Annual Sentinel Surveillance for HIV Infection in India

Country Report

2004

National AIDS Control Organisation
Ministry of Health and Family Welfare
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Prof. M. Bhattacharya
Project Coordinator

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Abbreviations

AIDS	Acquired Immunodeficiency Disease Syndrome
ANC	Antenatal Care
ANC-R	Antenatal Care – Rural
ANM	Auxiliary Nurse Midwife
ART	Anti Retroviral Therapy
ASHA	Accredited Social Health Activist
AWW	Angan Wari Worker
BCC	Behaviour Change Communication
BDO	Block Development Officer
CHC	Community Health Centre
CSW	Commercial Sex Worker
DOTS	Directly Observed Treatment Strategy
FSW	Female Sex Worker
GOI	Government Of India
HIV	Human Immunodeficiency Virus
ICMR	Indian Council of Medical Research
IDU	Intravenous Drug User
IEC	Information Education & Communication
IIT	Indian Institute of Technology
IRMS	Institute for Research in Medical Statistics
MO	Medical Officer
MSM	Men having Sex with Men
NACO	National AIDS Control Organisation
NGO	Non Government Organisation
NIHFW	National Institute of Health & Family Welfare
OPD	Outdoor Patients Department
PHC	Primary Health Centre
PPTCT	Prevention of Parent to Child Transmission
RCH	Reproductive Child Health
RCT	Regional Coordinating Team
RTI	Reproductive Tract Infection
SACS	State AIDS Control Society
STI	Sexually Transmitted Infection
TB	Tuberculosis
TBA	Trained Birth Attendant
TI	Targeted Intervention
UT	Union Territory
VCTC	Voluntary Council and Testing Centre
VDRL	Venereal Disease Research Laboratory
WHO	World Health Organisation

Executive Summary

The Annual Sentinel Surveillance was started in the country in 1998 and has been regularly held since then. The National AIDS Control Organisation (NACO) and State AIDS control Society (SACS) conduct the Annual Sentinel Surveillance. National Institute of Health and Family Welfare (NIHFW) supervise, monitor, collect data, collate, analyse and prepare a national report

Objective

To conduct HIV surveillance based on epidemiological principles, so as to provide quality data, following a standard methodology, in identified population groups & sites, for eliciting trends and estimating the number and characteristics of the HIV positives in the country, towards control, planning and advocacy.

The methodology followed for 2004 round was similar to 2003 except that rural ANC sentinel sites assessing HIV status were retained for six high prevalence states only. Besides surveillance for TB patients were started in the six high HIV prevalence states namely Andhra Pradesh, Maharashtra, Tamil Nadu, Karnataka, Manipur & Nagaland.

A new system of Web based data entry was introduced with the SACS office entering the data in the offline version of t he software given by NIHFW and then uploading in the online software at NIHFW website. The data was then downloaded at NIHFW.

Methodology of the Annual Sentinel Surveillance 2004

Survey area

Surveillance activities were undertaken on a national scale. A total of 649 sentinel sites were chosen countrywide to provide information on HIV status. Of the 649 sites, 461 were regular sites (268 - ANC, 171 - STD, 24 - IDU, 15 - MSM, 42 - FSW), 122 were ANC Rural sites (CHC/PHC), and 7 TB sites located at TB hospitals.

Survey population

The survey population was divided into two groups - the “low risk” or “general” population represented by pregnant women attending antenatal clinics (ANC); and the “high risk” and “core risk group” populations represented by STD patients attending STD clinics, injecting drug users visiting de-addiction centres, men having sex with men and female sex workers visiting STD clinics or drop-in centres.

Sampling

Sampling unit - A STD patient/ IDU/ MSM/ FSW/TB Patient or Antenatal woman.
Sampling frame - All attendees coming to attend the designated sentinel sites during the period of surveillance, formed the sampling frame.

Sample size

The sample size was chosen as 400 mothers from the "low risk" group; and 250 attendees from the "high/ core risk" groups of STD/ IDU/ MSM/ FSW at every site. The STD patients' sample size was to be completed from two sources - 150 patients from the STD clinic and 100 from the gynecology clinic. This was done to ensure adequate representation of women in the STD sample.

Sampling technique

At each designated sentinel site, patients were selected by "Consecutive Sampling", that is all new patients attending the clinic consecutively, and fulfilling the "inclusion criteria" for each group for the first time during the surveillance period

Inclusion criteria

STD: All consecutive patients attending the designated STD clinics and diagnosed as a case of STD based on "Syndromic Approach", presenting with genital ulcer, urethral or cervical discharge and genital warts, till the sample size was completed or till the end of surveillance period, whichever was earlier.

IDU: All consecutive injecting drug users attending Drug De-Addiction centres, till sample size was completed or till the end of surveillance period, whichever was earlier.

ANC: All consecutive pregnant mothers attending designated ANC clinics, till sample size was completed or till end of surveillance period, whichever was earlier.

MSM: All consecutive MSM members visiting the drop in centre, till sample size was completed or till end of surveillance period, whichever was earlier.

FSW: All consecutive FSWs visiting the clinic, till sample size was completed or till end of surveillance period, whichever was earlier.

Study variables

Age, sex, residence, migrant status, literacy, occupation (self for STD patients and of the spouse for antenatal mothers), STD diagnosis according to "Syndromic Approach", HIV and VDRL positivity, were the variables included to study the characteristics of the HIV infected population in India.

Surveillance period

The period of the 2004 surveillance round was from the 1st of July to the 30th of September 2004.

HIV testing strategy

The testing strategy adopted for sentinel surveillance was the "**Unlinked Anonymous**" strategy. In this strategy, blood is collected from attendees to the Sentinel sites for VDRL testing was also used to test for HIV without the patient's knowledge and consent (Unlinked). The blood sample was collected devoid of any markers that may identify the patient concerned, and was coded to prevent the sample from being traced back to the patient (Anonymous).

Data Collection

The examination and blood sample collection was done at the designated sentinel sites, along with the filling up of the standardised individual forms. The blood samples were then centrifuged to separate the serum from blood. Serum samples were sent with coded forms to the HIV testing centres (VCTCs) under adequate cold chain cover. At the HIV testing centres/VCTCs the samples were tested and test results recorded in the coded individual forms. The test results for VDRL were also recorded. Tally sheets were prepared from the individual forms for each site. Site wise consolidated reports were also prepared at the end of the surveillance period and sent to SACS (State AIDS Control Society) in each state. At SACS, staff specially trained by NIHFW did data entry into the web based offline software(developed by NIHFW) and then uploaded into the online one or direct entry was done at the online web based data entry format at NIHFW website. After downloading the data at NIHFW, compilation, analysis, interpretation and report writing at national level was carried out. NIHFW shared the data after compilation, with IRMS for estimating the HIV load in the country.Some of the SACS used the software to analyse,prepare tables &graphs and the report.

Quality Control Measures

Supervision and monitoring of data collection activities

Twenty-two Regional Coordinating Teams (RCTs) a

team of senior microbioogist and epidemiologist were identified for supervision of sentinel sites and testing centres. Training on NACO guidelines of RCTs was held at NIHFW, and then for state personnel in each state. The RCTs paid two supervisory visits to each sentinel site and identified HIV testing centres (VCTCs), to check for implementation according to NACO guidelines. Feedback from the visits was provided to the sentinel sites and testing centres, and also to NIHFW/SACS/NACO in the form of written reports. During supervision immediate possible remedial actions were taken at the field level by those in-charge of the sites, or the SACS officials based upon the complaints and suggestions by RCTs. Post-surveillance regional meetings were also held to discuss the problems encountered during surveillance, the possible causes and suggestions for improvement in the future rounds. The meetings were attended by NACO & SACS officials, NIHFW and IRMS faculty and the respective Regional Coordinating Team (RCT) members.

Data quality

To ensure that the surveillance was held according to guidelines, orientation of RCT members and SACS officers was done at NIHFW. Subsequently pre round training by NACO & NIHFW for officers from all sentinel sites and testing centres was carried out in each State/UT. Members of the State core Teams on Surveillance, RCT members and SACS officials made supervisory visits to the data collection sites during the conduction of the round.

Salient Observations:

- 649 sites participated in HIV surveillance round in 2004. The prevalence of HIV infection among ANC mothers was observed to be 0.89% where as the prevalence of HIV infection among STD patients was 5.55%, FSW-9.43%, IDU-11.15% and among MSM was 7.47%.
- Analysis of the attendees among STD patients and antenatal mothers in the same sentinel sites since 2001, indicated that the distribution of the persons in each age group for both ANC and STD clinics at country level has remained steady over the years. Majority of the attendees belonged to the age group 20-29 years.
- The male female ratio of HIV positives amongst STD patients in the country was observed as 1: 0.8, 1: 0.4 and 1: 0.5 in High, Concentrated and Low HIV p revalence states, respectively.
- The epidemiological classification of the states as high, concentrated & low for HIV remain unchanged compared to 2003.High HIV prevalence states were Maharashtra, Karnataka, Andhra Pradesh,Tamil Nadu,Manipur & Nagaland.
- The urban rural ratio of HIV positives was difficult to determine as there was a mix of attendees from urban and rural areas at both urban and rural sites.
- Among the high prevalence states (Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu) where heterosexual behaviour was the major mode of transmission of the HIV infection, the overall HIV prevalence was 15.4 percent for STD sites in these states. Karnataka had the highest HIV prevalence rate amongst the STDs with the figure of 19.8 percent. ANC urban sites had overall 1.25 percent HIV prevalence, while at ANC- Rural sites it was 1.31%.
- In the other group of states with high HIV prevalence i.e. Manipur and Nagaland, where the mode of transmission was pre-dominantly intravenous drug use,Manipur was showing high HIV prevalence among drug users (21.00%). The infection had also spread to general population through the sexual behaviour of the drug users. In Manipur HIV prevalence in STD patients was 7.20%, quite high. Amongst antenatal mothers, it was noted that prevalence rate at urban ANC site (1.61%) was higher than at rural ANC site (1.07%). However in Nagaland prevalence amongst IVDUs was 4.59%, but at the ANC-Rural sites the prevalence was very high (2.23%), which was not commensurate with the low STD prevalence of 1.72%.
- In the states with concentrated HIV prevalence (Goa, Gujrat and Pondicherry), Goa showed comparatively high rate of prevalence in STD patients (16.02%) through heterosexual behaviour of the high-risk groups. Surveillance at regular ANC sites also gave high rate of HIV prevalence (1.13 %). In Gujrat comparatively lower rates were observed, in STD patients it was 3.67% and amongst antenatal mothers it was 0.19%.
- The states with low HIV prevalence were the vulnerable states.

- HIV prevalence amongst the core risk groups being tested at the targeted intervention sentinel sites, HIV prevalence was high among males indulging in homosexual behaviour at Manipur (14.0%), Delhi (6.7%) and Mumbai (9.6)%. In high prevalence states where the predominant mode of transmission of HIV virus was heterosexual behaviour, the prevalence was very high among the female sex workers e.g. in Mumbai the prevalence rate was 44.76% and 16.9% in Andhra Pradesh. Intravenous drug use had increased HIV positivity as in Assam (4.5%) and Mizoram (6.8%).
- The HIV prevalence was analysed in 171 STD sites. Among these 31 STD sites had HIV prevalence more than 10%. Most sites belonged to high prevalence states, but two sites were from Goa, and one site each was in Pondicherry, Rajasthan and West Bengal. Amongst the high prevalence states, the mean HIV prevalence in the STD group was highest in Andhra Pradesh (20.76%). In Nagaland, the prevalence was very low (1.72%) compared to other high prevalence states. There are conglomerations of districts (sites) of very high HIV prevalence (10-20% & above) in coastal areas of Andhra Pradesh and northern Karnataka adjoining Maharashtra.
- Most of the men tested at the STD clinics were agricultural/unskilled workers, while most of the women were housewives. Among men, the occupational categories with higher HIV percent positivity were commercial vehicle driver (23.07%) followed by hotel staff (20.4%) and agricultural workers (18.35%). Among women, higher percent positivity was seen in agricultural workers (18.35%) and those in business (18.03%) followed by unemployed women (17.65%). Ten ANC sites in the country had HIV prevalence more than 3% and all of them belonged to high HIV prevalence states of Andhra Pradesh, Karnataka, Maharashtra, Manipur and Nagaland but none was in Tamil Nadu. In low prevalence states there are few ANC sites with very high HIV prevalence e.g. in UP at Banda it was 1.75% and Champai 2.8%. This points to the pockets of infection in these states, and need special studies to ascertain the reasons. Special programmes are needed to prevent spread from these sites. The "ANC hotspots" were usually areas, home to migrant populations as seen in eastern UP, with women residing there getting the HIV infection from their migrant husbands who are mostly working in states with high HIV prevalence.

Conclusions

- The 0.8% HIV prevalence in ANC group indicates that there is still opportunity to rein in the epidemic as it has not crossed the 1% prevalence whereupon it is assumed that the infection has spread to general population.
- The country is at the verge of transition e.g. some low prevalence states like Rajasthan moving into concentrated prevalence and Tamil Nadu sliding down to concentrated prevalence.
- Hotspots are present in all states and should be investigated to ascertain the cause of very high prevalence in these sites and appropriate action taken.
- The rural sites (ANCR) had 1/5th urban population hence cannot be termed absolutely rural.
- Lower socio economic status individuals are affected more and majority amongst men are drivers, factory workers, hotel staff, agricultural or unskilled labourer. Amongst women the worst affected are the housewives.
- Education is considered to be protective for prevention of HIV transmission but not for rural mothers and women amongst intravenous drug users, as observed in the north-eastern states.
- Unemployment predisposes to acquiring HIV probably due to unsocial activities like commercial sex and drug use.
- The epidemic has percolated to the rural area as evident from large number of very high HIV prevalence districts in rural areas in the high prevalence states and some high prevalence district in the low prevalence states.
- Women and adolescents especially girls are bearing the brunt of the epidemic.
- Patients with genital warts had the highest HIV positivity amongst men in high prevalence states. Genital ulcer was associated with high prevalence in other states.
- VDRL positivity not correlated to HIV positivity as the range varied from 4.28% in high prevalence states to 3.70% in low HIV prevalence states

amongst STD patients. Similarly the VDRL figure was 1.24% in antenatal women of high HIV prevalence states and 1.66% in mothers from low prevalence states.

- Health cares services for sexually transmitted diseases need further strengthening to attract patients for optimum utilisation.
- The IVDU groups depict decline in HIV prevalence at Manipur but the trend is increasing rapidly in Tamil Nadu and Delhi.
- The brunt of the epidemic is now on the low HIV prevalence states. Out of the total number of such states significant trends of increase amongst STD cases were observed for the states of Delhi, Mizoram, Orissa, A&N Island, Rajasthan, UP and West Bengal. Significant increase in prevalence compared to last year at 14 STD and 8 ANC sites and decrease in 16 STD and 14 ANC sites was noted.
- In each of the areas where HIV is on the up swing, specific groups were driving the rise. For example, agricultural/unskilled workers who move about in search of jobs were increasing the antenatal HIV prevalence by infecting their spouses. In some areas, drivers, factory workers and hotel staff were mainly involved; whereas in other places businessmen or those in service were mainly infected lika in Assam.

Recommendations

A. For improving sentinel surveillance

- The ANC-Rural(for High Prevalence States only)/Targeted Intervention project sites that had been introduced in 2003 must be continued in subsequent rounds of surveillance for three consecutive years.
- Sero-surveillance to be done in-patients with TB and in other hospital patients.
- Separate samples of major "bridge population" groups like drivers, factory workers, hotel staff etc. may be considered.
- ANC-Rural sites chosen should be predominantly rural in character. Some ANC-rural sites in 2004, may need to be changed because nearly 60% population are from urban areas.
- Male recruits in military or paramilitary services or university students may be used as proxy for the general male population, by conducting unlinked anonymous HIV testing on them during health checkup.
- The STD clinics may be renamed as "Reproductive Tract Infection Clinics" for utilisation without stigmatisation.
- A core surveillance team in each state to be constituted to keep track of the epidemic and initiate local area/problem based special surveys whenever and wherever needed, like the hotspots in both high and low prevalence areas.

B. Other surveillance activities

In Low Prevalence Areas:

- Behavioural surveillance in high risk behaviour groups are needed to provide information regarding the main risk behaviours and sexual networks, and the possible population groups to which HIV could spread. This should be in addition to sentinel surveillance in high-risk groups, donor blood screening, and HIV/AIDS case reporting from hospitals and VCTCs.

In Moderate Prevalence Areas:

- Annual sentinel surveillance in antenatal women and identified high risk groups, should be supplemented with behaviour surveys in "core risk" groups (networks), "high risk bridge population" and general population. In addition, STD data in the same high risk groups should also be collected. These data to be supplemented by blood donor HIV status and HIV/AIDS case reporting from VCTCs.

In High Prevalence Areas:

- All the surveillance activities stated above will be needed to be ducted with a widened scope like in specific age groups 15-24 years in antenatal women, TB patients and in high risk occupational groups like factory workers, hotel staff etc. Data on AIDS deaths, and HIV/AIDS related illnesses will also be needed.
- Population based HIV prevalence studies maybe conducted to validate surveillance data. STD surveillance will need to be extended to the general population.
- Behaviour surveillance in core risk groups

(channels & networks) and sentinel surveillance and PPTCT should be conducted in the same area for meaningful interpretation of data and to assess the impact of the preventive & control measures.

Utilising Sentinel Surveillance Data

- The surveillance data should be widely disseminated for taking preventive and promotive action by all concerned agencies.
- For tracking the HIV epidemic in the country:
- Based on surveillance data utmost focus is to be directed towards prevention of transmission especially in the low HIV prevalence states, where due to large population sizes even small increase in prevalence would have many HIV patients.
- The "hot spots" in all states need special surveys, to ascertain the causes of very high HIV in those sites.
- The surveillance data may be used for implementing surveillance strategies suitable for the epidemiological status of the states.
- Extending anti HIV interventions to rural areas is top priority in the programme. IEC efforts must penetrate the rural areas to make them more effective. Choice for action should be based on surveillance data.

Strengthening of STD Services

The information on VDRL reveals very interesting facts such as that in areas of low HIV prevalence VDRL is high, indicating intensive sexual activity even in the absence of high HIV prevalence. It is thus possible that as soon as HIV is introduced into the areas with high VDRL prevalence, HIV will spread like wild fire. Hence, strengthening STD services in the form of better facility, privacy, drugs and counselling IEC services would create awareness amongst the community for both STD and HIV.

Advocacy

- HIV and RCH key messages need to be marketed as health products by help of commercial advertisers for wider access and acceptability.
- NGOs, corporate bodies, parliamentarians and private sector in health care should be a part of the advocacy campaigns.

CHAPTER
1

Introduction

HIV/AIDS has emerged as one of the most important public health problems in India today and has the potential to undo gains acquired in the health status of India, as has been seen in many countries globally. This has been reiterated in the agenda of the 57th World Health Assembly, which met on 8th April 2004, and emphasised that tackling HIV/AIDS epidemic remains top priority for the WHO. About 8000 people die every day due to AIDS related conditions, thereby causing 3 million deaths despite significant advances in Anti-Retroviral treatment. Even the burden of HIV/AIDS is stealthily rising. According to WHO/UNAIDS, the number of adults and children estimated to be living with HIV/AIDS globally by the end of 2004 was 39.4 million (range 35.9-44.3 million). In India, an estimated 5.134 million have HIV/AIDS and with a population of over one billion, HIV epidemics in India will have a major impact on the overall spread of HIV in South East Asia as well as globally[1] and need focused attention.

Although, the HIV prevalence rate is still low in South-East Asia, it is rapidly growing, engulfing scarce resources which many developing or underdeveloped countries can ill afford. Further, an estimated 6.4 million people have been identified as living with HIV/AIDS in South-East Asia in 2004, which is the second highest number of cases in the world after sub-Saharan Africa (WHO/UNAIDS)[1]. The most disturbing fact is that 95% of infected persons are NOT aware of their HIV status.

An in-depth look into the patterns and prevalence of major High Risk Groups in Asia clearly shows that they are different from other regions of the world. This is in contrast to Western countries, where MSM and IDU groups dominate[2]. In Asia, however, a different pattern is seen. Here, IDUs as well as FSW and their clients, are the most prominent High Risk Groups involved in HIV transmission. In India, the Sentinel surveillance carried out annually since 1998 has generated data on HIV prevalence.

Further, while HIV/AIDS cases are now being reported by all countries in the South East Asian Region, 4 countries, namely India, Thailand, Myanmar and Indonesia, account for 99% of the total burden in the region and majority of HIV infections in the region occur through unprotected sex between men and women. This is one of the key factors which needs to be tackled in a comprehensive manner at grass root levels. Universal condom use amongst the risk groups in identified areas should be introduced in India, overcoming whatever obstacles might come in its implementation.

Moreover, in the SEA region, injecting drug use is adding to the rapid spread of the epidemic. Around half of the injecting drug users have already acquired the infection in Nepal, Myanmar, Thailand, Indonesia and Manipur State in India[1].

Annual Sentinel surveillance in India subserves many functions. Given the nature of the disease and the social stigma attached to it, this infection cannot be compared with

other diseases and needs special treatment and that is why the surveillance is carried out as "unlinked anonymous" at designated clinics amongst risk groups (most likely to acquire HIV), so that the inclusion of patients in the sample is not as per the choice of the patient. Further, unlinking of the patient to his/her positive status lowers chances of selection and participation bias.

It determines the geographical spread of HIV in India and identifies the areas with high HIV prevalence and areas which are low on HIV, but are highly vulnerable. It also provides insights into the socio-demographic profile of those affected and has helped in tracking the HIV epidemic in certain occupational groups.

Corrective behavioural modification in identified risk groups could thus be targeted to curb the progressive dynamics of HIV spread. It also provides estimates and future projections, so that the health system is sufficiently geared up to deal with all aspects of health care relating to HIV/AIDS and the data generated also acts as a leverage to gather political and social support (both Nationally and Internationally) for the ongoing National programme of HIV/AIDS control.

The HIV data gathered from various sites needs further triangulation, so as to give a composite picture and therefore draw broader inferences regarding the HIV epidemic in the country, since the sentinel sites are clinic based and capture only the population accessing them. It may be mentioned here that for the better assessment of the HIV/AIDS epidemic in the country, the data needs to be triangulated on biological parameters like HIV positivity amongst blood donors, mothers availing services of prevention of parent to child transmission (PPTCT), VCTC attendees and other markers like Hepatitis B, C and VDRL with percent positivity of HIV among STD and various groups. Behavioural factors contribute immensely to the mode of HIV transmission thus contributing to the magnitude of HIV in the population. Further, triangulation of surveillance data is necessary with behavioural data so as to draw meaningful conclusions and thus be a true representative profile of HIV for the whole country

By far, prevention remains the best cost-effective option available. Universalisation of condom use in the identified groups, behavioural modification, medical care for FSWs, gender sensitivity, elimination of social stigmatisation, effective NGO participation, capacity strengthening of existing control programmes and last but most critical, the adoption of enhanced surveillance methodologies, could modify the progressive HIV spread. Implementation of HIV control policies supporting suitable targeted interventions, depending upon the local dynamics provided by the surveillance data, should be of prime importance for framing strategies of control & prevention.

This report gives details of the surveillance activities in 2004 and provides a description of the country as a whole as divided into regions of high prevalence, moderate and low HIV prevalence, followed by a state-wise description.

CHAPTER
2

Methodology

The Annual Sentinel Surveillance was started in the country in 1998 and has been regularly held since then. The National AIDS Control Organisation (NACO) and State AIDS Control Society (SACS) conduct the Annual Sentinel Surveillance in collaboration with the National Institute of Health and Family Welfare (NIHFW).

2.1 Objective of the Annual Sentinel Surveillance for HIV

To conduct HIV surveillance based on epidemiological principles, so as to provide quality data, following a standard methodology, in identified population groups & sites, for eliciting trends and estimating the number and characteristics of the HIV positives in the country, towards control, planning and advocacy.

The methodology followed for the 2004 round was similar to that for 2003 except that rural ANC sentinel sites assessing HIV status were retained for six high prevalence states only. Besides, surveillance for TB patients was started in the six high HIV prevalence states, namely, Andhra Pradesh, Maharashtra, Tamil Nadu, Karnataka, Manipur & Nagaland.

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2.2 Methodology of the Annual Sentinel Surveillance 2004

2.2.1 Survey area

Surveillance activities were undertaken on a national scale. A total of 649 sentinel sites were chosen countrywide to provide information on HIV status. Of the 649 sites, 461 were regular sites (268 - ANC, 171 - STD, 13 - IDU, 4 - MSM, 5 - FSW), 122 were ANC Rural sites (CHC/PHC), 59 were Targeted Intervention (TI) sites run by NGO's and 7 were TB sites located at TB hospitals.

2.2.2 Survey population

The survey population was divided into two groups - the "low risk" or "general" population represented by pregnant women attending antenatal clinics (ANC); and the "high risk" and "core risk group" populations represented by STD patients attending STD clinics, injecting drug users visiting de-addiction centres, men having sex with men and female sex workers visiting STD clinics or drop-in centres.

2.3 Sampling

Sampling unit - An STD patient/ IDU/ MSM/ FSW/TB Patient or an Antenatal woman.

Sampling frame - All attendees coming to attend the designated sentinel sites during the period of surveillance formed the sampling frame.

2.3.1 Sample size

The sample size was chosen as 400 mothers from the "low risk" group and 250 attendees from the "high/ core risk" groups of STD/ IDU/ MSM/ FSW at every site. The STD patients' sample size was to be completed from two sources - 150 patients from the STD clinic and 100 from the gynecology clinic. This was done to ensure adequate representation of women in the STD sample.

2.3.2 Sampling technique

At each designated sentinel site, patients were selected by "Consecutive Sampling", that is, all new patients attending the clinic consecutively, and fulfilling the "inclusion criteria" for each group for the first time during the surveillance period.

2.3.3 Inclusion criteria

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IDU: All consecutive injecting drug users attending Drug De-Addiction centres, till the sample size was completed or till the end of the surveillance period, whichever was earlier.

ANC: All consecutive pregnant mothers attending designated ANC clinics, till the sample size was completed or till the end of the surveillance period, whichever was earlier.

MSM: All consecutive MSM members visiting the drop in centres, till the sample size was completed or till the end of the surveillance period, whichever was earlier.

FSW: All consecutive FSWs visiting the clinic, till the sample size was completed or till the end of the surveillance period, whichever was earlier.

2.3.4 Study variables

Age, sex, residence, migrant status, literacy, occupation (of self for STD patients and of the spouse for antenatal mothers), STD diagnosis according to "Syndromic Approach", HIV and VDRL positivity, were the variables included to study the characteristics of the HIV infected population in India.

2.3.5 Surveillance period

The period of the 2004 surveillance round was from the 1st of July to the 30th of September, 2004.

2.3.6 HIV testing strategy

The testing strategy adopted for sentinel surveillance was the "**Unlinked Anonymous**" strategy. In this, blood collected from attendees to the Sentinel sites for VDRL testing was also used to test for HIV without the patient's knowledge and consent (Unlinked). The blood sample was collected devoid of any markers that may identify the patient concerned, and was coded to prevent the sample from being traced back to the patient (Anonymous).

2.4 Data Collection

The examination and blood sample collection was done at the designated sentinel sites, along with the filling up of the standardised individual forms. The blood samples were then centrifuged to separate the serum from blood. Serum samples were sent with coded forms to the HIV testing centres (VCTCs) under adequate cold chain cover. At the HIV testing centres/VCTCs, the samples were tested and test results recorded in the coded individual forms. The test results for VDRL were also recorded. Tally sheets were prepared from the individual forms for each site. Site wise consolidated reports were also prepared at the end of the surveillance period and sent to SACS (State AIDS Control Society) in each state. At SACS, staff specially trained by NIHFW did data entry into the web based offline software and then uploaded it onto the online one or direct entry was done at the online web based data entry format at NIHFW website. After downloading the data at NIHFW, compilation, analysis, interpretation and report writing at national level was carried out. NIHFW shared the data after compilation with IRMS for estimating the HIV load in the country.

2.5 Quality Control Measures

2.5.1 Supervision and monitoring of data collection activities

Twenty-two Regional Coordinating Teams (RCT) were identified by NIHFW for supervising the functioning of the sentinel sites and HIV testing centres during the period of surveillance. Training of RCTs on NACO guidelines was held at NIHFW, and also for state personnel in each state. The RCTs paid two supervisory visits to each sentinel site and identified HIV testing centres (VCTCs), to check for implementation according to NACO guidelines. Feedback from the visits was provided to the sentinel sites and testing centres, and also to NIHFW/SACS/NACO in the form of written reports. During supervision, immediate possible remedial actions were taken at the field level by those in-charge of the sites, or by the SACS officials, based upon the complaints and suggestions by RCTs. Post-surveillance regional meetings were also held to discuss the problems encountered during surveillance, the possible causes and suggestions for improvement in future rounds. These meetings were attended by NACO & SACS officials, NIHFW and IRMS faculty and the respective Regional Coordinating team (RCTs) members.

2.5.2 Data quality

To ensure that the surveillance was carried out according to guidelines, orientation of RCT members and SACS officers was done at NIHFW. Subsequently, pre round training by NACO & NIHFW staff & officers from all sentinel sites and testing centres was carried out in each State/UT. Members of the State Core Teams on Surveillance, RCT members and SACS officials made supervisory visits to the data collection sites during the conduct of the round.

CHAPTER
3

Data Management & Analysis

3.1 Data Management

The data for all the risk groups was collected at the designated sentinel sites on individual request forms and was entered into tally sheets at the HIV testing centres. From each centre the data was sent to SACS. At SACS, Staff specially trained by NIHFW entered the data into the offline software and then uploaded it onto the online one or entered it in the online web based data entry format at NIHFW website. The web based data entry Software was developed by NIHFW in collaboration with IIT- Delhi, sponsored by the Department of Science & Technology.

3.1.1 Data Entry

The list of sites given by NACO for 2004 was taken as the Final List of Sites. Out of the 468 regular sites there were 122 ANC (Rural) sites and 61 TI sites. Data was not provided from some sites, hence, these sites were named as "Missing sites". Though correspondence was carried out with SACSs of the respective states for sending the data for the 'missing sites', no information was received till analysis was started. Some states had sent forms for sites (other than the designated sites for surveillance). The details are as given below:

Table : Details of Sites

Regular Sites:

Number of urban regular sites from which data was expected	Actual no. of sites whose data was analysed	Missing Sites	
		State	Site name
STD-171	STD-171		
ANC-274	ANC-268	1. Meghalaya 2. Himachal Pradseh 3. Tamil Nadu 4. Uttar Pradesh 5. A & N Islands 6. West Bengal	Resubelpora (ANC) Kelong (ANC) Ayalur (ANC) Nazibabad (ANC) Ranga t(ANC) RGKMC,Kolkata (ANC)
IVDU-13	IVDU-13		
MSM-4	MSM-4		
FSW-6	FSW-5	1. Goa	Baina (FSW)
Total-468	Total-461		Total-7

Other than the ANC regular and ANC rural sites, surveillance was also conducted specially in 10 Antenatal Sites for the age group of 15 to 24 years only.

Grand Total (468+192+10) = 670 Actually analysed 649

ANC Rural, TB and TI sites: -

Number of sites from which data were Expected	Actual no. of sites whose data were Analysed	Missing Sites	
		State	Site name
ANC (Rural)-122	ANC (Rural)-122		
TI-62	TI-59	1. Kerala	Kozhikode (FSW) Ernakulam (FSW) Trivandrum FSW)
TB-8	TB-7	1. West Bengal	Kolkata (TB)
Total-192	Total-188		Total-4

3.1.2 Problems with the data received

1. Many forms/records were not properly filled, for example, age and occupation had been left blank, and so on. This was observed more on the tally sheets sent to us from the State AIDS Control Society than in the web based data entry.
2. At many places, incorrect or non-existent codes had been used, e.g., education was coded as 5 in many instances while the education codes existed only from 1 to 4.
3. More than one option had been selected in some forms, thus both "urban" and "rural" had been ticked, or the HIV test was ticked both "positive" and "negative".
5. There were many silly errors, like antenatal clinic attendee's sex labeled as "male".
6. The required sample size was not completed in many sites - 21 STD sites, 10 ANC sites, 7 ANC Rural sites, 3 FSW sites, 5 IVDU sites, 4 MSM sites and 2 TB sites fell short of the 75% (of desired sample size) cut-off. i.e. 187 for high risk and 300 for low risk.

3.1.3 Actions taken to correct the data

3.1.3.1 For data received from the states in form of the schedule

Many states did not send the data through web as this was the first year of web based data entry and initial hurdles were many. These states included J&K, Uttranchal, Chattisgarh, Mizoram, Uttar Pradesh, Kerala, Haryana, Himachal Pradesh, Jharkhand and Karnataka.

The following actions were taken to improve the quality of the data, and to ensure that all data was error-free before starting analysis.

Double data entry was done (only for those sites from which forms were received) in computers to check for accurate entry; acceptable data values were defined, and entries were manually validated in a minimum of 5% of randomly selected forms. Range and consistency checks were applied.

After data was entered, frequency tables were produced for each data variable (e.g., age, residence, HIV test result, etc.) to identify missing or inconsistent values that may have originated from incorrect data entry into the computers (referred to as 'data cleaning'). Frequency tables for all the variables for each site were generated to check for errors in the data files and identify the missing values for specific variables. To clean the errors in the data for various sites, the SACS of each state was asked to send the individual forms or to make the necessary clarifications regarding the errors detected.

Project Directors of all the states were requested to send reports of the Sentinel Surveillance for the purpose of crosschecking and clarifying discrepancies.

3.1.3.2 For data received from the states through the web

After downloading data from the web, the name of the state and district was checked and cross checking was done with respect to various socio-demographic factors to ensure the completeness and correctness of the data received. Confirmation with the States was done to ensure that data entry had been completed.

In some sites, the site code was not filled properly. This was corrected from the list of sites given by NACO for the round of 2004. Many Sites did not complete

Table showing no of sites not completing sample size

Type of sites	Total Number of sites	Incomplete Sites (<75% sample size)
STD	171	21
ANC	268	10
ANC-R	122	7
IVDU	24	5
FSW	42	3
MSM	15	4
TB	7	2
Total	649	52

the given Sample size or at least 75% of the required sample size. The sites which did not complete the 75% sample size are given in the table.

3.2 Data Analysis

After the data was cleaned and verified, analysis was done to find out the distribution of data risk-group wise, by using statistical packages, namely, SPSS and MS EXCEL. To analyze the geographical spread of the HIV infection and to present it on a map, Geo Media Prof (Version: 6) was used. Analysis of the data included calculating prevalence, calculating 90% confidence interval for the prevalence values, fitting trend lines, detecting significant changes and interpreting the result.

The data was also sent to IRMS (ICMR) to estimate the national HIV load in the country.

3.2.1 Methodology of data analysis and interpretation

Calculated percent proportion prevalence has been used to analyse the data for HIV infection at site level. Median/mean prevalence has been used for analysing the data at the state level. In case the number of sites were less than or equal to three, the mean has been taken while median prevalence has been used when there were more than three sites in a state.

a) Estimation of prevalence

State wise mean/median prevalence was calculated based on all sites and also after dropping sites which did not complete 75 percent of the required sample, i.e., 187 for STD/MSM/CSW sites and 300 for ANC sites.

b) Comparing prevalence by calculating Confidence interval

Confidence intervals have been calculated at 90% confidence level for the estimated proportion at site level and median values for the states expressed as percentage, risk-group wise. The formulae used for calculating confidence interval are as follows:

For site

$$\textbf{C.I} = P \pm 1.645 * \sqrt{(1-P)*P/N}$$

For state

$$\textbf{C.I} = P\ (\textit{Median}) \pm 1.2533 * 1.645 * SE\ (P)$$

(Confidence Interval for State when median HIV prevalence is considered)

$$= \bar{P} \pm 1.645 * \overline{SE}\ (P)$$

(Confidence Interval for State when mean HIV prevalence is considered)

Where $\bar{P}$ is the mean prevalence for the state and $\overline{SE}$ (P) is the standard error for mean prevalence.

c) Significant change from 2003 - 2004

Confidence intervals were used to find the range of population prevalence and also to compare prevalence between years. If the confidence intervals for the two years were overlapping, the interpretation was that there was no significant change between prevalence values in the years for that state. The prevalence, with confidence intervals has been given in Table 1.a, 1.b and 1.c.

d) State & Site wise Trends

Least squares regression lines have been fitted on the mean/median percent of HIV prevalence for the states from 1998 to 2004 to show any changes (rise, fall or no change). Trend lines are fitted on the values after taking two moving averages of the mean/median percent HIV prevalence. The trend lines have been fitted risk-group wise. Interpretation was

done as significant trend when R-square value was greater than 0.50. Fitted lines on the graphs have been shown in the figures only when the R-square value was significant for the state or the site.

e) Hotspot identification

Criterion used was sites whose HIV prevalence values fell in the last quartile this year and also for at least 2 years in the past 3 years, risk-group wise. Such sites in each state have been labeled as the **hotspots** for the state for each of the risk groups.

f) Mapping

Maps have been prepared to depict geographically the distribution of HIV positivity at the sentinel sites and also the hotspots in the map of India using GIS software. The Sentinel Sites have been shown as districts because the exact map positions of the sites were not available. The GIS map used has 594 districts.

g) Regional classification for description

The country, for description purposes, has been divided into four regions: H1, namely, Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu where mode of transmission is heterosexual and H2, namely, Manipur and Nagaland where main mode of transmission is through IV drug use and STD, in that order. The third region is that of concentrated prevalence, which includes the states of Gujrat, Goa and Pondicherry. The rest are classified as low prevalence states where heterosexual transmission is predominant.

CHAPTER
4

HIV in the Country

Introduction

The HIV Annual Sentinel Surveillance in India has been enlarging its domain of activities since 1998, when the number of sites was only 180. In those early years of the epidemic, rural areas, core risk groups like MSM and FSWs, were inadequately represented, but this has since been corrected with the addition of adequate sites in these areas in 2003. The high prevalence states have nearly one site per district and in low prevalence states, one site per revenue district in 2004.

4.1 Magnitude of Problem

A total of 649 sites participated in the HIV surveillance round in 2004. The prevalence of HIV infection among ANC mothers was observed to be 0.89% whereas among STD patients it was 5.55%, FSW-9.43%, IDU-11.15% and among MSM it was 7.47%. The HIV prevalence in rural antenatal clinics of the six high prevalence states, namely, (Tamil Nadu, Maharashtra, Andhra Pradesh, Nagaland and Manipur) was 1.08%. The country has been divided into three epidemiological zones based on the prevalence of HIV among antenatal mothers and patients with sexually transmitted diseases (STDs). The high prevalence areas have HIV in ANC at more than 1%. Goa, Gujrat and Pondicherry are the states with concentrated HIV prevalence of more than 5% in the high-risk group and in the rest of the country, HIV prevalence among STD patients is less than 5%, hence these can be considered low prevalence areas. (Map1).

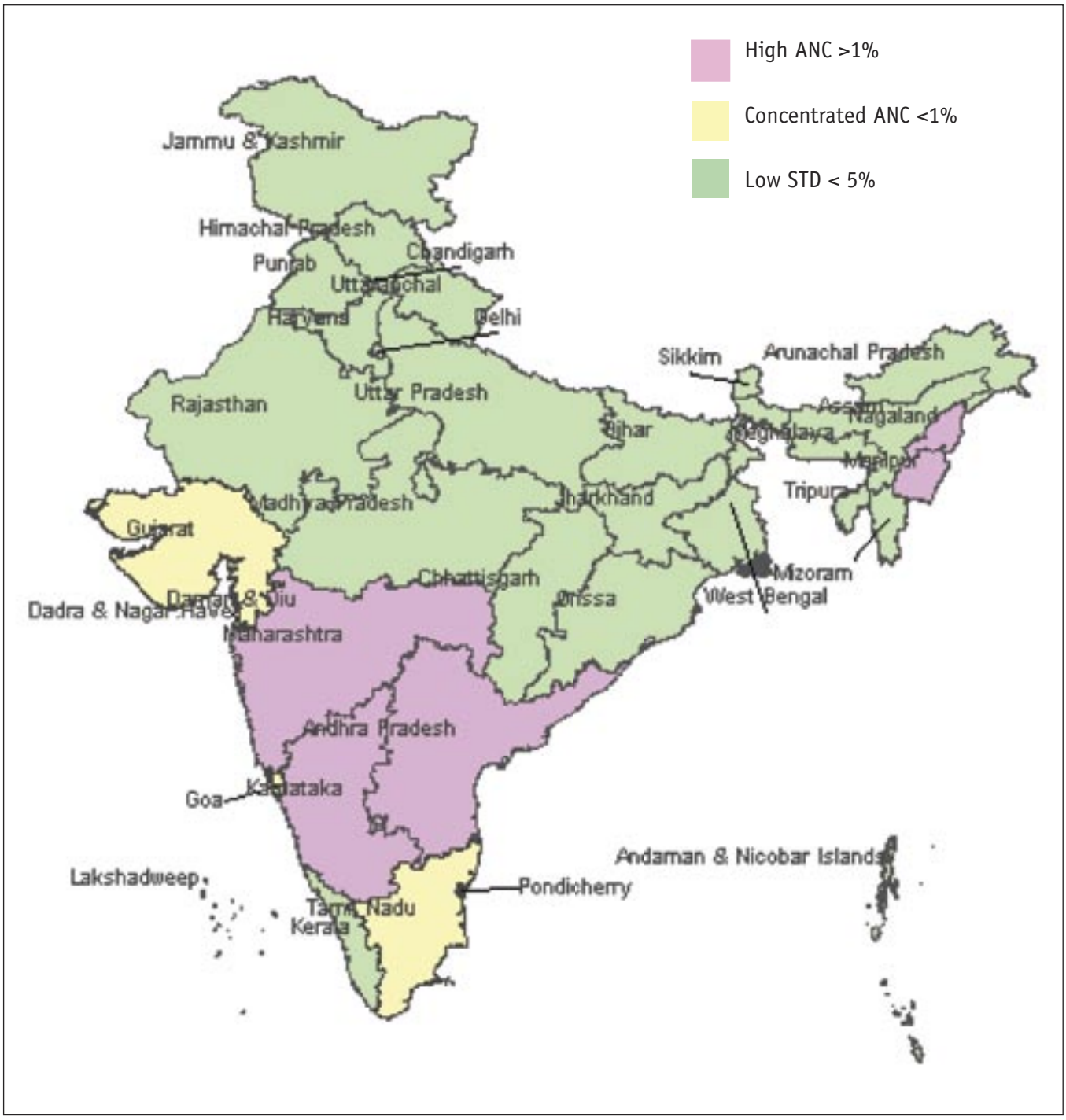
The spread of HIV in the country is not uniform and there are pockets of high HIV prevalence surrounded by areas of low prevalence. Some of the hot spots in various states are around National Highways as observed in Map 5.**4.3 Male female ratio for the Country**.

HIV prevalence at the country level amongst STD patients was 7.03% in males and 4.18% in females. The male-female ratio of HIV positives among the STD patients tested positive was 1:0.59. The male-female ratio of HIV positives amongst STD patients was observed as 1:0.77, 1:0.36 and 1:0.54 for High, concentrated and low prevalence states, respectively. It is evident that the crude ratios conform to the assumptions used in the estimation of HIV positives in the country although in low prevalence states, the epidemic is increasing among females. (Table below)

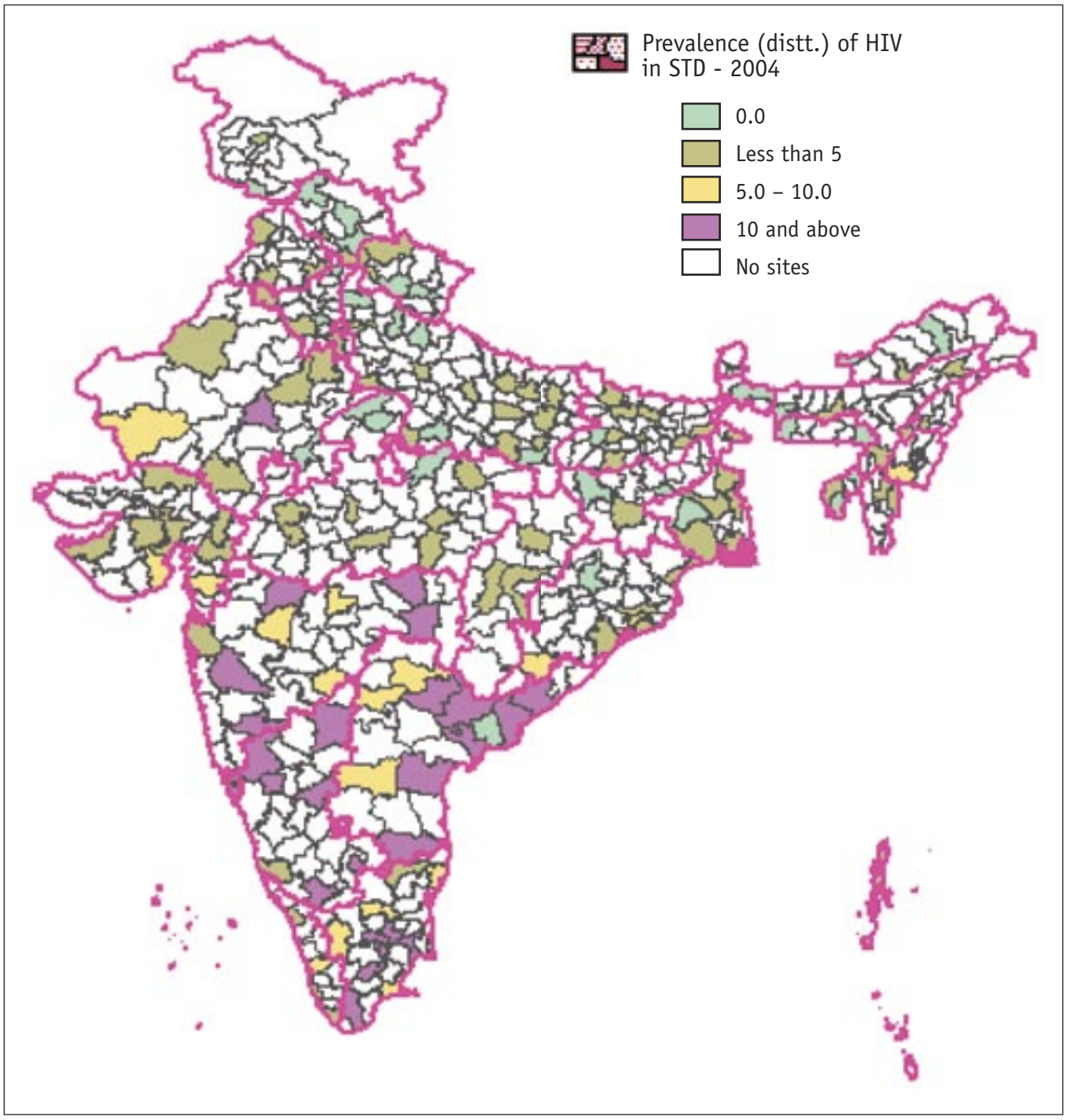
Year wise male female ratio in High-Risk (STD) Population

	High	Conc.	Low
Assumptions used for calculation since 1998	1 : 0.83	1 : 0.5	1 : 0.30
Data obtained from surveillance round 2001	1 : 0.68	1 : 0.41	1 : 0.40
Data obtained from surveillance round 2002	1 : 0.75	1 : 0.4	1 : 0.33
Data obtained from surveillance round 2003	1 : 0.84	1 : 0.5	1 : 0.45
Data obtained from surveillance round 2004	1: 0.78	1 : 0.3	1 : 0.54

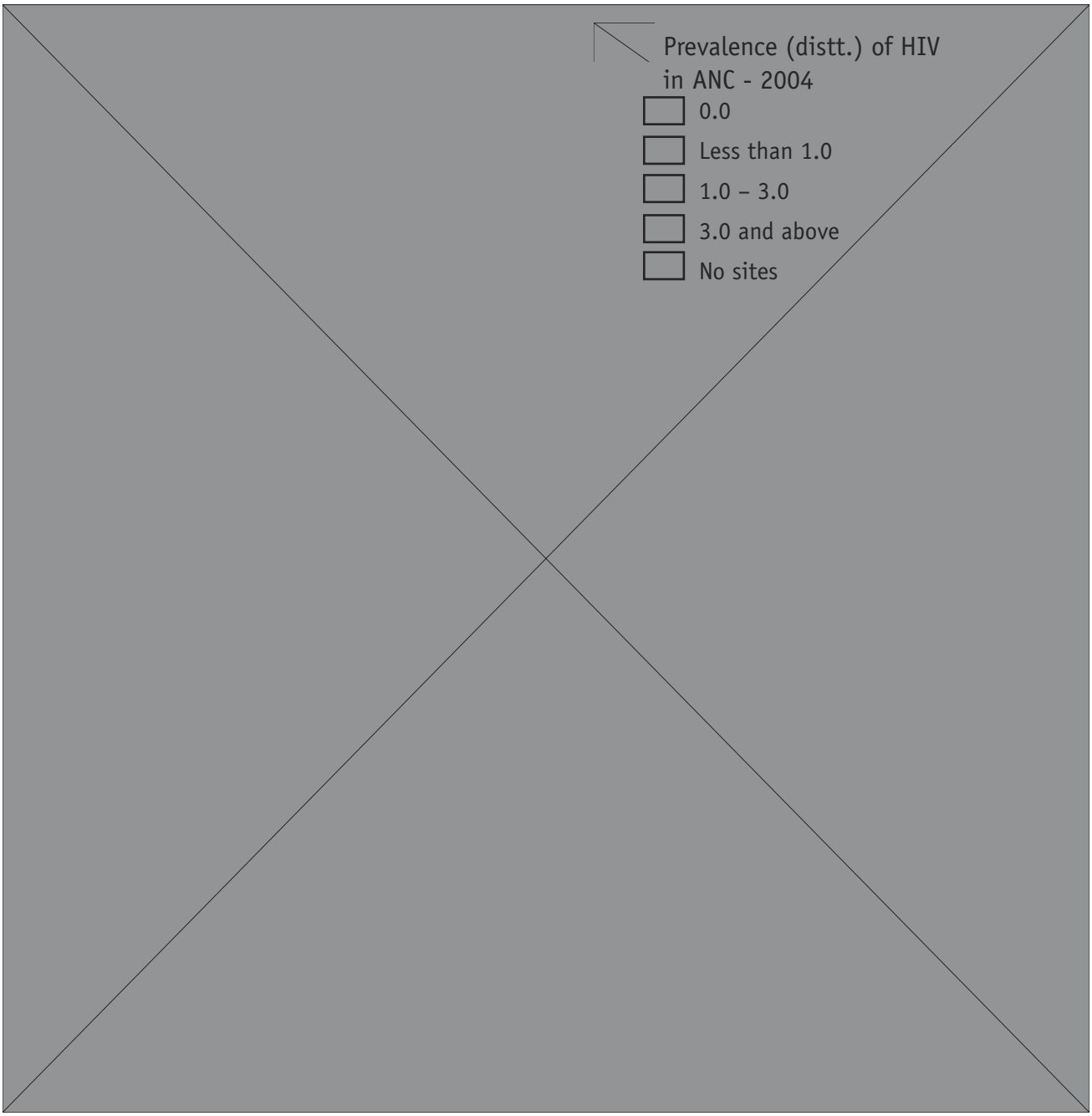
Map-1: Epidemiological Status of States on HIV % prevalence 2004



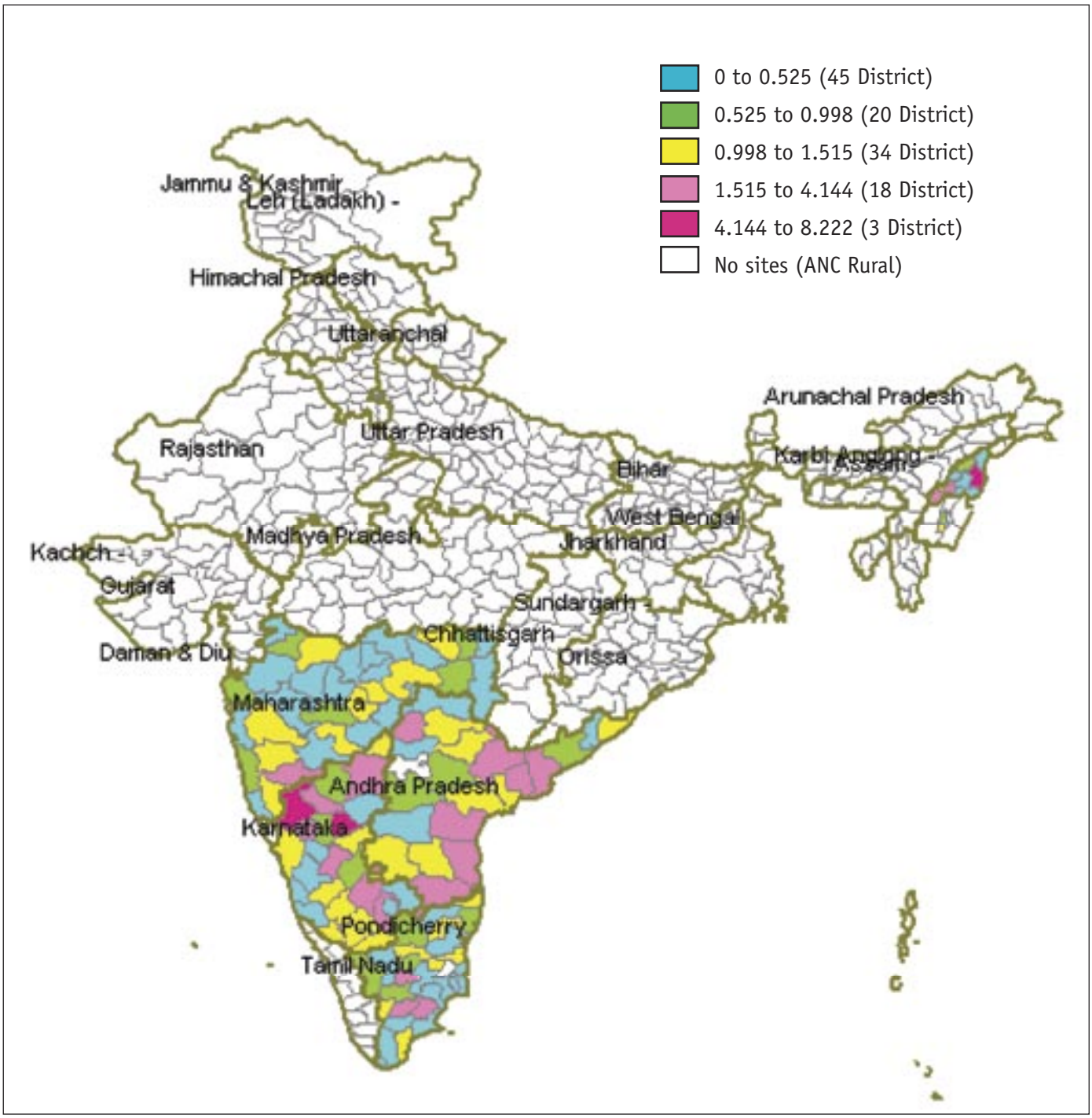
Map-2: HIV% prevalence of STD Sites (districts) 2004



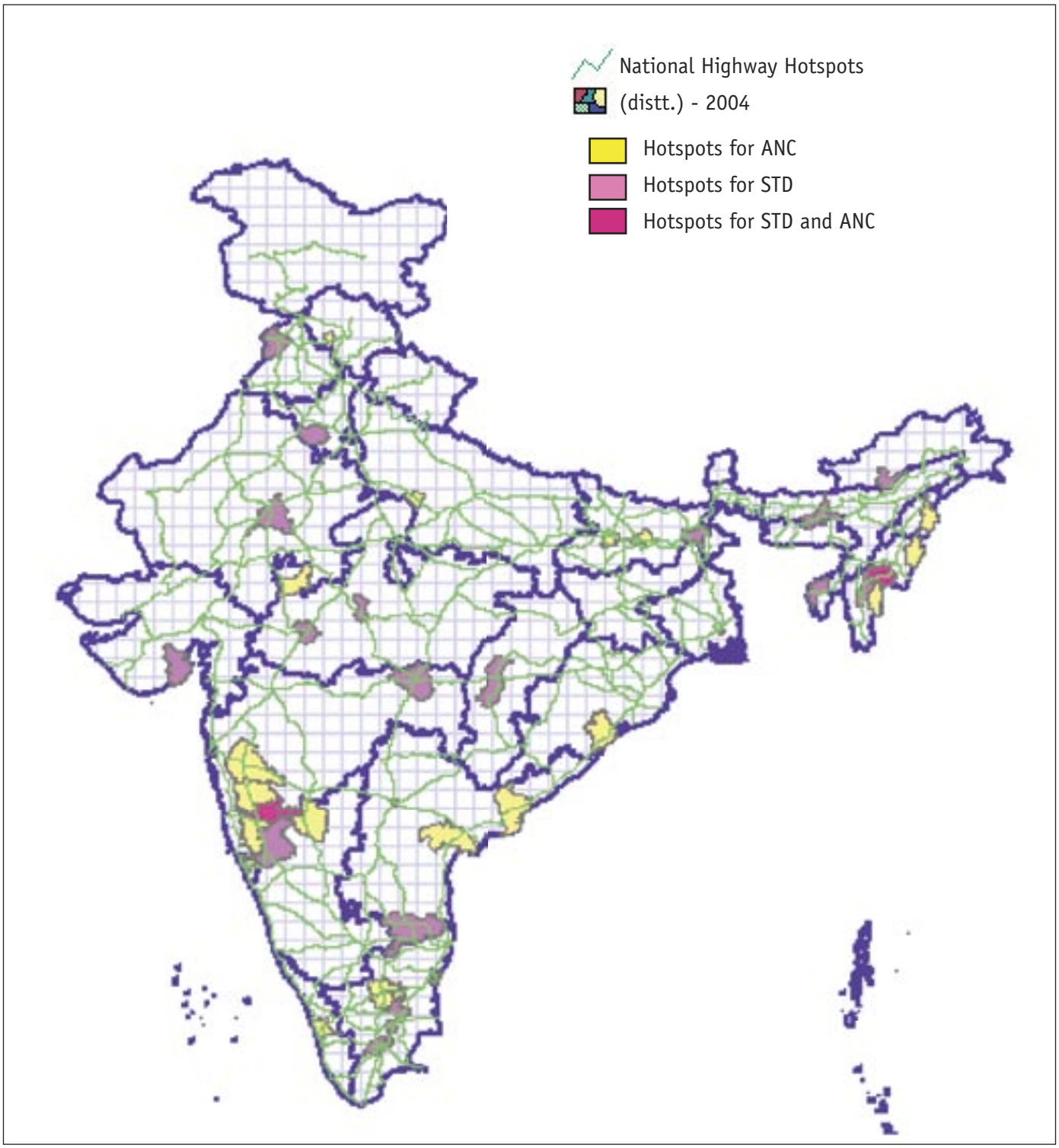
Map-3: HIV % Prevalence of ANC Sites (districts)-2004



Map-4: HIV (%) prevalence of ANC Rural Sites (district) in High Prevalence States-2004



Map-5: Hotspots for HIV % prevalence (districts)-2004



4.2. Characteristics of the Study population

To study any change in the composition of the attendees accessing the STD and ANC clinics, an age and locality wise trend analysis was done for sites active since 2001, as by then the number of sites had increased considerably as compared to 1998. Also, it was considered an adequate time period to study trends. Analysis of the attendees among STD patients and antenatal mothers in the same sentinel sites since 2001 indicated that the distribution of persons in each age group for both ANC (Fig-1) and STD clinics at country level has remained steady over the years (Fig-2).

This was true for both high and low HIV prevalence states. The age group of 20–29 years has been predominant throughout. Amongst male attendees at STD clinics in high prevalence states, patients aged 45 years & above constituted about 10%. Forthose aged less than 20 years, the vulnerable age of 15-19 years was analysed and it was found that in the country, Andhra Pradesh had the maximum number of pregnant mothers in this age group while Mizoram had the highest number of Male and Female STD patients among adolescents. The urban-rural distribution of the women attending the urban ANC clinics (Fig-3) since 2001 showed that there had been a slight decrease amongst the number of rural women attending urban clinics since 2003. (Fig-3)

4.4 Urban Rural ratio

The attendees of urban ANC surveillance sites and rural (ANC-R) sites, came from urban & rural area at both the places. This year, in ANC rural sites, one-third of the antenatal mothers were urban. (In 6 high HIV prevalence states.)

4.5. Trend in HIV prevalence among the 15 – 19 years age group

The HIV data for the 15-19 years age group captures the incidence of HIV infection in adolescents. Such

Fig 1: **Agewise distribution of ANC Attendees - India**

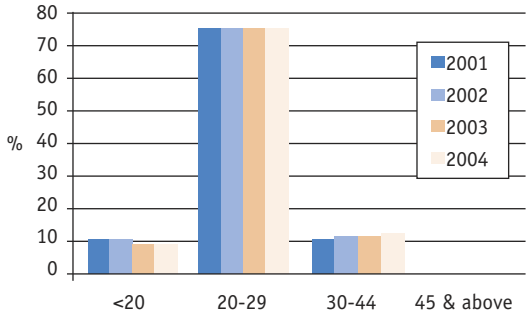


Fig 2: **Agewise distribution of STD Patients - India**

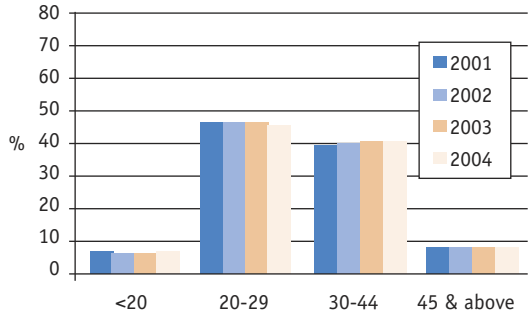


Fig 3: **Localitywise distribution of ANC Attendees - India**

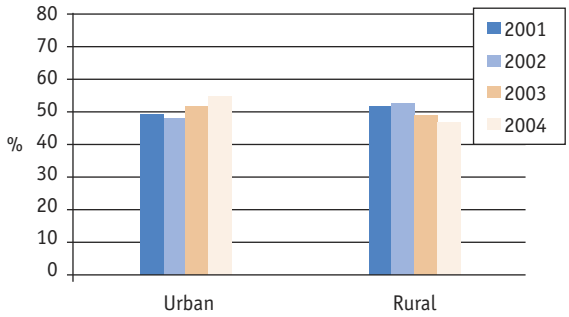
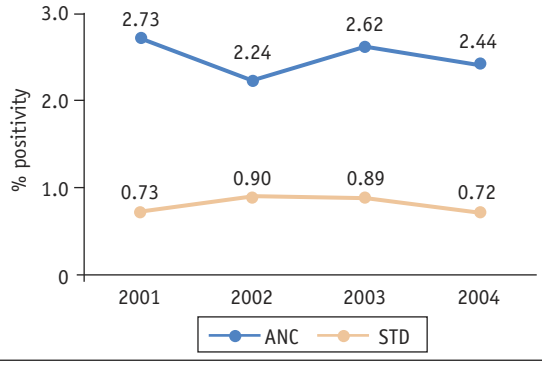


Fig 3: **Distribution of HIV % positivity among (15-19) yrs in different risk groups**



a study is important for health programmes The HIV prevalence (percent positives) amongst the 15 – 19 years age group was analysed at an all India level for the STD and ANC groups, separately. Amongst the STD patients, a mild declining trend till 2002 occurred but after that no considerable change was observed. No change in trend occurred in the women tested for HIV, at ANC sites. (Fig-4)

The above data is an indicator of the incidence of HIV in the community. In view of the HIV situation in India, this should be considered as high incidence in adolescents, which is being maintained at a high level. This means that information for behaviour change must be pursued vigorously.

4.6 State trends for HIV

The trend analysis based on median HIV prevalence values for all sites each year from 1998-2004 was done amongst **STD patients** for each state. Six states, including 2 high prevalence states (Tamil Nadu and Nagaland) show declining HIV trends among STD patients. The other 4 states with declining HIV prevalence are Uttar Pradesh, Himachal Pradesh, Assam and Haryana. HIV in low prevalence states for STD patients is increasing in the states of Delhi, Chattisgarh, Andaman & Nicobar Islands and Mizoram. However, aggregated data at state level may mask the true trend and therefore, site-specific trends should be considered for appropriate intervention.

The median HIV prevalence for the STD population in 2004 compared to 2003 had dropped in Andhra Pradesh, Jammu & Kashmir, Manipur, Rajasthan and Tripura (Table-1.a). Only Pondicherry showed a significant increase as compared to 2003. Though the trend of HIV among the STD population was rising in Mizoram, the prevalence had significantly dropped to 1.0% in 2004 from 3.8% in 2003. Efforts must be made at the local level to find the reasons for significant change in prevalence within a year.

Amongst **antenatal women**, the trend based on median HIV prevalence from 1998-2004 was found to be rising significantly in 3 states– Chattisgarh, Meghalaya and Mizoram Only one state showed a falling antenatal trend and that was Himachal Pradesh. In others, no significant trend could be observed. However, considerable increase in the median HIV prevalence was observed for Andhra Pradesh and Orissa among antenatal women as compared to last year. It is evident that the majority of significant changes are now taking place in the low HIV prevalence states, while trends in most high prevalence states, except Andhra Pradesh, are somewhat stable. Therefore efforts must be intensified in the vulnerable low prevalence states to curtail the pace of the epidemic.

The trend of HIV prevalence amongst **IDUs** (Table 1 a & c) is on the rise in Tamil Nadu and Delhi (one site each) but is falling in Manipur. Compared to 2003, the prevalence of HIV in IVDUs has increased in Kerala. However, the number of sites for IVDUs needs to be increased in vulnerable states for wider coverage of the IVDU population.

4.7 Site trends

The State trends often mask the site trends. Hence, in all states, trend lines were fitted for some important sites, which had been present since 1998 (consistent sites). HIV prevalence was rising in 21 **STD sites** (Tirupati, Indore, Raxaul, Gaya, Jamnagar, Bilaspur, Hamirpur, Bangalore, Gulbarga, Gwalior, Behrampur, Chandrapur, Churachandpur, Jaipur, Chennai, Bhopal, Madurai, Trivandrum, Aizwal, Agartala, Kolkota) among which 7 belonged to high prevalence states. A declining trend was observed in 8 STD sites (Mumbai, Panaji, Rohtak, Kohima, Latur, Lucknow, Pondicherry and Kooch Bihar) out of which 3 belonged to high prevalence states.

18 **ANC sites** showed a trend of increasing prevalence (Ratlam, Patna, Ranchi, Ratnagiri, Jammu, Aizwal, Lungei, Mandasur, Chindwara, Jagdalpur, Cuttack, Jaipur, Mysore, Daman, Diu, Kolkota, Trissur and Gorakhpur) among which only two (Ratnagiri & Mysore) belonged to high prevalence states. Seven ANC sites (Kurnool, Mapusa, Baroda, KEM Mumbai, Rajawadi, Chennai and Pondicherry) showed a downward trend of HIV prevalence out of which four sites belonged to high prevalence states. Three **IDU sites** (Churachandpur, Imphal, Bishnupur) also showed falling trends. The trend in FSW site of Mumbai showed a decline.

Altogether 30 (STD & ANC sites) showed rising trend while only 8 sites had a downward trend in the low

HIV prevalence states. Since a majority of the sites with upward trend of HIV prevalence are from the low prevalence states, it is concluded that the HIV epidemic is stealthily engulfing them. Thus the future of the HIV epidemic in India depends on dedicated efforts for control with extra emphasis on low prevalence but highly vulnerable states

4.8 HIV prevalence amongst patients with sexually transmitted diseases (STD)

The HIV prevalence was analysed in 171 STD sites. Among these, 31 STD sites had HIV prevalence at more than 10%. Most (26) sites belonged to high prevalence states, whereas two sites were from Goa, and one each in Pondicherry, Rajasthan and West Bengal. Amongst the high prevalence states, the mean HIV prevalence in the STD group was highest in Andhra Pradesh (20.76%). In Nagaland, the prevalence was very low (1.72%) compared to other high prevalence states. There are conglomerations of districts (sites)(MapII) with very high HIV prevalence (10-20% & above) seen in coastal areas of Andhra Pradesh and northern Karnataka adjoining Maharashtra. Besides, sites with high prevalence are lying next to district (sites) with comparatively low prevalence of less than five percent in high prevalence states. The same phenomenon can be seen even in low prevalence states (Map-2, Appendix-III), especially in Rajasthan. The majority of these sites with high HIV prevalence are STD " hotspots". These sites with consistently high prevalence over the last 3 years were usually areas with a large number of floating population due to commercial/tourist/religious activity, indicating wide spread practice of unprotected sexual activity among such population.

4.8.1 Socio-demographic characteristics of the STD Population

In Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu, analysis of 9961 STD patients in these four high prevalence states was done where heterosexual transmission was predominant. This indicated that the percent positivity was greater for men (16.85%) as compared to women (13.59%). The sex ratio of the HIV positive was 1: 0.80. Maximum prevalence among males was in the age group of 30-44 years (21.17%) while females in the 20-29 years age group had the maximum prevalence (14%). Amongst the less than 20 years age group, 11% women were positive as compared to 6% males. The increased HIV prevalence among younger ages in women indicates their enhanced vulnerability to both high-risk behaviour and the disease.

Illiterate and just-literate patients had the maximum percent positivity of 19.26% & 15.14% respectively, while graduates were least affected (10.49%). Graduate men had the least prevalence rate (6.47%). Education, therefore, appeared to be protective.

Most of the men tested were agricultural/unskilled workers, while most of the women were housewives. Among men, the occupational categories with higher HIV percent positivity were commercial vehicle drivers (23.07%), followed by hotel staff (20.4%), and agricultural workers (18.35%). Among women, higher percent positivity was seen in agricultural workers (18.35%) and those in business (18.03%), followed by unemployed women (17.65%). Among the people who came to STD clinics, the maximum number had been diagnosed with urethral and cervical discharge followed by genital ulcers. HIV prevalence was 19.33% among those who had both syndromes but it was the highest amongst those with genital warts (23.33%) in both men and women.

The percent positivity was higher in patients from rural areas (16.84%) than in those from urban areas (14.17%). Migrants had higher HIV percent positivity than non-migrants, amongst both rural and urban areas. About 4.25% were VDRL positive and 1.61% were both VDRL and HIV positive.

4.8.2

In the states of Manipur and Nagaland, HIV transmission was predominantly by IDUs. Out of 733 patients tested, the majority were woman. The HIV percent positivity was more in women (5.69%) as compared to men (4.93%). The age group of 20 and less had the greatest positivity (8.33%) among both men and women; the positivity being greater in men. Illiterates (10.53%) and graduates (5.88%) had the highest positivity among men. Education had very little effect on HIV prevalence in males, since prevalence decreased from 10.53% in illiterates to

3.81% with secondary level of education, but again rose to 5.88% among graduates. The chances of being HIV positive were greatest for businesswomen (16.67%) and agricultural/unskilled male workers had highest prevalence (10.71%). The percent positivity was higher in patients from urban areas (6.17%) than those from rural areas (4.57%), and more in migrants (6.67%) than in non-migrants (5.38%). Unlike high prevalence states, males and females were almost equally affected at younger ages as compared to older persons. About 4.77% were VDRL positive and around 0.41% were both HIV and VDRL positive. HIV percent positivity was greater in those diagnosed with genital warts and genital ulcers (7.5%).

4.8.3

In Goa, Gujrat and Pondicherry, of a total of 1265 men and 1550 women who were tested, HIV prevalence was found to be more among men (7.98%) than women (2.90%). Higher prevalence was reported amongst men residing in rural areas (9.26%). Migrants showed higher percentage positivity (6.26%) as compared to non-migrants (4.92%). HIV prevalence increased with age in men. However, in the case of women, it was the least among women of 45 years and above age group (1.11%). Men in the age group of 30-44 years were almost four times more infected than their female counterparts. Graduates were found to have least prevalence (1.27%) as compared to illiterates (5.68%). Highest prevalence was found in industry and factory workers (8.70%). VDRL positivity was 5.15% and 0.46% tested positive for both HIV and VDRL.

4.8.4

In the low HIV prevalence states, a total of 26,108 patients were tested including 11966 men and 14142 women. HIV percent positivity was more in men (2.43%) as compared to women (1.32%). Migrants showed higher prevalence rate (2.23%) as compared to non-migrants (1.76%). Most of the patients tested were in the age group of 20-44 years. Amongst men, prevalence was highest in the age group of 30-44 (3.32%) but older women showed higher prevalence. Graduates showed the least prevalence (1.24%) and just literates showed highest prevalence (1.99%). Male Truckers/drivers/associates had highest prevalence of HIV infection (4.90%) closely followed by hotel staff (4.06%) of both sexes. Housewives were positive at 1.33%. 3.70% tested positive for VDRL and 0.23% tested positive for both VDRL and HIV.

4.9. HIV Prevalence amongst Antenatal Women

The HIV prevalence amongst pregnant women is taken as a proxy for HIV prevalence in the general population. HIV prevalence was more evenly distributed within the ANC sites of high prevalence states, but in low prevalence states, there were some districts with high ANC prevalence (2.8% in Champai in Mizoram) .Ten ANC sites in the country had HIV prevalence at more than 3% and all of these belong to the high prevalence states of Andhra Pradesh, Karnataka, Maharashtra, Manipur and Nagaland. However, there were no such sites in Tamil Nadu (Map-3). The most interesting observation was in the case of the rural ANC sites (Map-4), where districts (sites) of very low prevalence were situated in rural areas of the high prevalence states. This again points to pockets of infection in the states and the need of special studies to ascertain the reasons for the same. Special programmes are needed to prevent spread from these sites. The "ANC hotspots" were usually those, which are home to migrant populations like those from eastern UP areas or where women residing there engaging in commercial/multi-partner sex with the local population, e.g., in northern Karnataka.

4.9.1 Socio Demographic Characteristics of HIV Positives

In Andhra Pradesh, Maharashtra, Tamil Nadu and Karnataka, the total number of antenatal women tested for HIV was 49601, comprising of those who attended the ANC sites situated in the urban hospitals where pregnant women from both urban & rural areas were seeking service. The percent positivity was almost equal in both rural and urban women (1.3%) at the urban ANC sites. Migrants had a greater HIV prevalence than non-migrants. Percent positivity increased with age among both rural and urban women with highest positivity in the age group of 30-44 years.The illiterate group was most affected, from both rural and urban areas, and women whose husbands were working as drivers or cleaners had the highest HIV prevalence rate of 2.35%. About 0.83% were VDRL positive and around 0.14% were both HIV and VDRL positive.

The majority of the women tested at the ANC-rural sites situated in the Community Health Centres were between 20-29 years of age. Positivity was highest in the 30 - 44 years age group (1.18 %). HIV positivity decreased with education, as in urban ANC sites. Positivity was highest amongst the wives of drivers (1.46%) and hotel staff (1.44%). About 0.96% were VDRL positive and nearly 0.15% were both HIV and VDRL positive.

4.9.2

In Manipur and Nagaland, about 6669 antenatal women were subject to HIV testing at urban ANC sites. Most of them were between 20-29 years of age. HIV prevalence was higher in rural women (1.97%) than in their urban counterparts (1.76%), and higher in migrants (2.46%) than in non-migrants (1.76%). Prevalence was highest among rural young women of less than 20 years of age (2.63%). Positivity decreased with increasing education levels as prevalence decreased from 2.04% in illiterates to 1.26% in those with graduate level of education. Wives of men employed in service, both in urban and rural areas, were affected more than other occupational groups. The least affected were wives of hotel staff in these states. VDRL positivity was 4.27% and 0.22% were both VDRL & HIV positive.

A total of 3258 antenatal women were subject to testing in rural CHC based sites for both the states. Most of the tested women were in the age group of 20-29 years. HIV prevalence was higher among urban women (1.83%) as compared to rural women (1.47%). It was highest among urban young women in the age group of less than 20 years. Wives of truckers from urban areas showed high prevalence of HIV infection (7.69%). A total of 6.54% tested positive for VDRL and 0.28% for both HIV and VDRL

4.9.3

In Goa, Gujrat and Pondicherry, a total of 4800 women were tested. Most of the women tested (3150) were in the age group of 20-29 years. Prevalence was higher amongst rural women (0.49%) than their urban counterparts (0.25%). Positivity was highest amongst the 30-44 years age group (0.61%). Higher prevalence was found amongst migrants (0.68%) as compared to non-migrants (0.33%). Prevalence was reported to be highest amongst just literates (0.71%) followed by illiterates (0.35%) and Zero percent prevalence was reported amongst graduates and above. In rural areas, most of the women with high HIV prevalence were wives of truck/auto/taxi drivers (2.62%). In urban areas, they were wives of factory workers (0.49%) or those in service (0.60%). VDRL positivity was 0.60% and 0.04% tested positive for both VDRL and HIV.

4.9.4

In Low prevalence states, i.e., the rest of the country, a total of 43,760 women were tested and over 90% of them were below 30 years. Migrant population showed nearly double the HIV prevalence rate (0.46%) as compared to non-migrants (0.29%). Prevalence was highest in the 30-44 years age group (0.43%). Education seemed to be beneficial as graduates showed least percent positivity (0.09%) and it was highest amongst those with literate to primary level of education (0.41%). Majority of positive women were wives of unemployed men in rural areas and of hotel staff in urban areas. Prevalence was more in urban women (0.33%) as compared to rural women (0.29%). 1.66% tested positive for VDRL and 0.03% were positive for both VDRL and HIV.

4.10 HIV prevalence among Core Risk Groups

4.10.1

At the national level, 9.43% of persons tested positive for HIV at the FSW sites, which was slightly lower from 10.33% in 2003. Similarly, among the IDUs, the HIV prevalence declined to 11.15% from 13.29% in 2003 but a marked decrease occurred among MSMs where HIV prevalence showed a decline from 12.09% in 2003 to 7.47% in 2004. Though a decrease was observed overall in the Core Risk Groups, attention should be focused on individual sites with very high prevalence in each state to curbs spread from there. Omit this table.**MSM**

In the **states of Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu**, a total of 1500 patients were tested and HIV positivity was 10.3%. More then 2/3rds were non-migrants. Percent HIV positivity was higher amongst non-migrants in urban areas (11.7%) and amongst migrants in rural areas (10%). In urban

areas, prevalence was highest in the 45 and above age group (16.67%). In rural area, it was the highest among the 20-29 years age group. HIV prevalence decreased with education in both the urban and rural areas.

The majority of the MSM were urban unemployed males and showed high HIV prevalence (14.46%). In rural areas prevalence was highest (16.67%) amongst drivers.

In the states of **Goa, Gujrat & Pondicherry**, a total of 599 men were tested and 5.18% were found to be HIV positive . The majority of men tested (511) were from urban sites. The maximum numbers of men tested (323) were in the 20-29 years age group, but HIV prevalence was highest among the 30-44 years age group (14.29%). Prevalence decreased with higher levels of education. In urban areas, the highest prevalence was reported amongst agriculture and unskilled workers (9.23%) followed by businessmen (8.33%) and the unemployed (7.69%). In rural areas, hotel staff reported the highest HIV prevalence (12.50%) closely followed by businessmen (9.09%). Out of the total number, 6.68% were positive for VDRL and 1.50% for both.

In the rest of the country, with relatively low HIV prevalence, a total of 837 men were tested for HIV. Migrants had higher prevalence of 3.67% as compared to non-migrants (1.12%). The 30-44 years age group from rural areas was 4.35% positive. No graduate tested positive. In urban areas, prevalence was highest amongst truckers followed by people in service. However, in rural areas, it was highest among service class (10%) followed by 8% amongst factory workers. VDRL positivity was 2.99% and 0.6% were positive for both HIV and VDRL.

Female Sex Workers

In the states of **Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu**, a total of 2960 FSWs were tested, including 2391 in urban sites and 569 in rural sites. Overall positivity was 22%. The HIV percent proportion was higher in rural women (23.55%) than in their urban counterparts (21.87%). Prevalence was higher amongst migrants (22.75%). In urban areas, prevalence was highest among women between 20-29 years of age (25.22%), while in rural areas, women of less than 20 years age had highest prevalence (27.56%). Prevalence did decrease with high literacy levels. VDRL positives were 12% and 5.81% tested positive for both HIV & VDRL.

In the states of **Manipur and Nagaland**, a total of 498 women were tested and HIV prevalence among them was 8.43%. Highest percentage prevalence was found amongst migrants (8.87%). The percentage prevalence was highest amongst the age group of 20-29 years (11.49%). The prevalence was surprisingly lower in illiterates (4.56%) as compared to primary and secondary education groups (13%). 12.45% tested positive for VDRL and 5.22% tested positive for both HIV and VDRL

In the states of **Goa, Gujrat & Pondicherry**, a total of 456 women were tested and the majority (314) were from urban sites. HIV prevalence was found to be highest in migrants (7.33%), especially amongst the urban population (9.62%). Maximum numbers of women tested were in the 30-44 years age group (244) and HIV prevalence was also highest among this age group (8.33%). Percentage prevalence decreased with increasing levels of education. Out of the total, 5.92% women tested positive for HIV, 7.68% for VDRL and 1.10% for both.

In the rest of the country, a total of 6039 women were tested, including 4553 from urban and 1486 from rural sites. 3.53 % of them were found to be positive for HIV. Highest prevalence was found in the 20-29 years age group (4.53%). Most of them were illiterate. 6.56% tested positive for VDRL and 0.55% tested positive for both HIV & VDRL

4.10.2

Intravenous Drug Users In the states of **Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu**, a total of 527 IDU patients were tested in H1 states including 518 men and 9 women. HIV prevalence was 33.59% amongst men and none of the women tested positive. Out of the total, 524 were from urban areas with prevalence rate of (33.21%). Prevalence was highest amongst the 20-44 years age group (35.26%). Illiterates and just literates showed high percentage prevalences of 35.75% and 37.91% respectively. The

highest prevalence was observed amongst hotel staff (66.67%).

In the states of **Manipur and Nagaland,** among 2679 IDU tested, most were men. Percent positivity was 10.47% in males and 5% in females. A large proportion of IDU were unemployed, but prevalence was greatest among agricultural/unskilled workers (16.25%) and truck drivers (11.90%). HIV prevalence was nearly the same in urban areas (10.10%) and rural areas (9.42%). Percent positivity was higher in non-migrants (10%) than in migrants (8.71%). 8.25% tested positive for VDRL and 0.60% tested positive for both HIV and VDRL.

Intravenous Drug Users (Delhi, Kolkota, Mumbai, Assam, Meghalaya, J&K)

1772 persons were tested including 1653 men and 119 women. Prevalence was observed to be 6.47% among men from urban areas. The highest prevalence was in the 30-44 years age group (8.69%).

Illiterates showed higher vulnerability to the infection with 9.45% prevalence. VDRL was found positive in 4.97%. Only 0.79% tested positive for both HIV and VDRL

4.11 HIV Prevalence in relation to TB patients (Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu)

A total of 1774 patients were tested including 1158 men and 616 women. 11.3% men and 6.8% women were found to be positive. Prevalence was reported to be higher amongst migrants (17.70%) as compared to non-migrants (9.21%). Prevalence was higher in patients from urban areas (10.36%) as compared to those from rural areas (9.00%). Patients in the 30 to 44 years age group showed highest prevalence (12.70%). Illiterates (10.72%) and just literates showed high prevalence of HIV infection. Hotel staff showed highest prevalence of 22.73% followed by people in service (15.63%), business (14.94%), truckers/auto/taxi drivers (13.43%) and industry/factory workers (13.13%). These findings are commensurate with observations in other groups because TB was more common in the groups with high HIV prevalence.

TB Patients (Manipur & Nagaland)

A total of 351 men and 188 women were tested. HIV prevalence was higher among men in rural areas and women in urban areas. Migrants showed a higher prevalence (20.75%) as compared to non-migrants (15.23%). Prevalence was highest amongst the 30-44 years age group (25%). Graduates and those with secondary level education showed higher prevalence as compared to illiterates. People in business, unskilled workers, students and the service class showed higher prevalence rate for HIV. Housewives also had high prevalence (17.89%). 3.53% tested positive for VDRL and 0.19% tested positive for both VDRL and HIV.

CHAPTER
5

Conclusion at Country Level

The Annual Sentinel surveillance in the country is a mammoth task undertaken by NACO for tracking the HIV epidemic in the country.

5.1. Strengths and limitations of the Annual Sentinel Surveillance for HIV in the Country

Strengths

- A nationwide system of surveillance.
- Follows scientific methodology to generate valid data based on guidelines by WHO/UNAIDS.
- This strategy, by following an "Unlinked Anonymous" criterion of blood collection, circumvents the difficulties of obtaining consent and the problems of social stigma and also avoids "participation & selection bias".
- Generates HIV status information for key high-risk groups that are spearheading the epidemic in our country and also the status amongst the general population.
- Generates state- and site- specific data that is extremely useful to assess the trends of the HIV epidemic in different parts of the country.
- The Surveillance system has continuously expanded to achieve greater representative ability and reliability.
- Data was used for estimating the number of HIV infections in the country, in the reproductive age group i.e. 15-49 years, for 2004.

5.2. Limitations

- The ANC sample population tested by the surveillance may not be representative of the general population to which the results are extrapolated. For example, the utilisation rates for antenatal care are very low in India and vary from state to state. Women attending ANC clinics may differ significantly from women who do not. Pregnant women may not be at the same risk of acquiring HIV as non-pregnant women. Those who utilise services, whether for antenatal care, STD treatment or any other service, may be slightly different from those who do not, and the rates of HIV infection may be over or under estimated.
- The sero surveillance data by itself does not contribute to an understanding of the reasons for changes in trends observed in different areas and needs further behavioural studies.
- Separate samples of the "Bridge" populations such as migrant labourers, truck drivers, hotel staff, etc., need to be taken, as they are the sub-groups at a higher risk of acquiring HIV than the general population.
- Pregnant women attending antenatal clinics have been taken as a proxy for the general population. Nearly 90% of the antenatal women are in the age group of less than 30 years.

- It is being observed around the world that adolescents are increasingly driving the pace of the HIV epidemic as the epidemic matures. This is a group for which statistics are lacking, not just surveillance data, but also other behavioural data.

Salient findings

- The surveillance was conducted at good to satisfactory levels in 85% of the sites across the country. The rural sites (ANC-R) had 1/3rd urban population and hence cannot be termed absolutely rural. More interior based rural sites are needed. Relocation can be done.
- The 0.89% HIV prevalence in ANC group indicates that there is still opportunity to rein in the epidemic, as it has not crossed 1% prevalence whereupon it is assumed that the infection has spread to general population. The low prevalence or vulnerable states should be prevented form increasing prevalence.
- The country is at the verge of transition e.g., some low prevalence states like Mizoram are moving into high prevalence and Tamil Nadu is sliding down to concentrated prevalence. Prevention efforts need to be intensified rather than providing care and support later.
- Hotspot specific surveillance and targeted intervention needs to be initiated in vulnerable states. Hotspots are present in all states and should be investigated to ascertain the cause of very high prevalence in these sites and action should be taken.
- Lower socio-economic status individuals are affected, the majority amongst men being vehicle drivers, factory workers, hotel staff, agricultural or unskilled labourers. Amongst women, the worst affected are housewives and those in business. No change in the pattern has occurred since 2001. Infection amongst the wives of the unemployed and, from 2003, for the wives of students has increased at a country wide level.
- Education is protective but not for intravenous drug users in Manipur and Nagaland where intravenous drug use is the predominant mode of transmission of HIV. This is true for females in Manipur and Nagaland too. Younger women are affected.
- Unemployment predisposes towards acquiring HIV through unsocial activities like commercial sex and drug use and needs to be addressed urgently across the country but particularly in the North-East.
- The epidemic has percolated to rural areas as is evident from the large number of very high prevalence sites in rural areas in the high prevalence states and some high prevalence districts in the low prevalence states. Rural young women with low levels of education are particularly getting infected along with illiterate ones of both sexes.
- Women and adolescents, especially girls, are bearing the brunt of the epidemic with nearly 11% in high prevalence and 1.33% in low prevalence states, despite being housewives.
- Patients with genital warts had the highest HIV positivity amongst men and women in high prevalence states with predominantly heterosexual transmission. In H2 states, HIV positivity was highest in men with genital ulcers and women with genital warts. Genital ulcer was associated with high prevalence amongst men in states with concentrated epidemics and with women in low prevalence states. Warts and ulcers predispose the person to increased chances of acquiring HIV. Services for sexually transmitted diseases need further strengthening to attract patients for optimum utilisation and to decrease stigmatisation.
- VDRL positivity did not correlate with HIV positivity as the range varied from 5.26% in high prevalence states to 4.23% in low HIV prevalence states amongst STD patients. Similarly, the VDRL figure was 0.83% in high prevalence ANC women and 1.66% in mothers from low prevalence states. This has to be interpreted in the light of the number of persons accessing STD services and the availability of treatment facilities for STD. High VDRL indicates intense sexual activity in low HIV states. Once the HIV virus enters this sexual network, HIV prevalence may suddenly rise.
- Need for triangulation of data for more comprehensive interpretation of the HIV epidemic.
- The VCTC data on HIV when compared to STD HIV positives shows marked difference in low

prevalence states and indicates that there are HIV persons in the community who are not accessing the STD and ANC services and hence have not been picked up. Such a masked situation makes the low prevalence states like Orissa, MP, West Bengal and U.P., extremely vulnerable.

- The present HIV prevalence in the country is 5.134 million and has not shown a marked difference since last year. However, because of detection of more AIDS cases now (as the previously HIV positives are becoming clinical cases), it appears that the epidemic is progressing rapidly. It is not denied that HIV is spreading but it is doing so at a slow rate. The detection of more AIDS cases in the recent past has created a greater demand for multi pronged interventions. Thus, it is essential to allocate more resources to the care and support of persons living with AIDS along with the treatment of opportunistic infections. The coverage of ART should be widened to improve the quality of life amongst AIDS patients. Nonetheless, emphasis should also be laid on prevention strategies like creating awareness about HIV, counseling for HIV testing, condom promotion and targeted intervention amongst the high-risk groups.

CHAPTER
6

Recommendations

6.1 Recommendations for improving sentinel surveillance

- All sentinel sites should complete their respective sample size. This will make the data more representative and enhance its validity. This can be achieved by selecting sites with adequate patient load.
- "Inclusion criteria" for testing should be strictly adhered to. This will prevent mixing of low and high-risk groups.
- It should be ensured that surveillance activities are performed only by adequately trained personnel.
- Transportation delays of consumables to the sites, and of samples to the testing centres, should be reduced to a minimum.
- The ANC-Rural/Targeted Intervention project sites must be continued in subsequent rounds of surveillance to study the trend of HIV in the respective groups.
- ANC-Rural sites chosen should be predominantly rural in character and should represent the population. Some ANC-Rural sites in 2004 may need to be changed due to the presence of urban population in them.
- Separate samples of major "bridge population" groups like drivers, factory workers, hotel staff etc. may be collected by linking them with targeted intervention project sites.
- Male recruits in military or paramilitary services or university students may be used as proxy for the general male population, by conducting unlinked anonymous HIV testing on them during health check-ups.
- Sero-surveillance should be done in other hospitalised patients.
- STD clinics may be renamed as Reproductive Tract Infections Clinics for utilisation without stigmatisation and to improve patient load.
- A core surveillance team should be identified in each district to keep track of the epidemic and initiate local area planning below the district level. Special surveys may be conducted at the hotspots in both high and low prevalence areas to formulate area specific interventions.
- The present sero surveillance does not trace risk behaviour, hence, behavioural surveillance is needed.
- Information on HIV/AIDS from all data sources not integrated at present should be integrated.

6.2 Recommendations for other surveillance activities

6.2.1 Low Prevalence Areas

Behavioural surveillance in high-risk behaviour groups is needed to provide information regarding the main risk behaviours and sexual networks, and the possible population groups to which HIV could spread. This should be in addition to sentinel sero surveillance in high-risk groups, donor blood screening, and HIV/AIDS case reportings from hospitals and VCTCs in the same area. A rising trend in high-risk behaviour and STIs should serve

as an alert for more detailed surveillance. Increasing prevalence of TB in the community may indirectly indicate HIV spread.

6.2.2 Moderate Prevalence Areas

Annual sentinel surveillance in antenatal women and identified high-risk groups should be supplemented with behaviour surveys in "core risk" groups (networks), "high risk bridge population" and general population. In addition, STD data in the same high-risk groups should also be collected. This data should be supplemented with blood donor HIV status and HIV/AIDS case reportings from VCTCs.

6.2.3 High Prevalence Areas

- All the surveillance activities stated above will need to be conducted with a widened scope and in the specific age groups of 15-24 years in antenatal women, in high-risk occupational groups like factory workers, hotel staff etc. Data on AIDS deaths, and HIV/AIDS related illnesses would also be needed for effective planning of interventions.
- Population based HIV prevalence studies maybe conducted to validate surveillance data. STD surveillance will need to be extended to the general population.
- Behaviour surveillance in core risk groups to find out the networks of sexual partners needs to be carried out. Trends in specific high behaviour obtained by behavioural surveillance and data on trends from sero surveillance in the population of the same area, like sentinel surveillance, VCTC & PPTCT may provide meaningful information regarding HIV/AIDS in the area.

6.3 Recommendations for Utilising the Sentinel Surveillance Data

The surveillance data should be widely disseminated for taking preventive and promotive action by all concerned agencies.

6.3.1 Tracking the HIV epidemic in the country

The epidemic trend in the high prevalence states is maturing and stabilising with Maharashtra, Tamil Nadu and Nagaland reflecting a slight but significant downward trend in STD and Maharashtra registering a similar downward trend for antenatal mothers. The IVDU groups show a sharp decline in HIV prevalence at Manipur. However, in these high prevalence states, the overall stability masks the pockets of significantly rising prevalence between 2003 and 2004 in 4 STD and 7 ANC sites which if not attended to in time, would undo the prevention efforts and affect the low prevalence areas of the same states. Mizoram, which has been a low prevalence state so far, has undergone transition to a high prevalence state. Hence, extra vigilance is needed to boost the decline and curb the rising trends.

But the brunt of the epidemic is now on the low HIV prevalence states. Out of the total number, significant trends of increase amongst STD cases were observed for the states of Andaman & Nicobar Islands, Arunachal Pradesh, Chattisgarh, Delhi and Mizoram. Rising trends for ANC women were seen in Chattisgarh, Mizoram, Haryana, A&N Island, Kerala and Meghalaya. Other states do not show a linear trend though in some the HIV prevalence is increasing. Nearly 9 STD sites and 10 ANC sites are experiencing significant increase in HIV prevalence as compared to 2003. Thus, the challenge should be taken up the so that utmost focus is directed towards prevention, especially in low prevalence states where due to large population sizes, even a small increase in prevalence would mean an increased number of HIV patients.

The "hotspots" in all states need special surveys.

Surveillance strategies should be implemented based on the epidemiological /prevalence status of the states.

Rural Areas: Extending anti HIV intervention to rural areas is top priority in the programme. In the high prevalence states, HIV positivity is greater in the rural populations but even in low prevalence states, the gap between urban and rural areas is decreasing. IEC efforts must penetrate the rural areas to make them more effective. Educational status does not provide protection amongst rural women. This phenomenon is markedly observed in women IVDUs of the northeastern states.

6.3.2 Group-specific interventions

- In each of the areas where HIV is on the up swing, specific groups are driving the rise. For example, in many ANC hotspots, agricultural/unskilled workers who move about in search of jobs are increasing antenatal HIV prevalence by infecting their spouses. In some areas, drivers, factory workers and hotel staff are mainly involved, while in some others, mainly businessmen are infected. Behaviour change communication and targeted interventions should be focused on the main groups responsible for HIV prevalence in each "hotspot" based on surveillance data.
- A key fact is that the majority of women positives amongst STD patients are housewives. Their husbands are infecting them or these women may be into high-risk behaviour. For both, adequate IEC efforts need to be directed, especially towards women from low socio-economic status. A majority of them are uneducated or educated only till secondary level and communication strategies should be tailored for their specific requirements. Migrants, both to rural and urban areas, are at increased risk in most of the states. Literacy has overall been protective, but in states like Nagaland and Manipur, where intravenous drug use is high, literacy levels do not have much impact on risk behaviour and HIV spread. These factors must also be kept in mind for better-targeted interventions and IEC.
- The IVDU groups in Mizoram, Tamil Nadu and Delhi need special programmes for prevention efforts as the prevalence is rising rapidly.

6.3.3 To assess impact of prevention programmes

The impact of control and prevention activities has been positive but in patches. In Manipur, for example, vigorous advocacy and needle exchange programmes have changed the trend of the infection amongst IVDUs. But not all efforts have been as effective. In high prevalence states, although many sites have shown a declining trend amongst both STD and ANC groups, the effect is not uniform across the states. Anti HIV interventions will need to find better ways of reaching out to affected groups to bring results, for example, it may be possible to rope in associations or unions of commercial vehicle drivers, businessmen's associations, workers' unions and the like in BCC and TI campaigns. This will give the anti HIV effort access to these occupational groups and also a greater standing among their members.

Monitoring of IEC activities for HIV/AIDS should be specially emphasised, especially for vulnerable low prevalence states and an officer at the district level should be given the responsibility.

6.3.4 Focus on adolescents

In a majority of the states, HIV positivity is highest in the youngest age groups across all risk groups. The young are especially vulnerable to HIV biologically. They are also increasingly socially vulnerable, through peer pressure, for to high-risk behaviours which can lead to HIV infection. Adolescent girls are doubly affected, as they are vulnerable due to not only their own risk behaviour, and the risk behaviour of their partners/spouses and peers but also biologically. The surveillance data supports these statements.

Therefore, there must be special focus on adolescents of both sexes in campaigns for behaviour change and targeted interventions in any of the risk groups. Programmes like "Universities Talk AIDS" and "Schools Talk AIDS" should be expanded; AIDS should be part of the Reproductive Health/Family Life Education in schools and communities.

6.3.5 Estimation/Projection of HIV infected

The surveillance data is the prime source for making estimations of HIV load in the country. This year's estimation of 5.134 million means that at present these many HIV positives are estimated to be in the country. However, there is now concentrated epidemic in a majority of the states with areas of very high or low HIV prevalence. Besides, the prevalence is rising in select groups. Hence, with the changing nature of the epidemic the same estimation process that has been followed so far may not be viable in the future, creating a need for more appropriate methods of HIV/AIDS estimation.

6.3.6 Planning of Health Care Facilities Focusing on High Prevalence Districts

- There is an urgent need to expand counseling services, in order that these services are easily

accessible to all those at higher risk of acquiring HIV/AIDS. For example, counseling services should be available at the Gynecology OPD in all districts, as most female patients prefer this OPD to the STD OPD. The availability and accessibility of STD treatment services must also be improved and a change of name from STD to Reproductive Tract Infection clinics may attract more patients from all socio-economic strata.

- PPTCT services should be expanded to include all the sites, which have an antenatal HIV prevalence of 1% or more, irrespective of whether they are situated in high or low prevalence states.
- Evidence-based local area planning should be done by conducting special surveys to identify factors influencing the spread of HIV in the community and by delegating well-defined tasks and job responsibilities to block level medical officers and other health personnel and by providing supportive supervision from district/state levels towards control of HIV/AIDS. There should be a separate officer-in-charge to carry out supportive supervision of all the interventions to curb HIV/AIDS at the district level.
- Similarly, AIDS case surveillance should also be strengthened by capacity building of health personnel at CHC and district level in all states.
- India is home to around 5.134 million HIV positive people now (2004). Facilities for providing them treatment for opportunistic infections, antiretro viral therapy, counseling services, and care and support at the terminal stages will have to be initiated, for making services available in future to all.
- There is a strong need for policy development in the states to protect the rights of HIV/AIDS infected persons at their workplaces.

6.4 Strengthening of STD Services

Information on VDRL reveals very interesting facts such as that in areas of low HIV prevalence, VDRL is high, indicating intensive sexual activity even in the absence of high HIV prevalence. It is thus possible that as soon as HIV is introduced into these areas with high VDRL prevalence, it will spread very fast. Hence, strengthening STD services in the form of better facilities, privacy, drugs, counseling and IEC services would create awareness in the community for both STD and HIV.

6.5 Advocacy

The sentinel surveillance provides information for situation analysis of HIV in the country and for making comparison at National & International forums. It gives transparency and visibility to the programme. It also creates awareness amongst all stakeholders and provides directions for future course of action to curb the forward march of the epidemic. The information and issues should be shared with politicians, parliamentarians, professional bodies and academic institutions of the country.

HIV and RCH key messages ought to be marketed as health products with the help of commercial advertisers for wider access and acceptability.

6.6 Inter Sectoral Coordination with non-health sectors

There is a critical need for many non-health sectors to collaborate with health sector to intensify efforts towards prevention and the major ones are:

1. Ministry of Education, for making Family Life Education compulsory at secondary level. RCH & HIV based messages ought to be included in the curriculum of adult literacy programmes.
2. Drug legislation, to make antiretroviral therapy more accessible and affordable. The Association of Pharmacists should be involved in the training of pharmacists so as to provide appropriate and accurate knowledge regarding antiretroviral drugs.
3. Social Welfare and Women & Child Development Department, for taking care of HIV widows, orphans and broken families by initiating welfare programmes.
4. Media & the Press, for giving responsible and non-threatening, destigmatising messages, thus enabling positive responses from HIV affected persons and from the society.
5. Ministry of Youth Affairs and Sports, to expand the scope of “University Talk AIDS programme”, and “Nehru Yuvak Kendra” so as to involve the youth in education and care of the affected families.
6. Judiciary, for legislations to protect the human rights of the HIV/AIDS affected persons.

6.7 Intra Sectoral Coordination

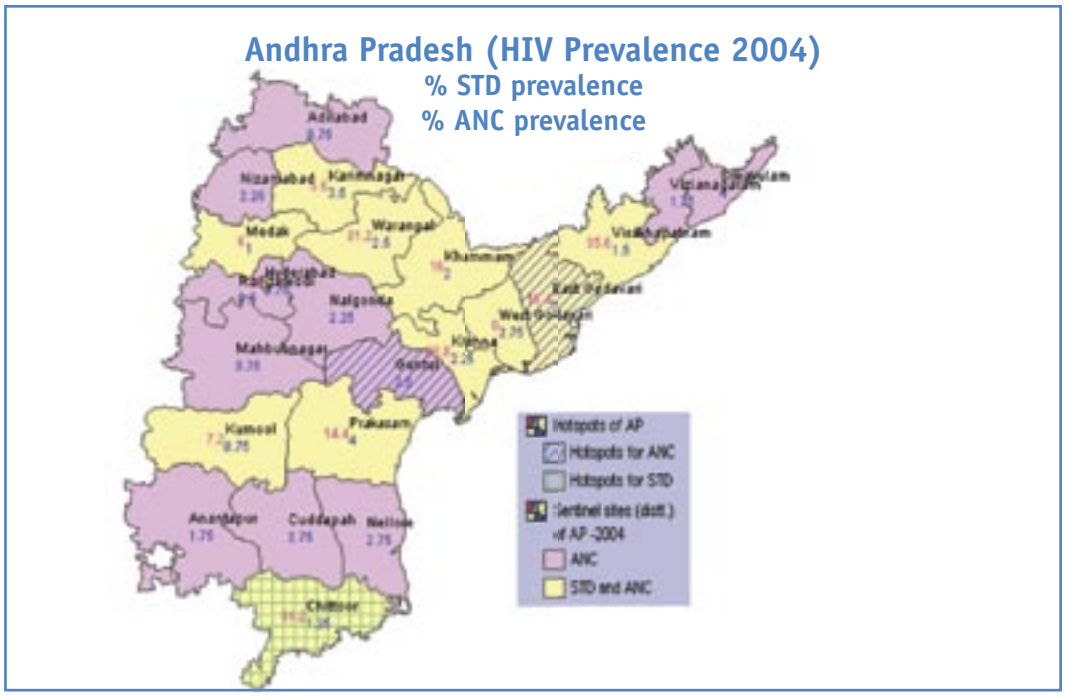
6.7.1. Combined services for TB & HIV

Combined counseling for HIV+ TB patients can be done at DOTS centres. Anti tubercular and HIV treatment may be given at same site after training the providers.

6.7.2. Recommendations for integration of HIV/AIDS and RCH under National Rural Health Mission

1. Inclusion of topics on HIV in training of Dais so that they can educate women at the time of delivery, since for a majority of women, the only opportunity of contact with any health functionary is at the time of pregnancy/delivery (e.g. In BIHAR, 70% women do not even get one ANC, in UP 54%,) (Ref. RCH document GOI).
2. Sensitised and supportive staff at PHC/CHC. Promotion of informal discussion about modes of transmission/prevention of HIV infection with mothers who come for ANC (since one third of the total women get ANC at Government facilities) should be done.
3. Inclusion of IEC material in delivery kits, to be explained and given to mothers during visits by TBA/ANM/AWW/ASHA.
4. Target adolescent girls for HIV awareness (as mentioned in RCH II strategies) and then build upon it at the time of their first ANC visit (All India, any ANC 74%).
5. Counselors at F.P. clinics to counsel about prevention of unwanted births and HIV/AIDS and STDs.
6. Training about universal precautions to be included in RCH manuals. Ensuring universal precautions in labs situated at PHC/CHC levels by MO in charge.
7. Part time counselors for counseling in RTIs/STIs/ HIV for the local population at CHC/ PHC level.
8. Educate Panchayat members, BDOs and other block level officials regarding RCH & HIV & TB and assign specific tasks for achieving health targets.
9. Family life education in schools to have integrated messages of HIV/AIDS and RCH.
10. PPTCT programmes in all those districts where the ANC HIV prevalence has been above 1% for three consecutive years, in low and concentrated prevalence states.
11. Encourage research organisations to measure the impact of IEC programmes for HIV/RCH gender concerns in the community.
12. Monitoring and evaluation of HIV programmes related to mother and child to be done jointly with RCH indicators.

Andhra Pradesh



Introduction

Andhra Pradesh is one of the six high prevalence states for HIV. The total number of sentinel sites were 64 during 2004 rounds of surveillance. There were 23 ANC, 21 ANC-R, 11 STD, 7 FSW, 1 MSM and 1 TB site. The state has the highest HIV prevalence in practically all the districts in the range of 0.65 – 3% at urban ANC sites. Moreover, fourteen out of twenty one rural ANC sites have HIV prevalence above 2% (See Map).

Magnitude of problem

The overall median percent positivity of HIV was 2.25 % in ANC attedees (ANCR 1.25) and 16.40 % in STD patients during this round of surveillance. There has been an increase in the median HIV prevalence among ANC mothers since last year (from 1.25% in 2003 to

Fig 1: **HIV Trend in Andhra Pradesh**

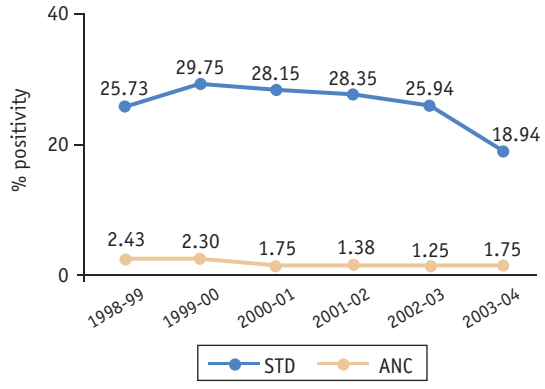


Fig 2: **HIV Trend in Hyderabad**

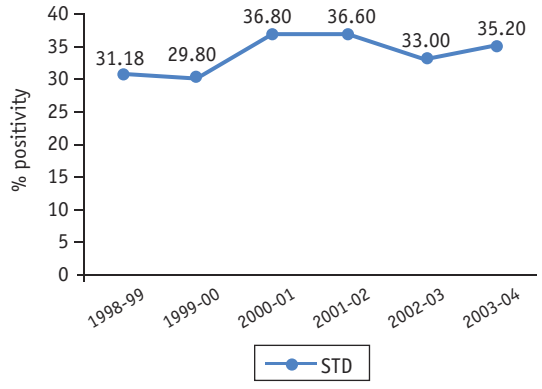
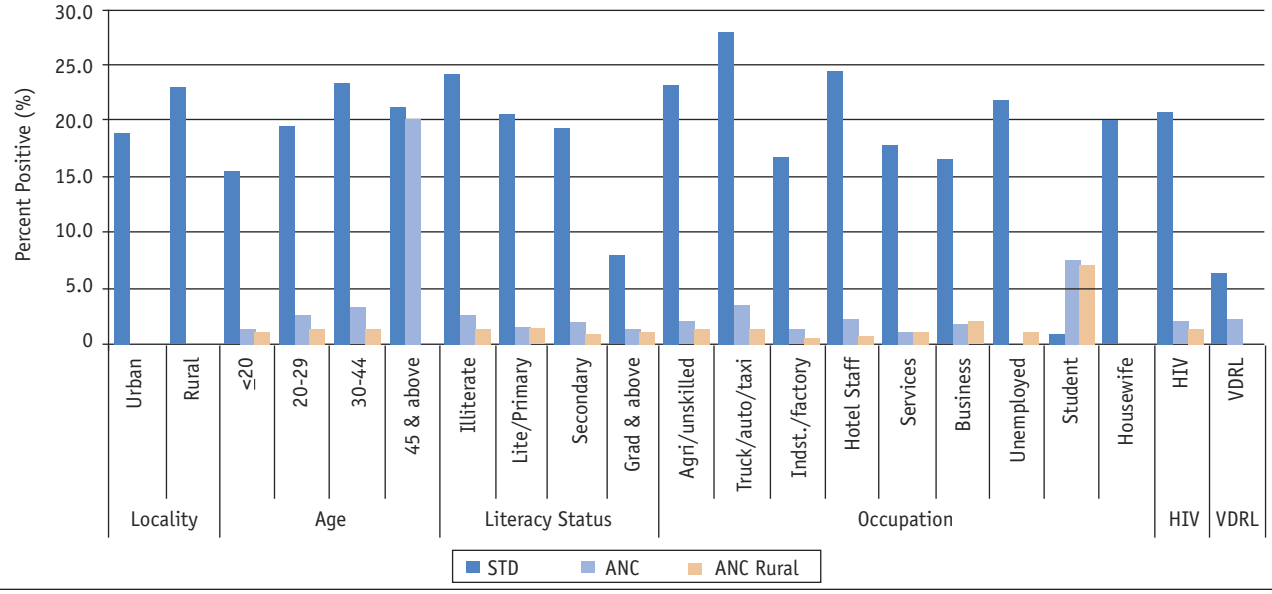


Fig 3: **HIV Prevalence by Socio-demographic in Andhra Pradesh**

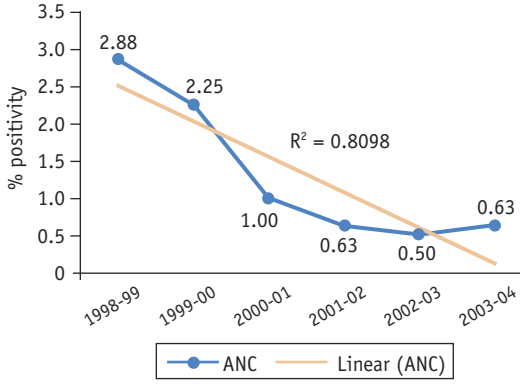


2.25% in 2004) and ANC Rural (from 1.00% in 2003 to 1.25% in 2004). Though Andhra Pradesh has the highest HIV prevalence among STD patients for the whole country, yet there has been a decrease in HIV prevalence as compared to 2003(from 21.47% in 2003 to 16.40% in 2004) (See Figure).

Geographical Distribution of HIV

Among the STD sites, Medak saw an increase in HIV prevalence as compared to 2003. However, other sites including the Hotspots like Hyderabad (Figure), Chitoor and Khamman did not reveal any significant changes. Amongst the ANC sites, a significant increase was seen at Srikakulam and Chitoor district hospitals but a decreasing trend was identified at Kurnool (Figure 4).

Fig 4: **HIV Trend in Kurnool**



Profile of the HIV positives

The core risk group (FSWs & MSMs)

FSW

During this round of surveillance, a total of 1750 FSWs were tested with 16.97% testing positive for HIV. HIV prevalence was highest in less than 20 years at (19.2 %). Migrant FSW had much higher prevalence (22.59%) as compared to non-migrants (14.86%).

The urban-rural ratio of tested FSW clinic attendees was 2.8:1. Moreover, the rural residents had more than $1^{1/2}$ times percent positivity than their urban counterparts (23.5% and 14.7% respectively). The literacy status showed that illiterates were most commonly involved in urban areas (15.3%) as compared to primary level educated in rural areas (30.0%).

MSMs

In MSM groups the HIV positivity was 16% (40 positives out of 250 tested). The positivity was slightly higher in urban (16.1%) as compared to rural (15.8%) MSMs. The highest HIV prevalence was found 23%in the 20-29 years age group amongst the MSM More than one-fourth of total positives were illiterate, however

the highest positivity was amongst secondary level educated at 18.26%. Occupation wise the highest positivity was amongst agricultural/unskilled workers at 16.3%, though MSMs in other occupations had higher positivity but the number tested was very less.

STD Patients

During the 2004 round of surveillance, about 1719 male and 1031 female STD patients were tested and the following figures, 1 & 2, represent the age wise distribution of both the populations.30% are below 24 years in females compared to 20% in males. Analysing data as regards age wise distribution, the figures revealed that the highest positivity was found in the 30-44 years age group (23.33%)

Among the male patients tested, more than half were agricultural/unskilled workers, however, the highest positivity was found amongst truck drivers category (29.9%).

Fig 5: **Age wise percentage distribution of the male STD patients in Andhra Pradesh**

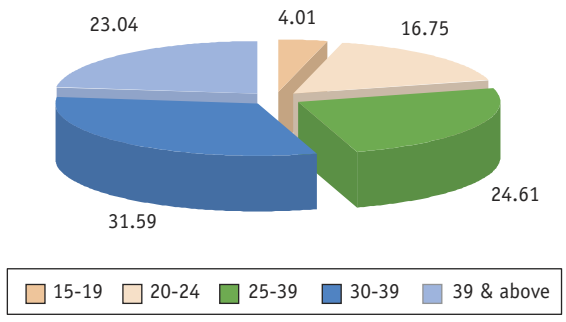
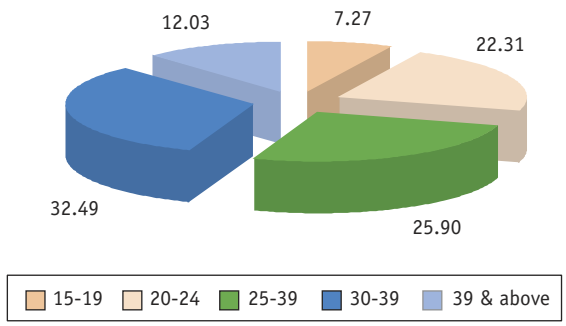


Fig 6: **Age wise percentage distribution of the female STD patients in Andhra Pradesh**



In contrast to males, the female STD clinic attendees working as agriculture/unskilled workers had highest positivity (25.3%).

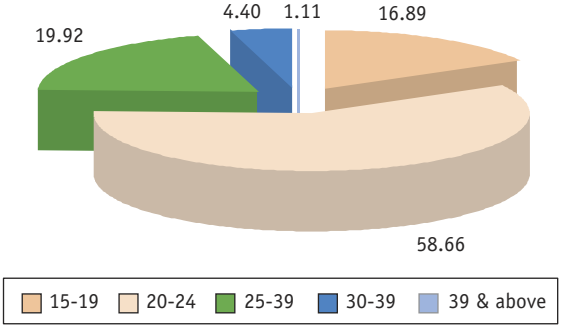
The positivity among housewives was 19.85%. This clearly shows that the spread of HIV is on the rise from high-risk population into the general population. Making the situation more vulnerable was the presence of sexually transmitted diseases in housewives. Amongst migrant STD patients tested positive, a high percent positivity of 30.77% was noted. This is much higher compared to the low figure of 19.72% positivity found amongst the non-migrants.

As regards HIV prevalence among those from rural residents (22.8%), it was much higher than urban residents at 18.8%Education had a positive role, as it was found that the HIV positivity decreased with increase in education status, thus it was highest amongst illiterates at 24.1%. Overall around 50% of clinic attendees presented with discharge as syndromic presentation, however, the highest HIV positivity was amongst sufferers of genital warts at 34.1% followed by both sexes having genital ulcers and urethral/cervical discharges who were commonly found positive. VDRL infection was present in 6.15% and combined positivity 2.84%

Antenatal Mothers

Among the ANC mothers, the pattern of those tested age-wise is shown in figure 3. 63% were below 24 years, It was found that those in the age group of 20-29 years, illiterate and with husbands as agricultural workers, had the highest number of

Fig 6: **Age wise percentage distribution of the tested ANC mothers in Andhra Pradesh**



positives. However, as regards percent positivity the highest positivity was seen amongst 30-44 years age-group (3.41%), amongst illiterates (2.6%) and in wives of truck/auto/taxi drivers/cleaners category at 3.4%.

Only 5 out of 224 mothers who were wives of hotel staff were found positive. The positivity was higher amongst migrants. The VDRL positivity was 2.22% and 0.47% were both HIV & VDRL both positive.

ANCR-R

The percent positivity was 1.26% at ANC-rural sites, this was lower than regular ANC sites at 2.1%. The positivity was higher amongst migrants than non-migrants (1.6% and 1.2% respectively). The positivity was highest amongst 20-29 years at 1.4%. Like at regular ANC sites the ANC rural sites also showed highest positivity amongst illiterates at 1.4%. Occupation wise the highest positivity was amongst the wives of truck drivers category at 1.5%.

TB

Overall HIV positivity amongst TB patients was 11.0%, it was higher amongst urban residents (11.65%) than rural residents (10.31%). As regards age-wise distribution highest positivity was amongst 30-44 year age group at 16.28%. Illiterates accounted for highest 60% of the total positives and had highest positivity at 11.1%. As regards occupation and HIV percent positivity, it was found that highest was amongst agricultural/unskilled worker at 10.9%.

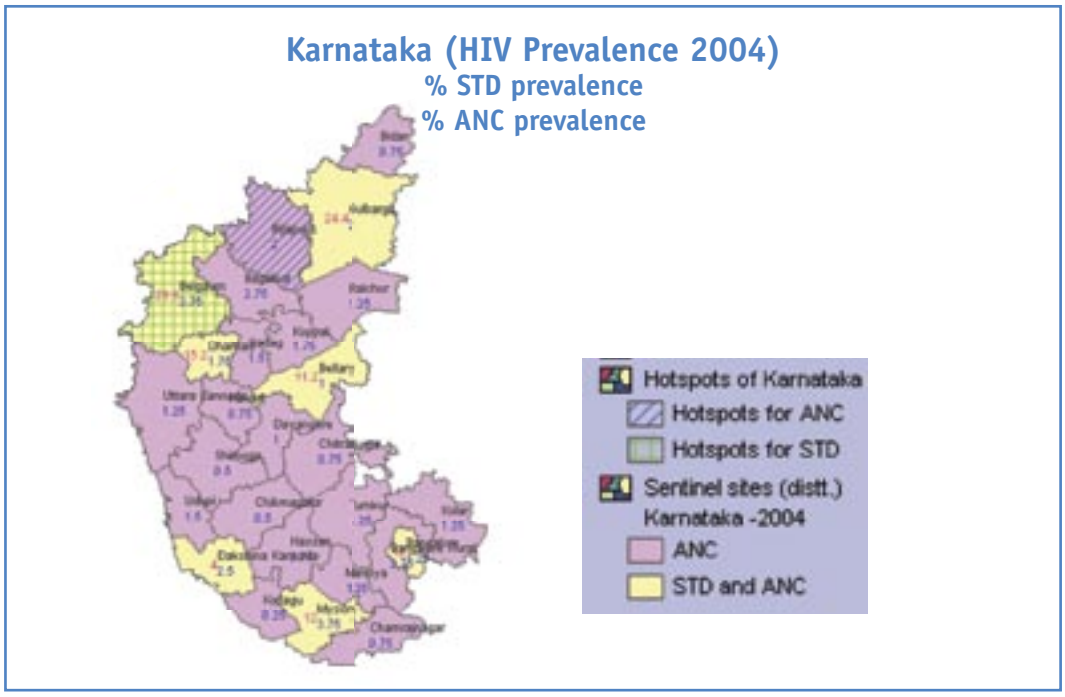
Conclusions and Recommendations

Andhra Pradesh is in the grip of a major epidemic, as the HIV positivity amongst the population donating blood is also high (more than 1%), particularly in the costal region. This indicates that the local population is heavily infected. The other sites are also on the higher side of HIV positivity compared to the rest of the country. The percent positivity among attendees of VCTC has increased from 13.8% in 2003 to 14.3% in 2004. The VDRL positivity also shows values as high as 60% in the West Godavari district. Unfortunately, those educated to graduate and above levels are also involved in the state. This is not commonly seen elsewhere, except in the Northeastern parts of the country. Young feamales are particularly at risk and BCC campaigns particularly for adolescents are urgently needed,Districtwise action is needed keeping in view the high HIV in every district.

HIV positivity amongst FSWs and MSM was also high but surprisingly, was equal to the prevalence in STD patients, indicating that there are certain other factors also contributing as sources of infection for HIV.

Targeted interventions are essentially needed for the bridge population such as migrants, truck/ auto drivers/cleaners and hotel staff. The 19% HIV positive housewives need to be educated so as to be able to lead a normal life. Extensive IEC and BCC are needed urgently to check the growing menace of HIV in Andhra Pradesh.

Karnataka



Introduction

Karnataka is one of the six high prevalence states in the country. In total there were 66 sentinel sites in the state during 2004 round of surveillance. There were 27 ANC, 27 ANCR, 7 STD, 3 FSW, 1 MSM and 1 TB site in the state of Karnataka.

Magnitude of problem

The median prevalence of HIV in 2004 was 1.25 % in antenatal mothers and 12% in STD patients. Although there has been a slight decline in HIV median prevalence amongst STD patients since 2001, (fig)Yet there has also been a significant increase in HIV prevalence in STD patients since last year (12.00% in 2004 compared to 10.40% in 2003).

Geographical distribution

Site wise trends showed significant increase in HIV prevalence at the ANC site at Bangalore as compared to 2003. Belgaum remained the **hotspot** for STD in 2004 with a percentage prevalence of 29.6% followed by Gulbarga with 24.4% positivity. For ANC, the site at Belgaum and Mysore were the hotspots3.75 %

Fig 1: **HIV Trend in Karnataka**

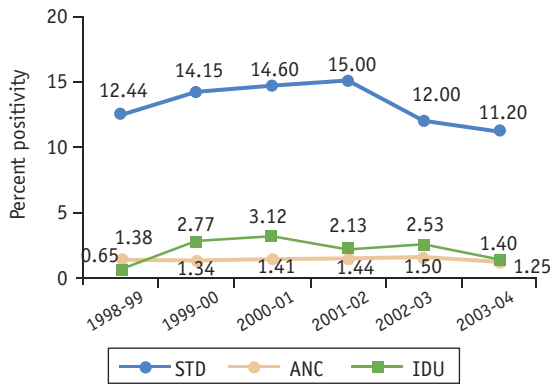
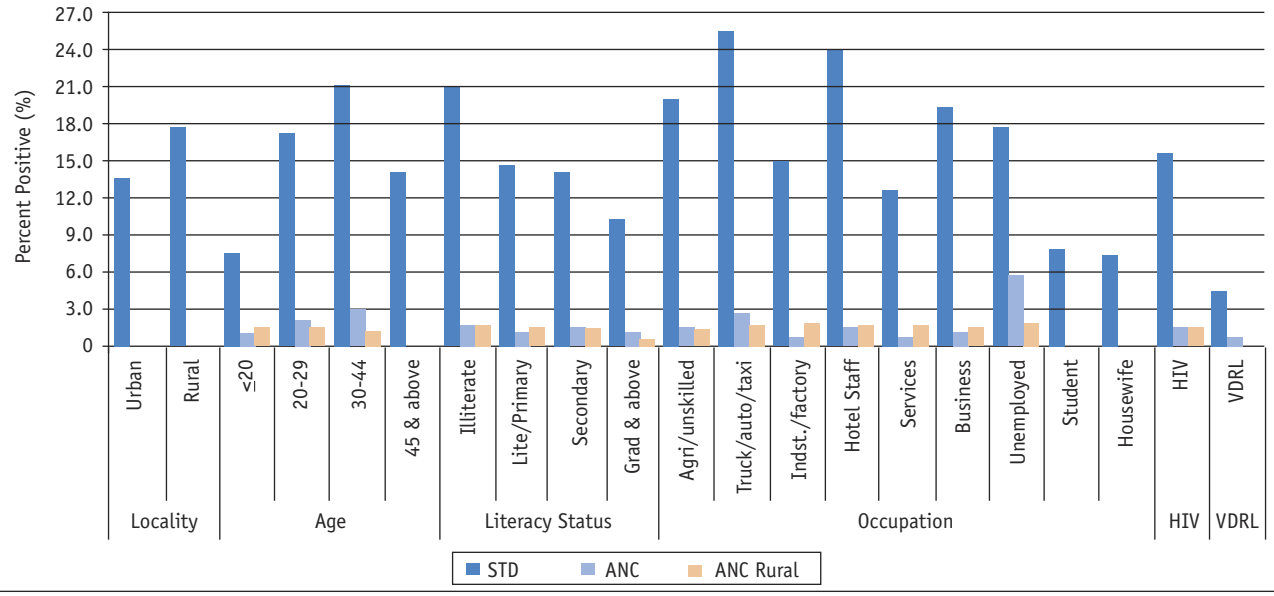


Fig 2: **HIV Prevalence by Socio-demographic characteristics in Karnataka in risk groups**



positivity each. The STD sites at Belgaun and Gulbarga show a significant increase since 1999 while the ANC site at Mysore shows a rise The ANC sites at Hubli and Bangalore have a

Profile of the HIV positives

The core risk groups (FSWs, MSM & IDUs)

FSWs

A total of 250 FSW were tested. The maximum attendees were from the age group of 20-29 years, however, the highest positivity was amongst 30-44 years age group at 26.7%. The overall HIV percent positivity was 21.60% in FSWs. The percent positivity was higher in non-migrants as compared to migrants (24.58% vs. 18.94%). Literacy level did not play any role in HIV percentage positivity, though highest positivity was amongst illiterates at 21.9%.

MSMs

Amongst the other high-risk group of MSMs, 250 patients were tested and overall infection rate was 10%. Forty percent belonged to the age group of 20-29 years and this age group had the highest positivity at 13.33%. More than half of those tested belonged to the primary level literate group and accounted for highest positivity at 10.8%. About 45% of the HIV positives were agricultural/ unskilled workers, with a positivity of 11.11%.

Fig 3: **HIV Trend in Benglore**

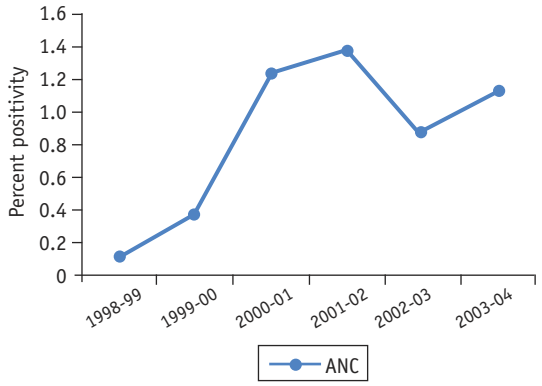
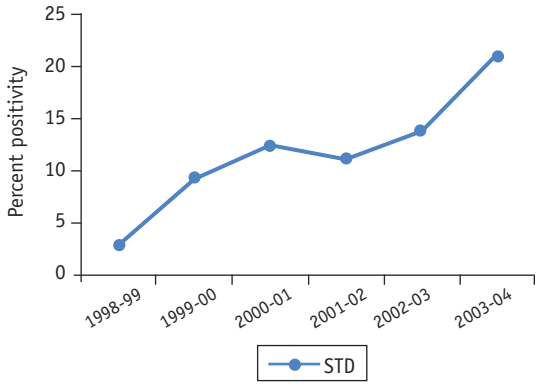


Fig 4: **HIV Trend in Gulbarg**



IVDUs

In total just 24 IVDU clinic attendees were tested and none of them was found to be positive. Amongst the tested more than 85% were non-migrants and were rural residents, and 75% belonged to the 30-44 years age group.

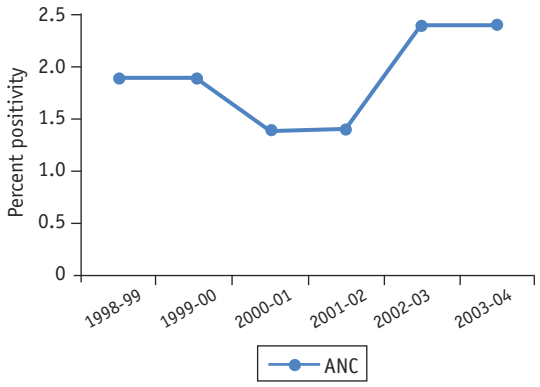
STD Patients

The age-wise distribution of the male STD and female STD patients is shown in the figures.

The figures clearly reveal that the maximum attendees were from the age group of 30-39 years. Though the highest positivity (17.15%) was amongst 20-29 years. The urban: rural ratio of the sample tested was 1.11:1. However, the percent positivity in urban areas (13.45%), was lower than that in rural areas (17.75%). In addition, more males were found to have higher positivity compared to female STD patients (19.90% versus 11.95%).As regards literacy status and HIV percent positivity, it was found that with increase in literacy the percent positivity decreased, however, significantly all the educational classes had HIV positive cases. Highest positivity was still amongst the illiterates at 20.8% as in previos years. Trucks/ auto/taxi drivers/cleaners were the most commonly involved group in males with the HIV prevalence of 28.0%. Whereas amongst the females the highest positivity was found amongst agricultural/ unskilled workers (16.1%). The positivity amongst housewives was 7.44%.

Amongst STD patients, according to syndromic presentation, patients with discharges, males as well as females, showed the highest HIV percent positivity; 29.41% and 21.31% respectively,

Fig 5: **HIV Trend in Hubli**



The aggregate percent positivity for VDRL was 4.29% and with HIV & VDRL combined it accounted for 0.91%.

Antenatal Mothers

In the urban ANC site, the distribution of those tested according to age is depicted in the figure.Sixty four% the highest HIV positivity was found amongst 20-29 years at 2.14%. The urban: rural ratio of the sample tested was 0.6: 1.

The HIV prevalence among ANC mothers was higher in migrants as compared to non-migrants (2.03% versus 1.42%).

Illiterate women were most commonly positive in urban areas (1.94%) as compared to secondary level educated women in rural areas (1.69%). With regard to

Fig 6: **Age wise percentage distribution of the male STD patients in Karnataka**

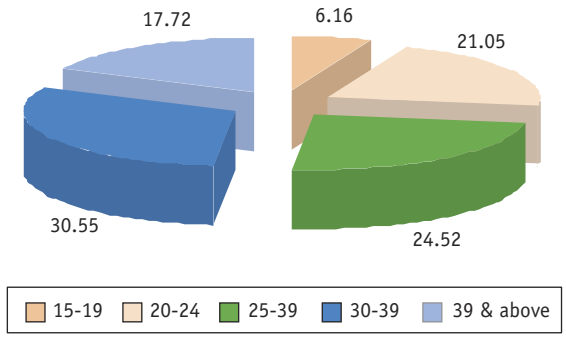


Fig 7: **Age wise percentage distribution of the female STD patients in Karnataka**

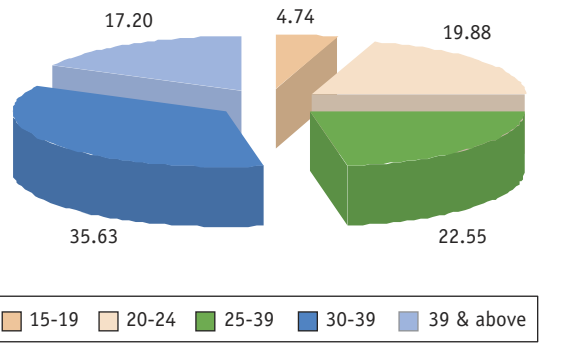


Fig 8: **Age wise percentage distribution of the tested ANC mothers in Karnataka**

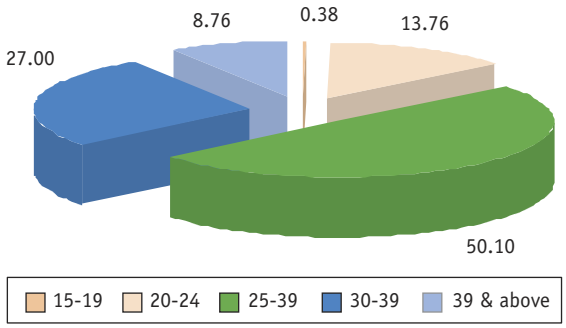
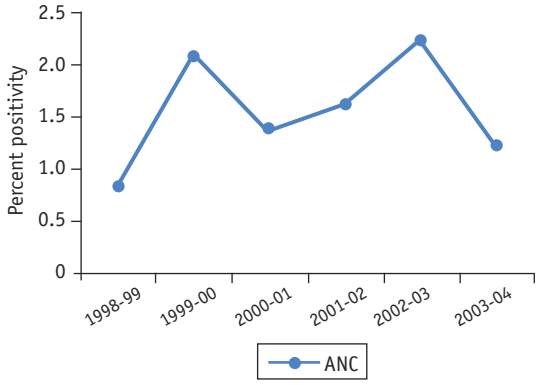


Fig 9: **HIV Trend in Bellari**



occupation, the most commonly involved were wives of unemployed at 5.63%. In antenatal women VDRL positivity was 0.80% and HIV and VDRL positivity was 0.09%.

ANC-Rural site

The overall positivity at ANC urban and ANC rural sites was similar at 1.50% and 1.54%. However, at ANC-rural sites the urban residents had higher 1.77% positivity compared to rural residents at 1.41%. Moreover, the non-migrants had almost double positivity as compared to migrants (1.68% and 0.86% respectively).In the rural ANC sites, the majority of ANC women tested were in the age-group of 20-29 years, however, the highest positivity (2.5%) was amongst 30-44 years age group The illiterates had highest positivity at 1.7% Wives of unemployed husbands had a high rate 1.94% of HIV infection.

TB site

The HIV status of TB patients gave the percent positivityas 12.5%. The positivity was very high in urban (38.89%) as compared to (10.535%) rural residents. The highest positivity was found amongst 45 years and above at 17.65%. The illiterates had highest percent positivity (13.68%). Occupation wise more than half of those tested belonged to agricultural/ unskilled workers category with highest positivity also among them at 12.1%.

Conclusions and Recommendations

The northern border of Karnataka has the highest prevalence in the state except for Bangalore & Mysore. To curb the infection in the state, the chain of transmission from the high-risk group, i.e,. from FSWs to the general population, through the bridge population, needs to be broken through appropriate measures, particularly in the focused areas of the state.

Analysis of STD sites reveals high prevalence in males working as truck/auto/taxi drivers/cleaners. Besides them hotel staff & unemployed group need targeted intervention strategies.

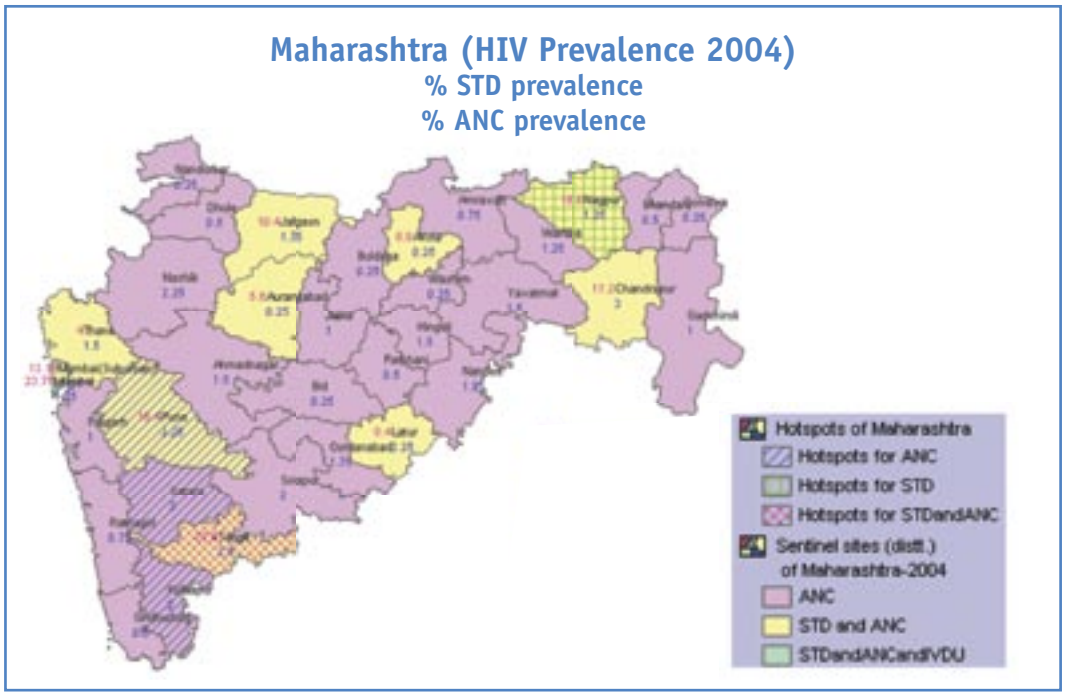
In Karnataka, the percent positivity among attendees of VCTC was 18.63% in 2004 and 18.60% in 2003, which is slightly higher than the percent positivity among the STD patients (15.49%). This signifies less utilisation of the VCTC centres.

About 2.73% HIV positivity was found in the ANC mothers whose husbands were truck drivers/cleaners and this is clear evidence of the spread of the disease. Strategies for halting transmission need to be implemented with rigorous monitoring, if reversal of trend is to be achieved in this particularly vulnerable group.

High positivity of HIV (12.5%) was seen in TB patients, which is a deadly combination. Hence; effective control of TB with DOTS strategy needs to be implemented vigorously and at the earliest.

The IVDU population was not being picked up properly in Karnataka as the IVDU site at NIMHANS was practically not picking up patients.New site for IVDU urgently needed to assess the infection in this group.

Maharashtra



Introduction

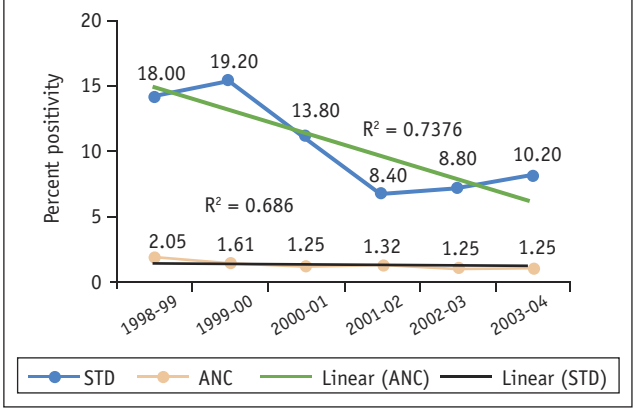
Maharashtra is one of the high HIV prevalence states in the country (excluding the area of Mumbai). In total there were 79 sentinel sites in the state- 33 ANC, 33 ANC-R, 9 STD, 2 FSW, 1 MSM and 1 TB sites (see map).

Magnitude of problem

The median prevalence of HIV in 2004 was 1.25 %same as in (2003) in antenatal mothers and 10.40%(10% in 2003) in STD patients.

HIV prevalence in STD population has shown a declining trend since 1998. However, the trend seems to be constant since 2001 when only consistent sites are considered. As such there is no significant trend visible amongst ANC women in the state.

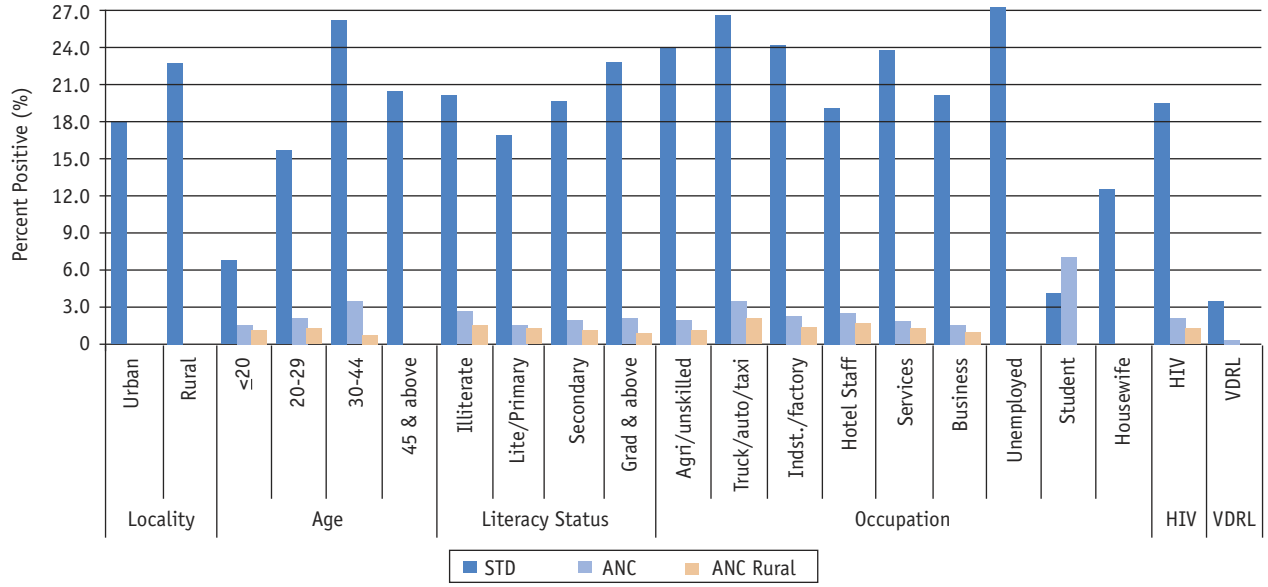
Fig 1: **HIV Trend in Maharashtra**



Geographical Distribution

The sites close to the northern Karnataka border, the western part around Mumbai and around Nagpur have high prevalence of HIV. Sites with the highest HIV

Fig 2: **HIV Prevalence by Socio-demographic characteristics in Maharashtra in risk groups**



prevalence consistently in the past years are Hotspots. For STD patients these were Sangli with 32.8% and Nagpur with 18.8% HIV prevalence, while antenatal clinic attendees with HIV prevalence at Satara (2.0%), Pune (3.75%), Sangli (2.5%) and Kolhapur (2.0%) were particularly at risk in 2004. Chandrapur has also shown very high prevalence during this round of surveillance(11.2% for STD and 3%forANC.)

Profile of the HIV positives

The core risk group (FSWs and MSMs)

FSWs

The overall positivity amongst FSWs was 40.40%, with positivity amongst migrants and non-migrants being 36.59% and 50.00% respectively. The analysis revealed that illiterate FSWs had highest positivity at 40.60%. As regards HIV positivity and age-wise distribution, it was found that with increase in age the percent positivity increased and it was highest amongst 30-44 years ae group at 40.13%MSMs

Among the MSM category population, HIV infection was 12.80% but it was highest (40.54%) in the 30-44 years age group of MSMs. Illiterates had the maximum positivity (35.29%), while graduates and above had the least positivity rate of 6.12%. 40% of those tested for HIV status belonged to the service class, however, the highest positivity was found amongst unemployed MSMs at 19.67%.

STD Patients

The overall HIV percent positivity amongst the STD clinic attendees was 12.93%. Migrant males showed higher (19.31 % positivity) as compared to non-migrant males (15.93%). Similarly percent positivity among migrant females (10.53%) was higher compared to non-migrant females (8.55%).

Though urban: rural ratio of males tested was 2:1, yet rural males showed higher percent positivity of 21.43%. In contrast, there was higher percent positivity seen in urban females (9.47%) than in rural females (6.93%) among the STD patients.

Fig 3: **HIV Trend in Chandrapur**

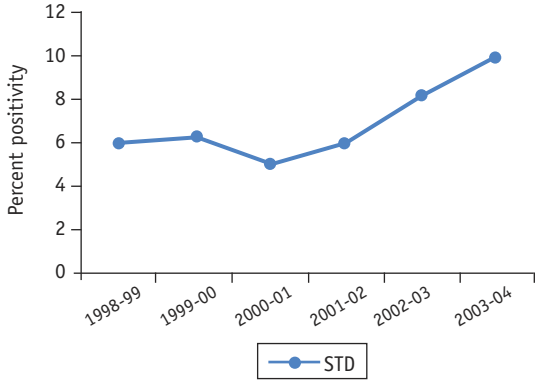


Fig 4: **Age wise percentage distribution of the male STD patients in Maharashtra**

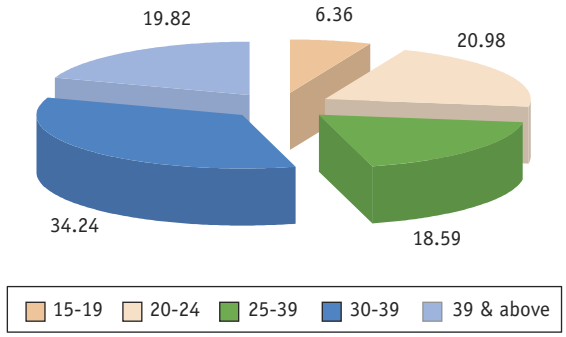
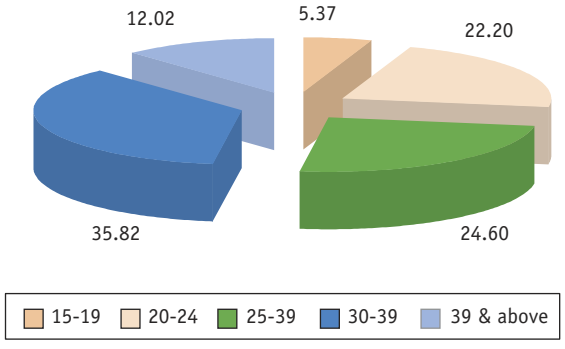


Fig 5: **Age wise percentage distribution of the female STD patients in Maharashtra**



When the educational background was analysed, it was found those with education level of graduation and above had highest positivity at 15.21%. Moreover, the highest percent positivity was found among 30-44 years age group clinic attendees at 17.42%.

Occupation-wise, unemployed males with HIV percent positivity of 19.23% need special attention though the prevalence was high in other groups too (fig). 8.31% of the housewives were found to be HIV positive. Considering syndromic presentation, male STD patients with discharge had highest percent positivity of 24.44%, whereas, females with genital ulcers showed highest percent positivity of 12.81%. The overall VDRL positivity was 2.18% and positivity for both HIV and VDRL was 0.58%.

Antenatal Mothers

The overall positivity amongst ANC clinic attendees was 1.23%. The urban:rural ratio of the ANC mothers tested was 1.38:1. There was not much difference as regards HIV prevalence between migrants and non-migrants at 1.13% & 1.25% respectively. Highest positivity was noticed in the age group of 30-44 years at 2.15% though the majority of those tested belonged to the 20-29 years age group. Maximum infection was found among illiterate women (1.66%).

Fig 6: **HIV Trend in Latur**

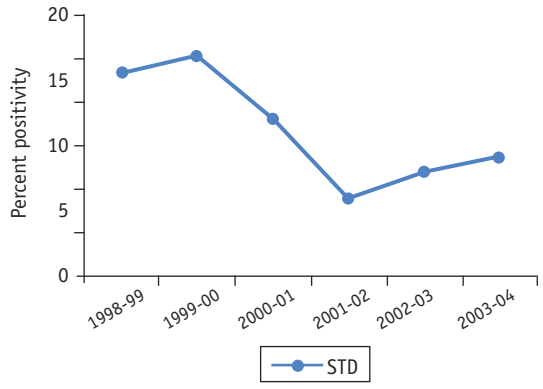


Fig 7: **HIV Trend in Pune**

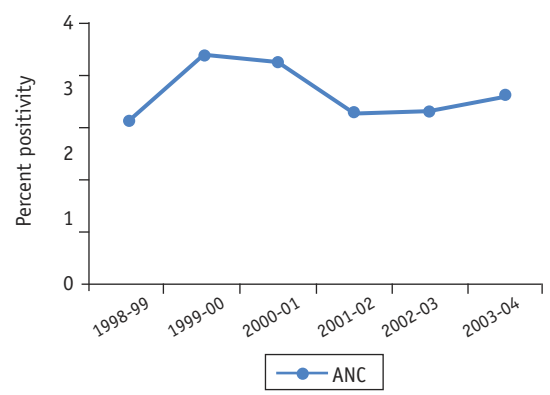
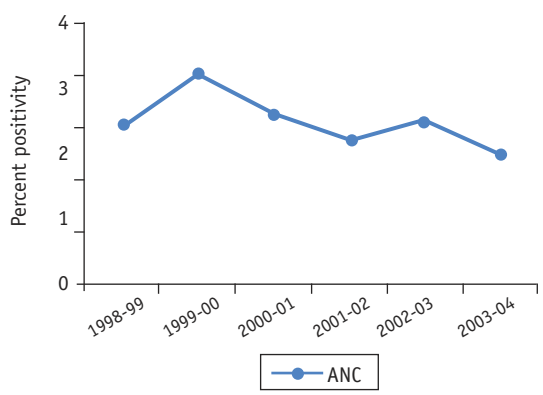


Fig 8: **HIV Trend in Satara**



Wives of those working as truck/auto/taxi drivers/ cleaners had highest positivity at 2.13%, though more than 50% of clinic attendees were wives of agricultural/ unskilled workers. The VDRL positivity was 0.08%.

ANC-Rural site The overall percent positivity was lower (0.69%) compared to ANC urban sites at 1.23%. The highest positivity was found amongst 20-29 year age group (0.74%) and illiterate clinic attendees at 0.88%. The migrants (0.84%) had higher positivity than non-migrants at 0.67%.

Like in urban site, here too the wives of those worling as truck/auto/taxi drivers/cleaners had highest positivity at 1.23%.

TB patients

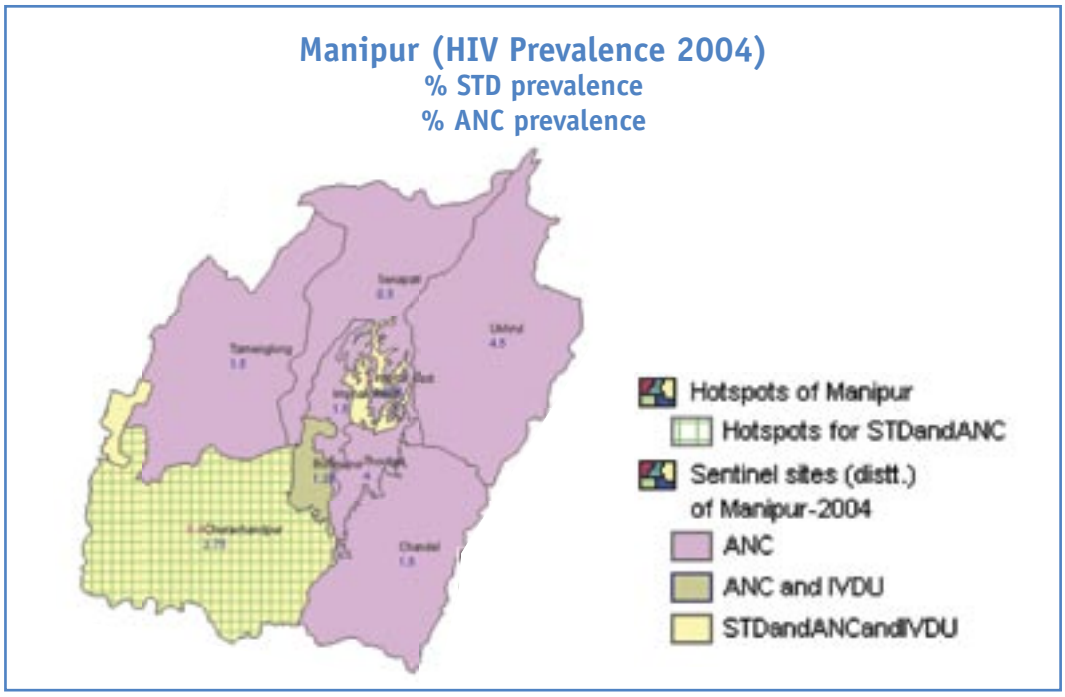
The overall HIV positivity was 5.75% amongst the TB patients, it was more than twice in rural residents at 7.23% compared to their urban counterparts at 3.64%. The positivity among males was much higher than females (8.46% versus 3.02%). The positivity was highest among the 20-29 years age group 7.81% and those clinis attendees having primary level education (9.30%). Those working as agricultural/ unskilled workers had highest positivity at 8.33%.

Conclusions and Recommendations

HIV prevalence in STD patients has remained equivocal in Maharashtra (10.00% in 2004 from 10.40% in 2001). The area of western Maharashtra is particularly affected and needs a well defined strategy for control. The STD site at Sangli deserves special attention as HIV prevalence here is amongst the highest in India (32.8 %). The percent positivity in the blood banks was 0.8% during 2003 as well as in 2004. The percent positivity at VCTCs has increased compared to 2003.

Specific measures to reduce HIV transmission require urgent IEC measures, behavioural modification, universal condom use, and support for FSW%MSM groups. Truckers continue to be the main infected group. Involvement of their association in a more responsible way may be helpful for control amongst this group. TB also needs attention particularly in males working in agricultural /unskilled sector. In a nutshell, urgent steps implemented today can go a long way in preventing the further spread of HIV tomorrow.

Manipur



Introduction

Manipur is a high prevalence state.The predominant mode of spread of infection is through sharing of infected needles amongst drug abusers.Twenty three sentinel sites (10 ANC,2 STD,4 IVDU,4 ANC-R,1 MSM,1 FSW,1 TB) participated in the 2004 round of surveillance activities.Despite occasional problems,the quality of data generated was good.As can be seen in the map,surveillance activities covered the entire state.

Magnitude of problem

Manipur is one of the high HIV prevalence states, with infected needle use amongst IDUs being the predominant mode of transmission. The mean percent prevalence for STD was 7.2%, and for ANC was 1.50%, 22.00% for IDU & 0.63% for ANC-R during this round of urveillance.

Geographical distribution

As a whole, the HIV prevalence in STD patients and antenatal woman has not changed significantly as compared to the figures for the previous year in the state. Prevalence in antenatal women has been stable for the last 6 years, while HIV prevalence in IVDUs has

Fig 1: **St. 5 HIV Trends in Manipur**

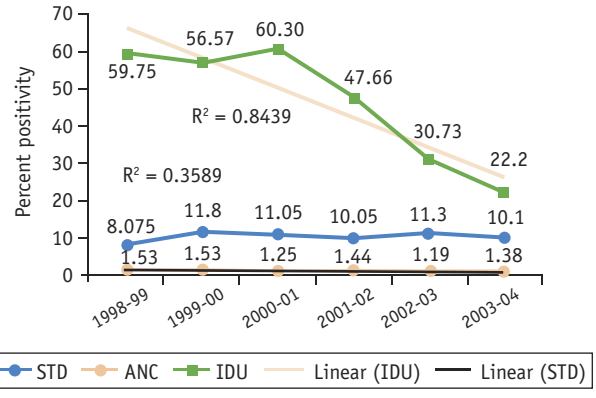


Fig 2: **HIV Trend in Imphal**

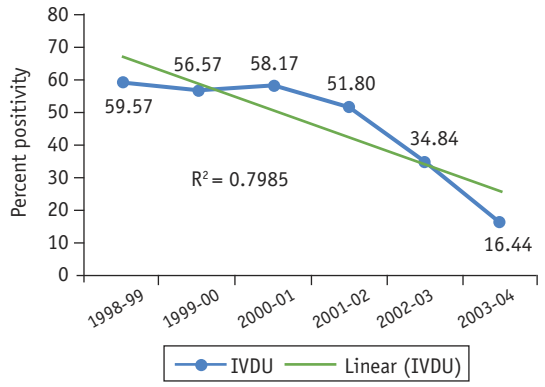
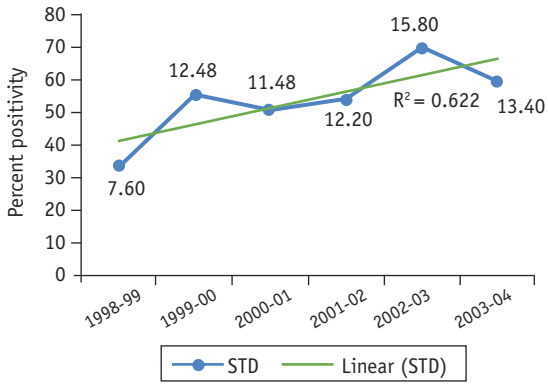


Fig 3: **HIV Trend in Churachandpur**



fallen significantly with a a sharp decline from 64% in 2000 to22.0% in 2004.

IVDU site Imphal revealed a significant decline from last year. Churachandpur, which was an IVDU as well as an ANC hotspot (Map), has shown a slight decline from last year. Thoubal and Ukhrul were ANC hotspots for Manipur (State Map).

Overall, the trend of HIV prevalence in STD patients has been stationary since 1998 but HIV prevalence has declined from 13% in 2003 to 7% in 2004. However, the STD site at Churachandpur becoame the hotspot with 8.4% of HIV prevalence for the year 2004.

Profile of HIV positives

The core risk groups (IVDUs, FSWs and MSMs)

IVDUs

The main core risk group in Manipur consists of the IVDUs. Out of the 1000 tested, only 19 were femalesYet women had more than 1\2 times positivity(36.9% versus 20.7% in males. More than 90% of IVDUs tested were non-migrants. However, percent positivity was more in migrants (25.29%) as compared to non-migrants (20.59%). The highest positivity was found amongst primary level literates at 24.3% and in the age group of 20-29 years at 22.4%. As far as occupation was concerned, the highest positivity was among the unemployed IVDUs(27.1%) hinting that unemployment was a contributing factor to the problem of IVDU in Manipur. VDRL positivity was 0.80%.

As regards the males IVDU users, it was found that HIV prevalence was a little higher on the urban side and the commonest infected age group was that of 20-29 years (22.12%). Most of these positive male IVD users were primary or secondary level literates. Interestingly, 22 of the 133 graduates tested were also found positive with a positivity of 16.54%. The highest positivity was found in the unemployed group

Fig 4: **Age wise distribution of the tested IVDUs in Manipur**

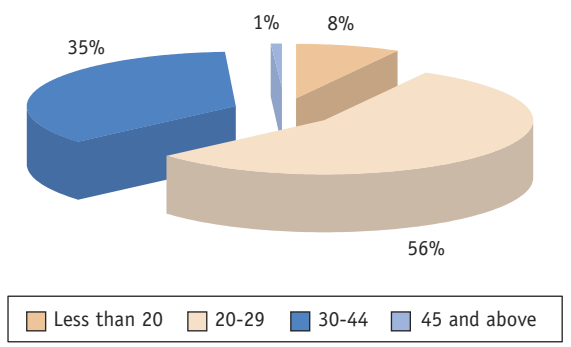
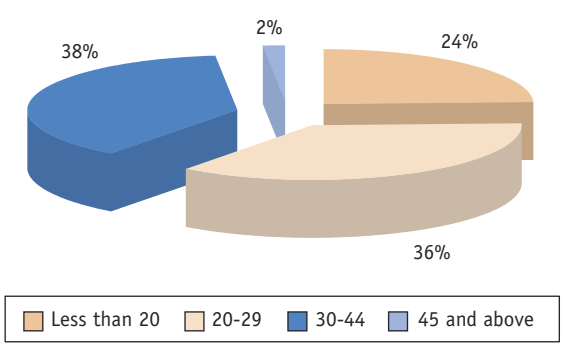


Fig 5: **Age wise distribution of the tested FSWs in Manipur**



(26.71%). Out of the 7 positive females, 5 were non-migrants and were primary level literates, 4 of the 7 belonged to the 20-29 years age group and five were unemployed.

FSWs

For the other core risk group, FSW, 250 were tested in the state of Manipur. Although the ratio of tested FSWs between urban and rural was 1:2,yet the positivity was much higher in the former at 16.5% than later at 10.3%.The aggregatepercent positivity amongst FSWs clinic attendees was 12.4% during 2004 round of surveillance. and most of the tested belonged to the age groups of 20-29 and 30-44 years as depicted in the figure. The highest percent positivity was found amongst the primary level educated (18.97%) and in the age group of 30-44 years (17.89%).

MSMs

As regards MSM clinic attendees,250 were tested during this round of surveillance.Though more than half of tested belonged to 20-29 years age group,yet the highest positivity was in 30-44 years at 29.03%. Moreover, the maximum attendees were secondary level educated with highest positivity at 11.41%. Occupation wise those in business were found to have maximum percent positivity at 25.5%.

The overall HIV positivity was 14.00% in MSM patients.

STD Patients

Out of 500 STD patients tested, 115 were males and 385 were females.Yet the positivity was higher in males at 9.6% than females at 6.5% The age wise distribution of STD patients is represented in the figures below.

The majority of the male and female STD patients belonged to the secondary level educated group (7.14%) Though highest positivity was among illiterates at 8.65%

The aggregate percent positivity for STD patients was 7.20%. Moreover, only 2 males of the 11 positives were migrants and none of the female migrants were found to be positive. Out of 25 positives although almost half of STD clinic attendees were in the 30-44 years age group,yet positivity was highest in under 20 years of age at 12.0%.Significantly 80% of positive females were housewives they had the highest positivity too(5.9%),(though occupation wise others had higher percent positivity, but since the numbers tested were less than 50 they were not considered). If occupation wise HIV prevalence is considered, among the 11 positive males, more than half belonged to the agricultural/unskilled workers. The VDRL positivity was 20.40% and and HIV & VDRL positivity was 0.40% in the STD population.

Antenatal Mothers

Out of the 4000 antenatal clinic attendees tested more than 85%were non-migrants and more than half belonged to the age group of 20-29 years. Most of them were from the secondary level literate group and the second largest group was that of illiterates.

Fig 6: **Age wise percentage distribution of the male STD patients**

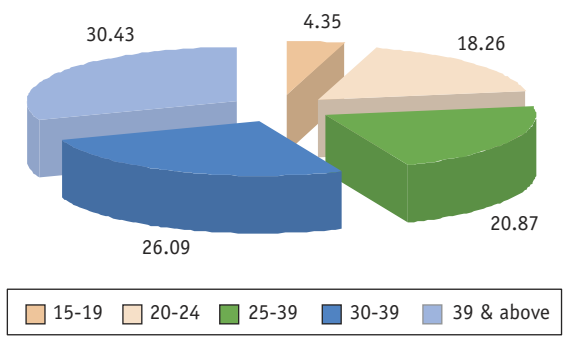


Fig 7: **Age wise percentage distribution of the female STD patients**

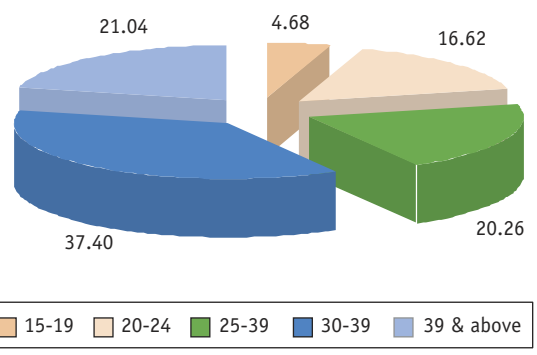
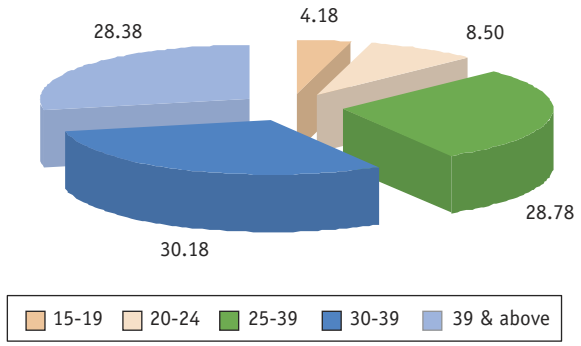


Fig 8: **Age wise percentage distribution of the tested ANC mothers**



The aggregate HIV percent positivity was 2.03%. The prevalence was slightly higher in rural areas (2.12%) as compared to urban residents (1.90%). The migratory population showed much higher percent positivity for HIV as compared to non-migrants 3.35 versus 1.82%. HIV percent positivity amongst antenatal mothers in urban areas was equally distributed in all age groups except that above 45 years where it was zero. In rural areas, the HIV percent positivity was highest in the age group of 30-44 years (2.95%); this was closely followed by <20 years where the percent positivity was 2.77%. In urban areas, the HIV percent positivity was seen to be declining with an increase in the level of education, while in rural areas the trend was reversed and positivity was highest amongst graduates (4.38%).

In urban areas, the highest percent positivity was seen amongst ANC mothers whose husbands were working as truck/auto/taxi-drivers or cleaners (3.20%). In rural areas, antenatal mothers whose husbands belonged to service class group showed the highest percent positivity (2.82%). The VDRL positivity was 1.78% and 0.13% were positive for both VDRL & HIV.

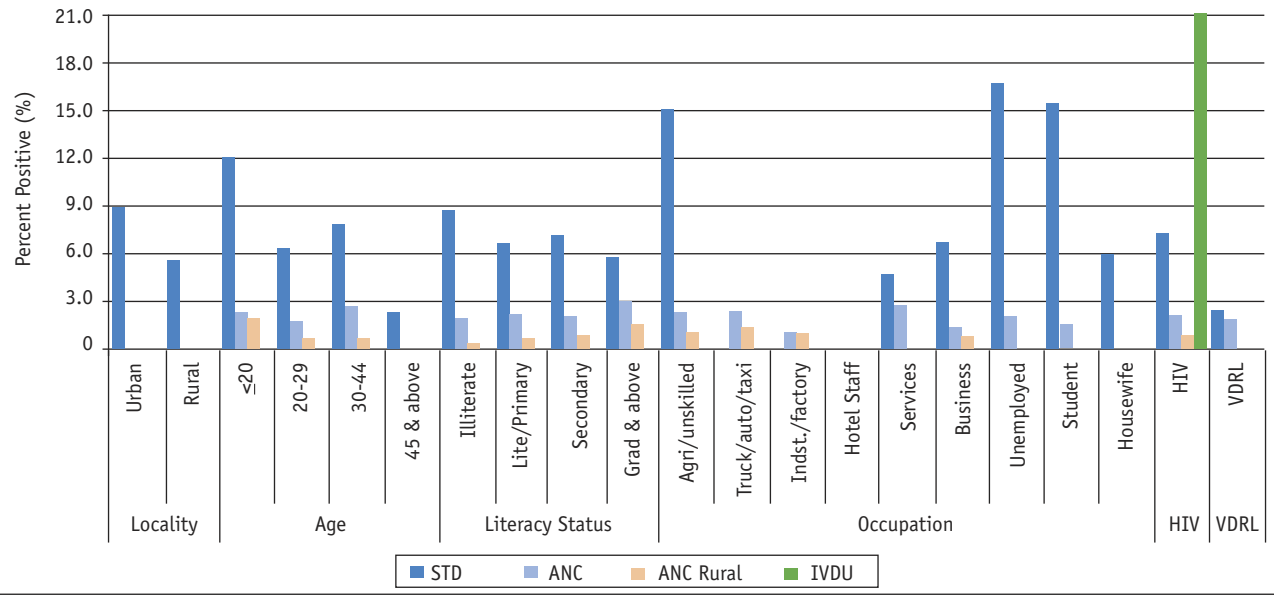
ANC-R

The aggregate percent positivity was much higher in the ANC urban sites compared to ANC rural site(2.03% and 0.75%) respectively.In the ANC rural sites, the maximum number of those tested HIV positive belonged to the age group of 20-29 years (100 out of 183) and more than 55% were educated up to secondary level. The aggregate percent positivity was 0.75%, which was quite low in comparison to the regular urban ANC sites at 2.03% Amongst ANC-R clinic attendees the highest positivity was in those below 20 years (1.88%). Significantly the highest positivity was amongst graduate and above level literates at 1.5% ANC women in rural areas whose husbands were working as truck\auto\taxi drivers\cleaners workers showed highest positivity (1.27%)

TB patients

The aggregate percent positivity in TB patients was (18.75%). In male TB patients, the percent positivity was equally distributed in urban as well as rural areas at 20.64% and 20.65% respectively. In female TB

Fig 9: **HIV Prevalence by Socio-demographic characteristics in Manipur in risk groups**



patients, the highest positivity was observed in urban areas (18.87%). Male as well as female TB patients in the age group of 30-44 years showed the highest positivity, 32.41% & 21.67% respectively. Overall, HIV positivity was highest in the secondary level educated at 24.8% Occupation wise,those in business had maximum positivity (26.2%) as compared to female TB patients th.at were working as industrial/factory workers. The positivity amongst the housewives TB patients was 16.84%.

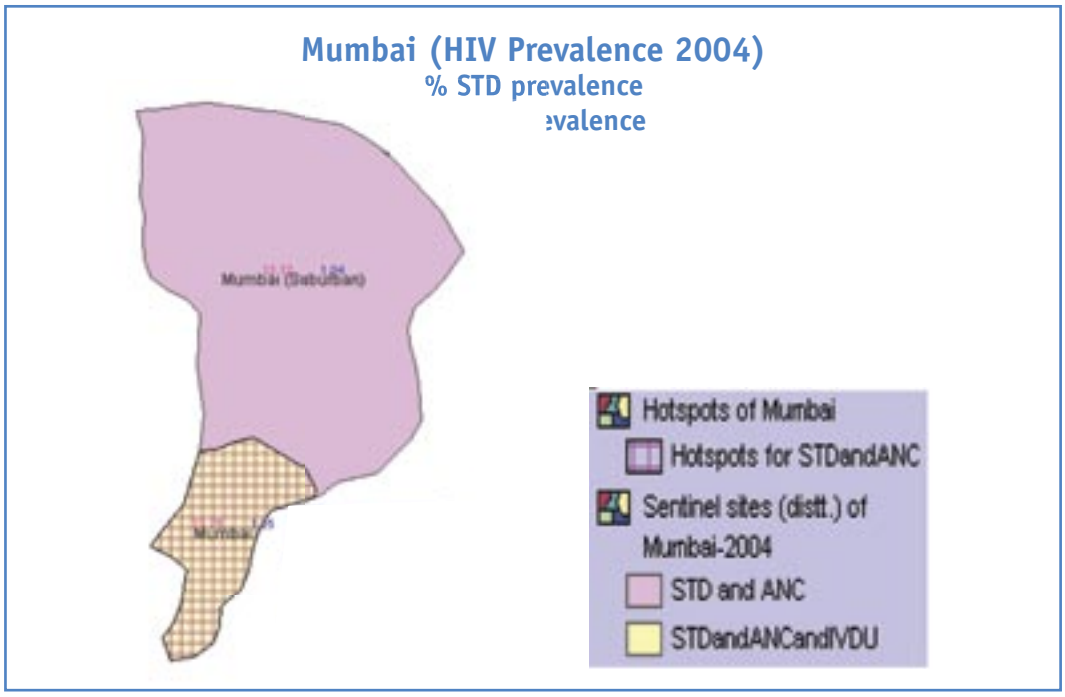
Conclusions and Recommendations

The core risk group being IDU in Manipur in itself demands specific targeted intervention programmes for curbing the epidemic in the state. That many of these patients were unemployed needs to be looked into, not only by the health department but by the social welfare department too.

Among the bridge population, the fact that the majority of the positivity among females was found in the housewife category needs special attention, as this is clear evidence that the infection has spread into the general population. The percent positivity between the VCTC attendees was 76.11% in 2004 and 18.93% in 2003, a very sharp jump, much higher than that of the positivity between the STD group (7.20 %) and IVDU (21%).

Amongst the general population represented by theantenatal women, greater positivity was detected among those ANC women whose husbands belonged to the truck driver/cleaner category and this needs targeted intervention at the earliest. The positivity in the blood banks was 0.7% and 0.8% in 2004 and 2003, respectively, which is less than the ANC positivity. This reflects good blood donation practices in Manipur. However, intense action is needed for the population since the high number testing positive at the VCTC centres indicates gaps in prevention and control measures.

Mumbai



Introduction

There were a total 13 sites-of which 3 were STD, 6 ANC, and 1 each of IVDU, MSM, FSW, & TB sentinel sites (State Map) in the 2004 round of sentinel surveillance in Mumbai The quality of data collected was satisfactory.

Magnitude of problem

The percent positivity for STD patients was 15.0%, 1.0% for ANC, 29.20% for IDU, 9.6% for MSM, 44.8% for FSW and 11% for TB, during this round of surveillance. As seen from the data, there was a rising trend since 1998 amongst STD patients but it had declined around the year 2000, and has been stable since 2002. Among ANC women, HIV prevalence has declined since 2000. While in IDU patients though there had been a declining trend since 2001, prevalence increased in 2004 from 22 % (2003) to 29 % (2004). In FSW, an increasing trend was seen from 1998 to 2000 and since then the situation had been stable with the HIV prevalence falling in 2004 to 44% from 54% in 2003.

Profile of the HIV positives

The core risk groups (FSWs, IVDUs and MSMs)

210 FSWs were tested and the figure below represents their age wise break up Surprisingly 58%were between 30 to 44 years. More than 75% of those tested were illiterate and more than 95.0% tested were migrants. The percent positivity was 44.76%. Almost all FSWs tested were urban residents .The highest positivity was found amongst 20-29 year age group with 49.3%. Education had a positive role, and with increase in level of education,

Fig 1: **St. 4.1 HIV Trend in Mumbai**

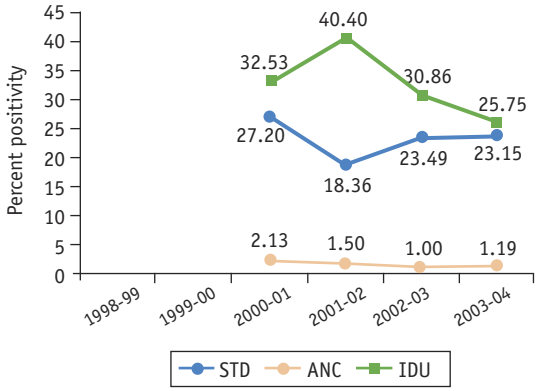
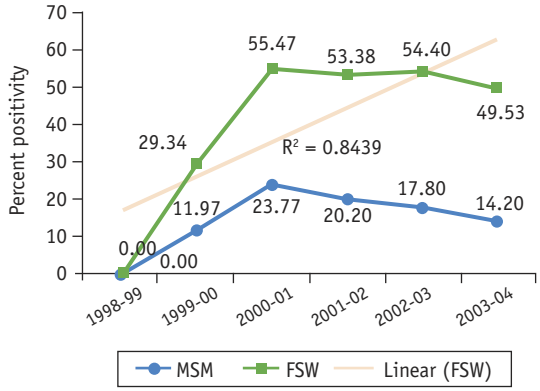


Fig 2: **HIV Trend in Mumbai**



the positivity decreased. It was highest among illiterates at 48.7%.

In total, 250 IDU patients were tested during this round of surveillance. T Majority of the HIV positives were in the age group of 20-29 years, followed by 30-44 years though the positivity was higher among former group at 39.8%. Almost half of those tested were illiterates and they were found to have highest positivity at 31.45%. Occupation wise, 205 out of 250 were agricultural/unskilled workers and had positivity of 32.7%. The percent positivity was higher among the migrants as compared to non-migrants (32.39% and 21.62% respectively). However, the positivity was spread out evenly throughout the age break-ups and literacy status and overall HIV positivity was 29.20%. Moreover,all the tested IVDUs were urban residents.

Out of 250 MSMs tested 24 were found positive, giving a percent positivity of 9.6%. Majority of attendees belonged to the 20-29 years age group, with a percent positivity of 9.58%. The majority of those tested were secondary level literates.and had highest positivity at 8.4%. As regards occupation, the highest positivity was amongst service class MSMs at 7.6%.

TB Patients

Among the TB patients, HIV percent positivity was11% overall. For males (12.67%) was more than double that for females (6%). Further, the rural population had a relatively higher percent positivity (16.13%) than the urban (10.57%). Maximum HIV percent positivity was

Fig 3: **HIV Prevalence by Soc io-demographic characteristic in Mumbai in risk groups**

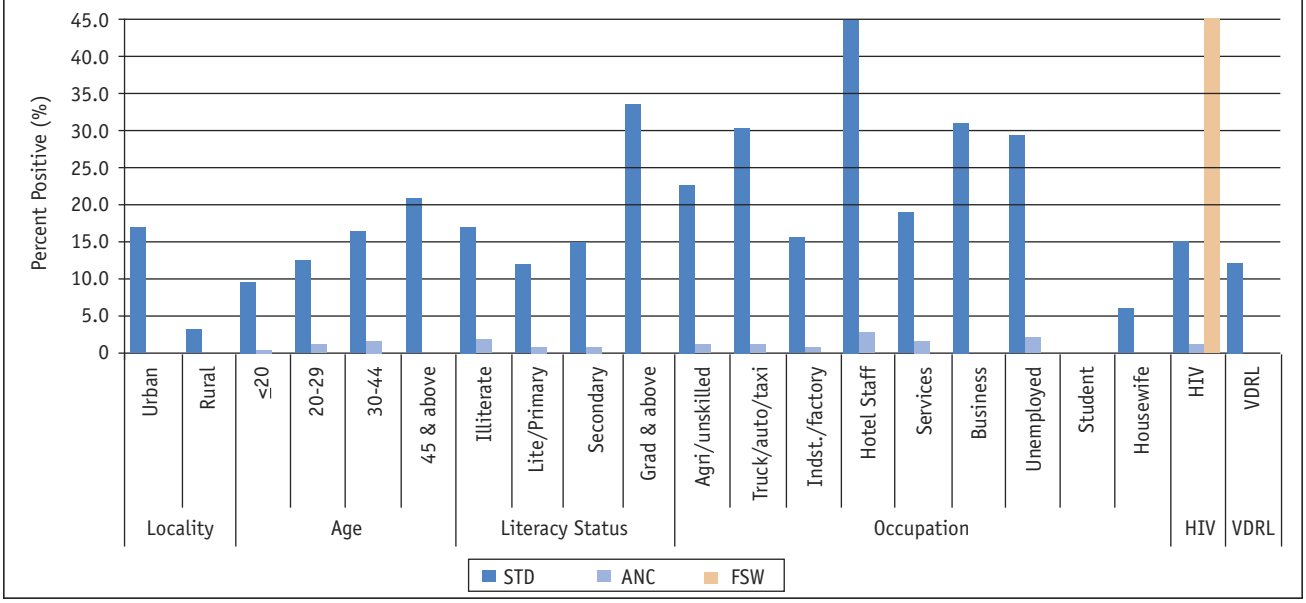
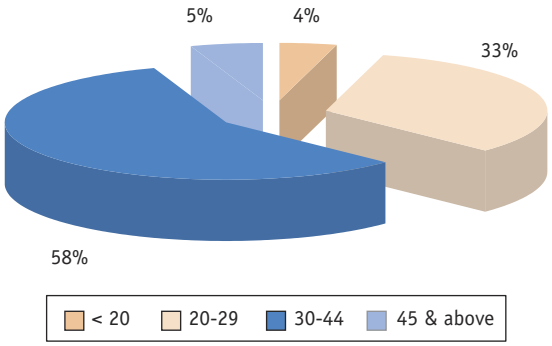


Fig 4: **Age wise percentage distribution of the tested FSWs in Mumbai**



seen in the age group of 30-44 years in both males (19.15%) and females (9.09%). A heterogeneous pattern was observed with respect to education status. The highest percent positivity of 14.17% positivity was observed in males who had primary level education as compared to 12.50% positivity in females who were illiterate. When occupations were analysed, The highest positivity was found in service class T.B clinic attendees at 15.4%.

STD Patients

The HIV percent positivity was 15.0% among STD clinic attendees. Males had much higher positivity than females(23% versus 8.0 The figures represent the age wise distribution of STD patients both male &female separately.In both the groups majority are 30—44 year old.

The positivity was found to be highest in the elderly clinic attendees of 45 years and above at 20.6% Moreover the illiterates had highest positivity at 16.76%. The positivity among housewives was 5.9%. Amongst the agricultural\unskilled workers the positivity was highest at 22.3%.Though the maximum attendees were those with discharges, yet the positivity was highest in sufferers of genital ulcers at 20.7%.The VDRL positivity was 12.15% and HIV+VDRL positivity was 7.36%.

Antenatal mothers

Around 90% of the tested antenatal women were non-migrants, however the positivity was higher in migrants than non-migrants(1.8% versus 1%). Though more than half of attendees were between 20-29 years of age, yet highest positivity was in 30-44 years at 1.57%.Moreover highest positivity was in illiterates and in wives of those in service (1.6% and 1.3% respectively). The VDRL positivity was 0.04%

Conclusion and Recommendations

In Mumbai, among the high-risk groups, as expected, the majority of FSWs were migrants, illiterates and showed a very high positivity for 20 to 29 age group. Similarly among the IDUs the maximum positivity was among the migrants, and they were agricultural/ unskilled workers. Among the MSMs, 7 positives out of the 91 tested were in service. Thus, all these groups need more focused attention and concerted efforts by civil society.

Among the positive bridge population of STD patients, 8 of the male positive patients were truckers and 13 of the positive female patients were housewives. Thus, the dynamics of the infection spread comprising of

Fig 5: **Age wise percentage distribution of the male STD patients in Mumbai**

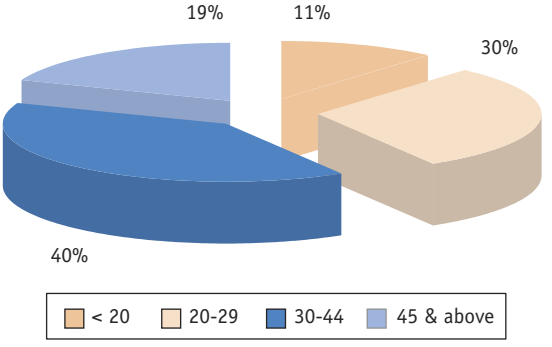
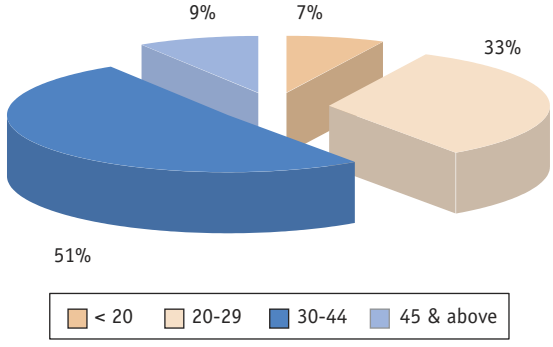


Fig 6: **Age wise percentage distribution of the feale STD patients in Mumbai**



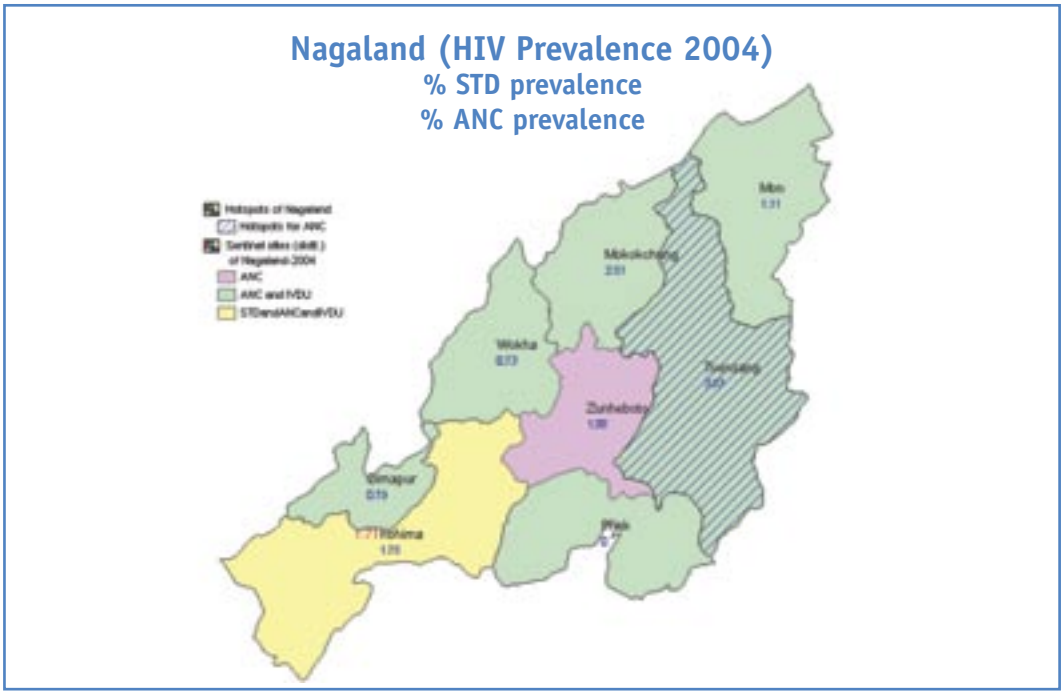
the truck drivers, housewives and general population seems very prominent and demands targeted intervention. In 2004, the percent positivity in VCTC attendees was 14.13% as compared to 14.77% in 2003. So, when compared to the STD positivity of 14.97%, it indicates that the utilisation of the VCTC clinics is inadequate as higher figures for positivity are expected if patients are being screened according to guidelines.

Among the general population of ANC mothers, the positivity at 1.08% indicates infection in the community. It thus implies that truckers, STD patients, IDUs and the general population as such, require more awareness and behaviour changes to combat the HIV epidemic at Mumbai.The age group 30 to 44 years is chiefly infected with HIV in almost all the groups. This requires an indepth study of the sexual networks operating in Mumbai.

The positivity among those tested in the blood banks was 0.8% and 0.7% in 2003 and 2004 respectively, which is lower than the ANC positivity of 1.08%. This indicates good blood bank practices in the area but we must strive to decrease positivity further.

In Mumbai epidemic is controlled by FSWs and migrant population,hence focused efforts should be given to educate these groups and have BCC to prevent spread further.

Nagaland



Introduction

In total 28 sentinel sites were included in Nagaland,during 2004 round of HIV surveillance. There were 10 ANC, 8 ANC-R, 1 STD, 1 FSW, 1 TB, 7 IVDUs sentinel sites.Six sites out of total were not able to fulfil the desired sample size.

Magnitude of problem

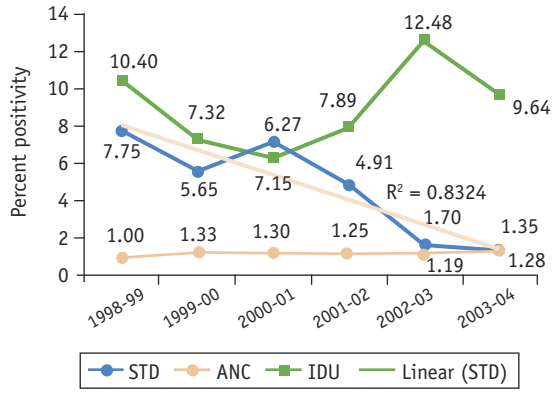
Nagaland is a high prevalence state. The predominant mode of spread of infection is through sharing of infected needles amongst drug abusers. The median HIV prevalence in antenatal women was 1.43%. Mean HIV prevalence was 1.72% in STD patients; percent positivity was 4.6%in IDUs. The mean HIV prevalence was 7.2% for TB patients in 2004.

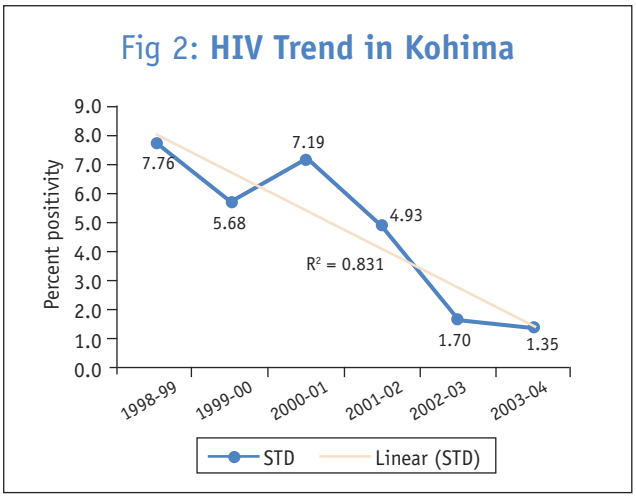
There has been a significant decrease in HIV prevalence in 2004 among IDUs in Nagaland as compared to 2003. Other risk groups have also shown a declining trend.

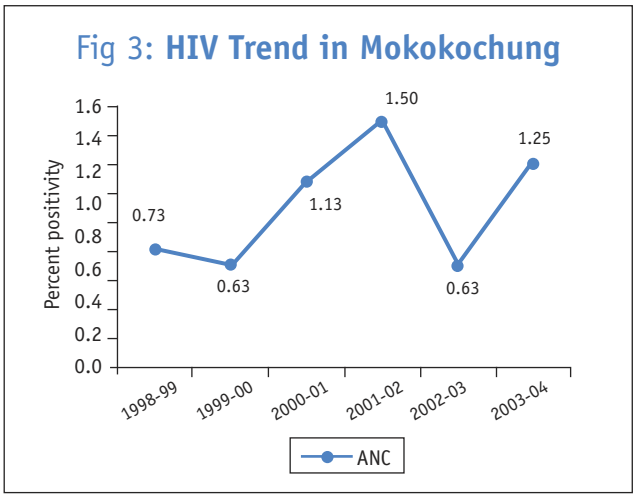
Geographical distribution

There was no STD hotspot for the year 2004.The prevalence in Kohima had a downward

Fig 1: **St. 6 HIV Trend in Nagaland**







trend.(site graph) Tuensang with 3.6% positivity remained the hotspot (State Map) for ANC though the prevalence of HIV in Tuensang had decreased. The prevalence in Mokochung was 2.5% in 2004.

In Mokochung the HIV positivity has increased but in Phek the trend is declining. Amongst the ANC women it was considered stationary since though there has been a slight increase in the value of HIV prevalence the rise was not significant. The trend of HIV infection among the IDU had shown an increase since 2001 but has sharply declined in 2003-2004 to the same level as that of 2001.

Profile of the HIV positives

The core risk group(FSWs and IVDUs)

Among the FSWs, a total of 248 were tested and around 95% of them were migrants.however the positivity was higher in non-migrants(14.3%) than migrants at 3.85%.Significantly all the positives were urban residents with a positivity of 4.55%.The age wise distribution showed that the maximum positivity was among the 20-29 year age groupat 10.8%. With regard to education, highest prevalence was seen in illiterates (3.08%). Moreover, 11 housewives tested positive out of the 224 tested for HIV, thereby a positivity of 4.91%.

In the other high risk groups, i.e., the IVDUs, a total of 741 were tested (of this 100 were females) the majority of them were non-migrants and urban residents. The maximum positivity was from the age group of 30-44 years at 7.20%.As regards educational status and HIV positivity, those IVDU clinic attendees having secondary level education were found to have highest at 5.63%. Non-migrants showed higher positivity (5.0%) than migrants (2.5%). This pattern was reflected in both males and females. Positivity in male IVDUs was equally distributed in urban as well as for rural residents (4.52% in each), while it was predominantly among urban females at 5.7%. Occupation wise, the maximum positivity was found among the unemployed (6.43 %). VDRL positivity was 19.57% and both HIV and VDRL positivity was 1.75%.

In **IVDU (TI) sites** a total of 938 were tested and percent positivity was much lower (2.1%) than at IVDU sites at 4.6%. Among the positives, 13 belonged to the age group of 20-29 years and 13 were secondary level educated and the positivity was 2.4% and 3.0% respectively.Those in business had highest percent positivity at 4.8%.

STD Patients

The aggregate percent positivity was 1.72%. A total of 233 patients were tested and only 4 positives were found and the age wise distribution of attendees of both sexes isare represented in the figures.Majority of the female attendees were younger than the males.

Most of the attendees were just primary or secondary level literates and among the males, as far as occupation was concerned, tested males were distributed between the service class, those in business and the unemployed.

Fig 4: **Age wise percentage distribution of the tested male STD patient**

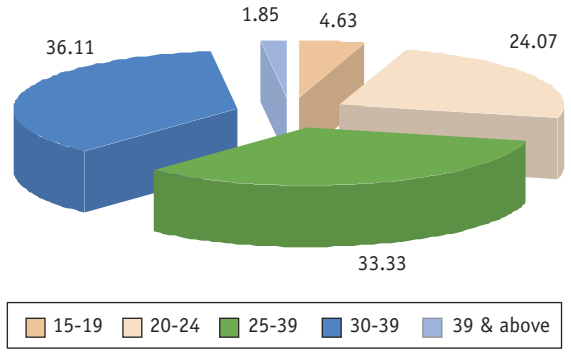


Fig 5: **Age wise percentage distribution of the tested female STD patient**

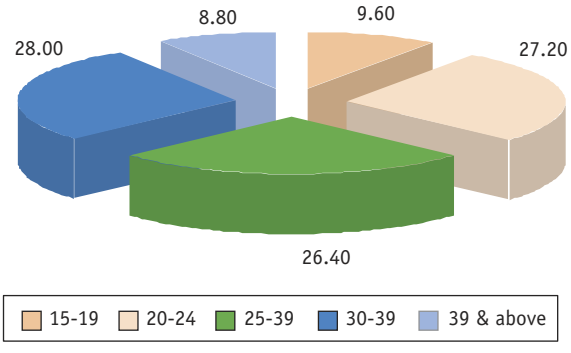
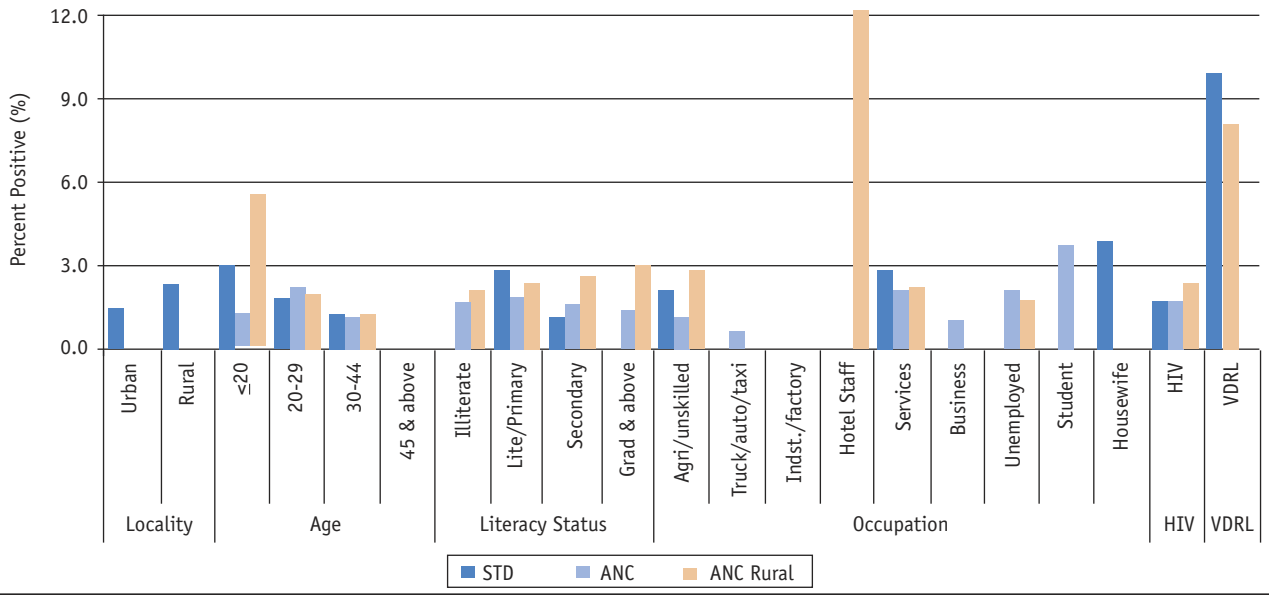


Fig 3: **HIV Prevalence by Socio-demographic characteristic in Nagaland in risk groups**



All 4 who tested positive were females with the percent positivity of 3.20%. One was migrated out of 3 migratory and 3 out of 122 non-migratory women tested were positive. Urban females showed lower positivity (2.94%) than those living in rural areas (3.51%). Three of the 4 positives women were literates and had been educated at least till primary level. Moreover out the 4 positives –2 were housewives with percent positivity at 3.8%.The VDRL positivity was 9.87%.

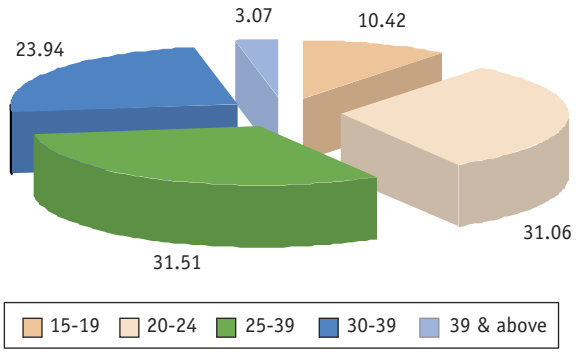
T.B patients

The overall positivity among 139 tested TB patients was 7.2%. It was more than double at 10.2% in females than 5.0% in males. Migrants had much higher positivity at 11.8% compared to 6.6% among non-migrants.Similarly rural residents had more than twice positivity than their urban counterparts (10.0% and 4.3% respectively). The highest positivity was found amongst those educated till primary level at 5.5% and in 20-29 year age group at 7.4%.

Antenatal Mothers

Out of the 2669 ANC mothers tested, 43 were found positive. and their age wise break up is represented in the figure. The maximum number belonged to the age group of 20-29 years and most of them were secondary level literates. Wives of those in the service class constituted the maximum among the attendees at ANC sites.

Fig 7: **Age wise percentage distribution of the tested ANC mothers**



The total percent positivity in urban ANC sites was 1.61%. The majority of women tested were urban residents. Positivity was higher in urban (1.63%) women than in rural (1.57%) women. Positivity was highest in the age group of 20-29 years (2.26%) in both urban as well as rural areas (1.75%). Positivity declined with a rise in the level of education and it was highest among primary level literates at 1.75%. Wives of student men had highest positivity at 3.7%. The VDRL positivity for the antenatal women was 8.02% and both HIV and VDRL positivity was 0.37%.

ANC-R

The positivity at ANC-R sites was higher than at the urban ANC sites (2.2%) and 1.6% respectively. Although 97% tested were non-migrants, but positivity was higher in migrants at 8.8%, than 2.09% in non-migrants.The highest positivity was found in those under 20 years of age at 5.54% and in wives of agricultural\unskilled workers at 2.7%.As regards educational status, it was found that secondary level literates had highest positivity at 2.5%.

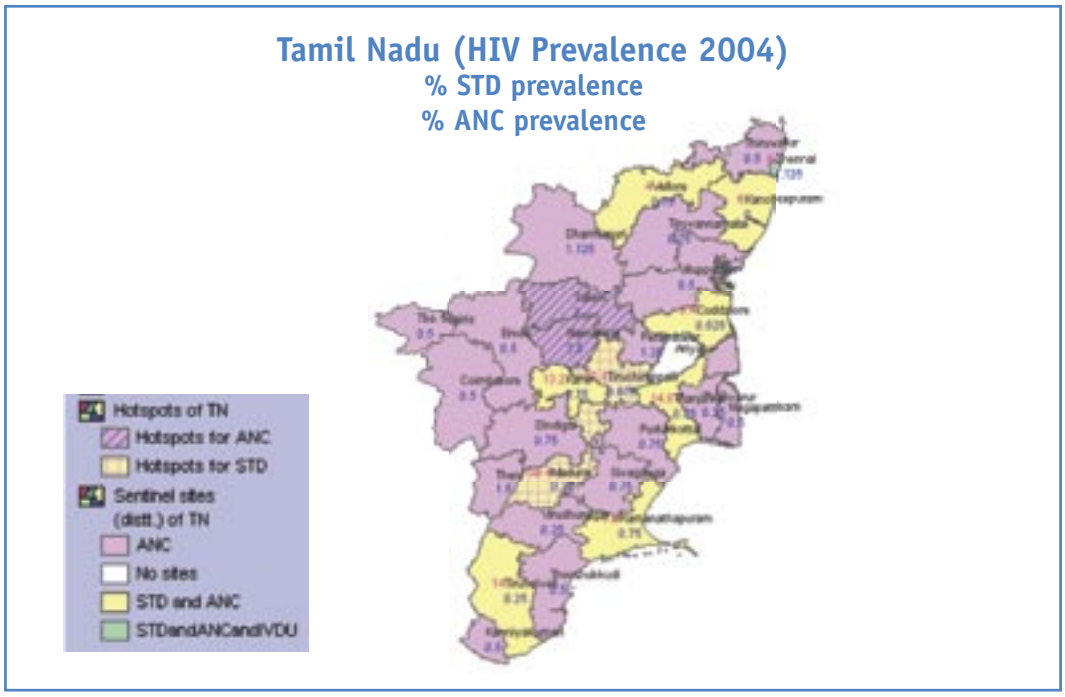
Conclusions & Recommendations

Most positive FSWs are migrants residing in urban areas. Advocacy of uniform condom use backed up with some reforms, so as to empower sex workers to enforce condom use in males, could halt the spread of HIV from this high-risk group to the bridge population and thereby prevent vertical transmission as well. Among the IDUs, positivity was highest in the productive literate unemployed group. This needs serious thinking on a long-term basis and intervention of the department of social welfare is highly desirable.

In the bridge population represented by the STD patients, no male patient positive for HIV was detected and in female STD patients, the percent positivity was 1.72%. Five percent positivity was detected among the female IDUs. The contribution of the bridge population especially the famales in helping the disease to spread from the high-risk population to the general population needs to be understood. Do the men in Nagaland not visit the STD clinics? Is the contribution of female IDUs to the spread of the epidemic of HIV in the general population significant?

In Nagaland, the percent positivity among the VCTC attendees was 18.0% in 2004 and 11.14% in 2003. This is much higher than the positivity among the STD patients (1.72%) and may be contributed by the IVDUs. Interestingly, no sample has tested positive in the blood banks during the consecutive years since 2002 and up to 2004A behavioural study to understand the sexual dynamics and network seems imminent and should be used to frame prevention and control strategies.

Tamil Nadu



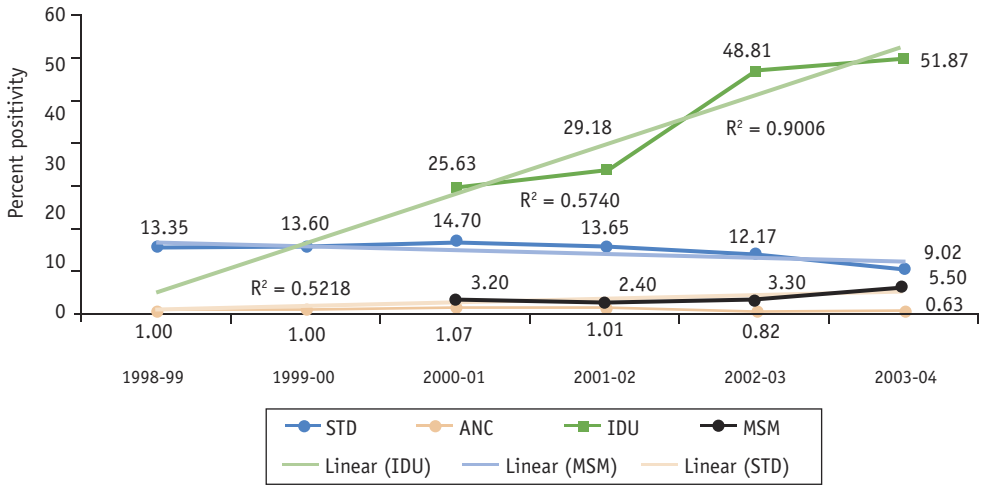
Introduction

Tamil Nadu is one of the six high prevalence states in the country and was the first state in India to initiate an HIV control program. The 2004 round of surveillance activities had 80 sentinel sites in the state viz. 11 STD, 35 ANC, 29 ANCR, 1 IDU, 2 MSM, 1 FSW and 1 TB site (state Map).

Magnitude of Problem

The percent positivity of HIV in 2004 was 0.80% in antenatal mothers (0.90% in ANC-

Fig 1: **HIV Trends in Tamil Nadu**



R), 12.1%in STD patients, 4.0% in FSW, 6.9% in TB patients, 39.9% in IDU and 6.80% in MSM groups.

Magnitude of problem:There has been a significant decrease in HIV prevalence in STD patients from last year. Moreover, there was a slight decrease in HIV prevalence in antenatal women as compared to 2003. As seen in the figure, HIV trend amongst the STD and ANC population has declined since 1998. However, the STD site at Madurai had showed an increasing trend. In IVDUs, a rising trend was seen but the value dropped from 63% in 2003 to 39% in 2004. The trend is, however, increasing among the MSM group.

Geographical Distribution

The trends were varying in different parts of the state. In the Nilgiris and at Kannyakumari the ANC sites showed a significant increase in the prevalence of HIV since 2003. In Viluppuram, there was a significant increase in prevalence at the MSM site.

Fig 2: **HIV Trend in Madurai**

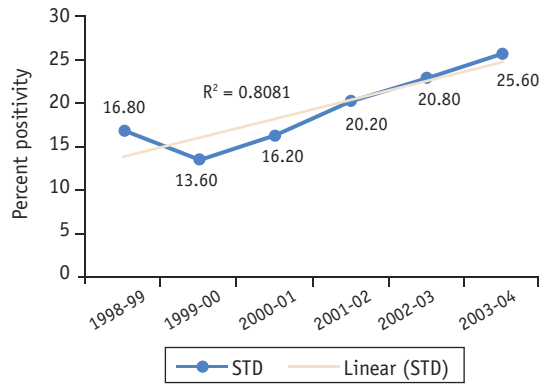
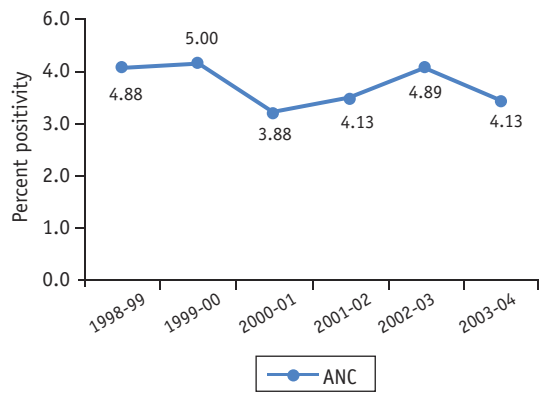


Fig 3: **HIV Trend in Namakkal**



However, the ANC sites at Namakkal, Tirunelveli, Vellore, and Viluppuram showed a significant decrease. The IDU site at Chennai also showed a decreasing trend. For 2004, the ANC hotspots were Salem (1.1%) and Namakkal (1.0%).

Tiruchirappali continues to have a high prevalence of STD for the past 5 years and is considered to be an STD hotspot showing a prevalence of 20.4% in 2004. With a consistent rise in the prevalence of HIV in Madurai, it is also now designated as another STD hotspot. Thanjavur showed an HIV prevalence of 14.8% in 2004 for STD patients

Profile of the HIV positives

Core Risk Group (FSWs, IVDUs and MSMs)

Among the FSW, all the tested were urban residents and more than 90.0% were migrants, however, the percent positivity was higher in non-migrants than migrants amongst the urban residents (5.9% versus 3.9%). The majority of the FSW were in the age group of 30-44 yrs with 4.60% positivity. Around 40% of the FSW were illiterate and had highest percent positivity of 6.12%.

The aggregate percent positivity in MSM was 6.80 per cent. 500 men were tested with an urban: rural ratio of 2:1. The majority tested in both urban & rural areas belonged to the age group of 20-29 years and accounted for highest positivity at 7.5%. The highest positivity was found amongst primary level literates at 11.0%. Overall, the highest percent positivity was found among agricultural/unskilled workers at 10.8%.

The percent positivity among IDUs was 39.92 %. Out of the 253 tested, 252 were males. Almost all of them (251 out of 253) were non-migrants, of which 100 males tested positive and the only female IVDU tested was negative. All of the IVDUs tested were from urban areas. The majority of the males tested were in the age group of 30-44 years of which 45.88% were positive and most of them were educated till primary school level though the highest positivity was in illiterates at 46.1%. Agricultural/unskilled workers formed the majority of those tested, of whom, 45.05% were positive.

Fig 4: **Agewise % distribution of male attendees attending STD Clinics in Tamil Nadu**

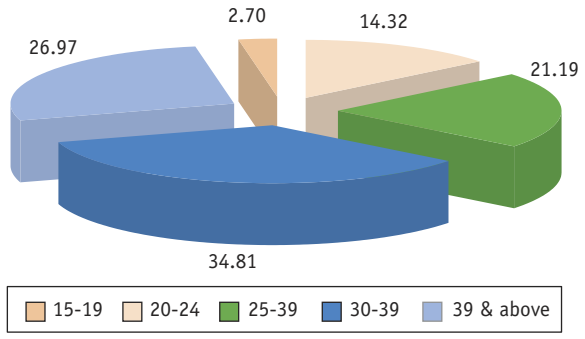
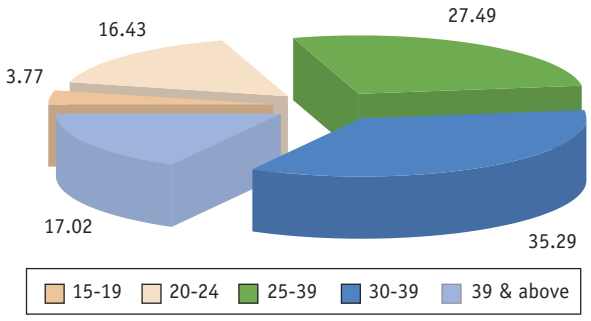


Fig 4: **Agewise % distribution of female attendees attending STD Clinics in Tamil Nadu**



STD Patients

The percent positivity was 12.07% in STD patients. Among both males and females, the major prevalence was in the age group of 30-44 yrs at 14.6%. The age breakup of attendees is given in the figures.The largest age group attending the clinics was that of 20-29 years among males and females. The urban: rural ratio of tested persons was 0. 65:1. Of the 2750 tested, around 90.0% were non-migrants. As regards occupation, it was found that those working as truck drivers had highest positivity at 17.1%. Most of the affected females were in the age group of 30-44 yrs, illiterate and were agricultural/unskilled workers. Housewives had a positivity of 12.25%.

When the syndromic approach was considered, it was found that 99 out of the 168 positive males had genital ulcers. This was followed by those diagnosed with urethral discharge (53). Among the 164 affected females, the majority were cases of cervical discharge

Fig 4: **Agewise % distribution of attendees attending ANC Clinics in Tamil Nadu**

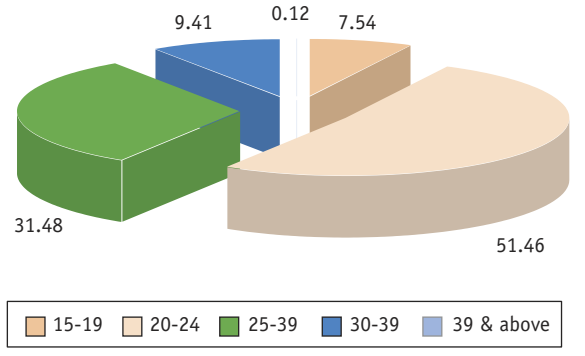
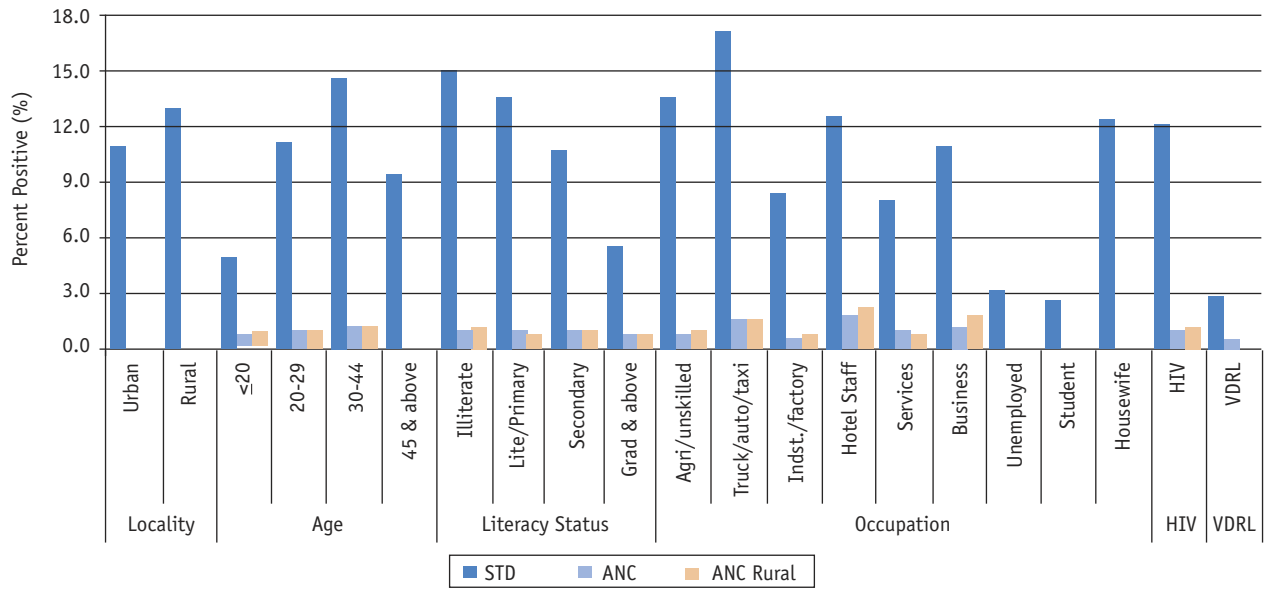


Fig 3: **HIV Prevalence by Socio-demographic characteristic in Tamil Nadu in risk groups**



but the positivity was highest in those with ulcer and discharge. In males, patients with genital warts had the maximum positivity. VDRL positivity was 2.7% with not much difference between males and females.

Antenatal Mothers

Among the 14000 ANC mothers tested, 108 were positive for HIV, of whom 83 were from rural areas and almost 80% were non-migrants. As seen in the figure, most of the attendees at the ANC clinics were from the age group of 20-29 years. As regards HIV percent positivity overall it was highest amongst 30-44 years (at 0.98%). The highest percent positivity was found among primary level literates at 0.8%. Majority positive women in urban and rural areas were wives of truckers/auto drivers but highest positivity was found among wives of those working as hotel staff at 1.7%. VDRL positivity was 0.31%.

Rural ANC

Among the 11159 mothers from rural ANCs, 95 tested positive for HIV with positivity of 0.85%. The ratio of tested migrants : non-migrants was 1:5 and percent positivity was 1.0% and 0.82% respectively. Of the 67 women who tested positive in the rural areas, 45 were from the age group of 20-29 years. As regards highest HIV positivity, it was found maximum amongst 30-44 years age group at 1.06% and in illiterates at 1.09% and in wives of those working as hotel staff at 1.96%, in business (1.68%) or as truckers/auto drivers (1.38%).

HIV Status among TB patients

Among the174 TB patients in Tamil Nadu, 8 males and 4 females were HIV positive. The positivity was much higher among the urban resident TB patients than their rural counterparts (9.26% versus 5.83%). The highest percent positivity was found in 30-44 years (at 3.95%), in secondary level literates (at 7.14%) and those working as agricultural/unskilled workers (at 7.45%). Moreover males had higher positivity than females(7.21% and 6.35%).

Conclusions and Recommendations

Tamil Nadu is one of the high prevalence states, though the prevalence in antenatal women has plateaued and is on the decrease but the STD rates are still high and may be due to floating population of tourists and labourers.This is duther supported by the overall percent positivity being high in migrants and in urban residents. The IVDUs had high percent positivity and were mainly agricultural/unskilled workers from urban areas. This group needs to be addressed in order to create awareness regarding consequences of such activities. The FSWs migrants of urban areas are another group carrying the risk of HIV. The high positivity among illiterate and urban FSWs in addition to, 90% of the MSMs also being illiterates and agricultural/unskilled workers are a group for focused intervention.

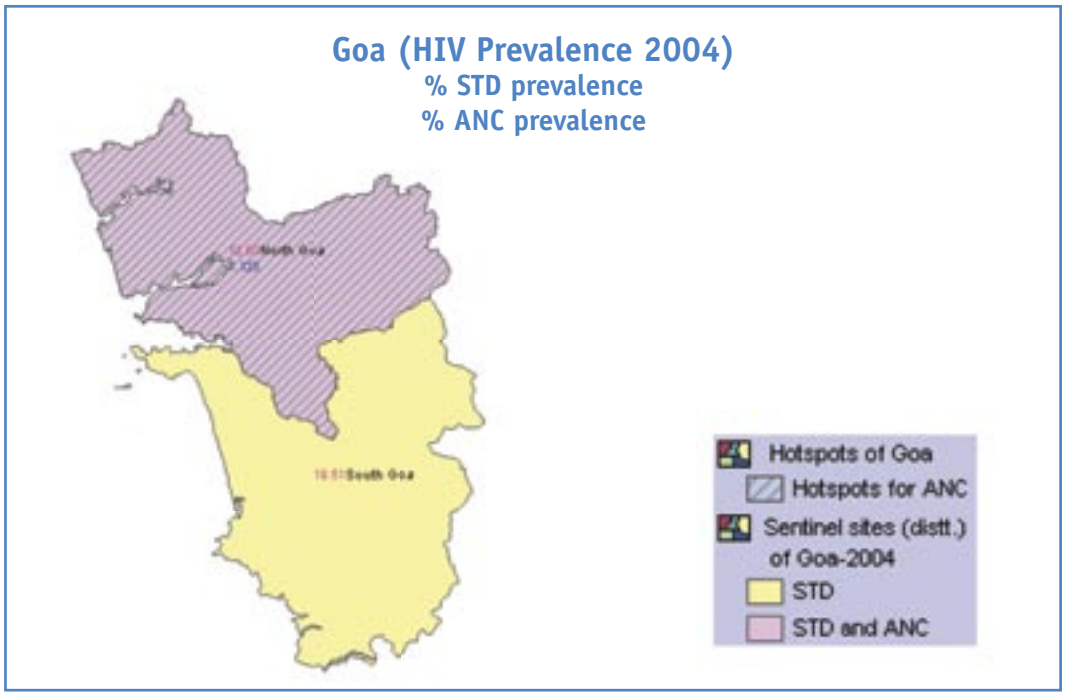
The bridge population consisting of STD patients, both males and females, are again mostly agricultural/unskilled workers who need to be specially addressed so as to break the chain of transmission as their promiscuous behaviour increases the risk of HIV transmission to their wives. However, the area of concern is the highest positivity among the truck driverscategory among STD patients, as it is this bridge population that frequently and continuously interacts with the general population. Significantly, the wives of truck drivers and hotel staff have high percent positivity and this could further trigger the epidemic in the state.

Universal condom use should be promoted, if spread to general population from the high-risk group is to be prevented. Emphasis should also be placed on behaviour modification with regards to safe sexual practices.

About 21.69% positivity in 2004 and 24.88% positivity in 2003 was observed in the VCTCs of Tamil Nadu and the percent positivity in blood banks was 0.2% during both the years. This indicates adequate measures had been taken to control the epidemic but still more has to be done. To conclude, anti-TB efforts, besides targeted interventions for the heterosexual transmitters, and at the same time action to the combat drug abuse should be intensified in the state.

Moderate Prevalence States

Goa



Introduction

In the current scenario, Goa is classified as a moderate prevalence state the infection is concentrated in the high risk groups. There were 5 sites for the 2004 round, with 2 ANC, 2 STD and one MSM site (state map) The two STD sites were not able to test the desired number of clinic attendees during this round. Overall data collection was satisfactory.

Magnitude of problem

As seen from the figure no significant change was observed in HIV prevalence rates in STD and ANC attendees s over the years. Although there is a decline in HIV percent positivity amongst the FSW clinic attendees.

Fig 1: HIV Trends in Goa

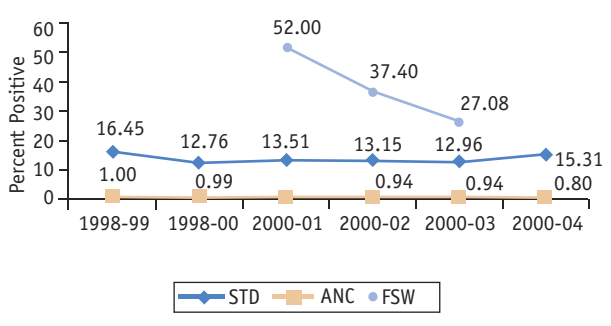
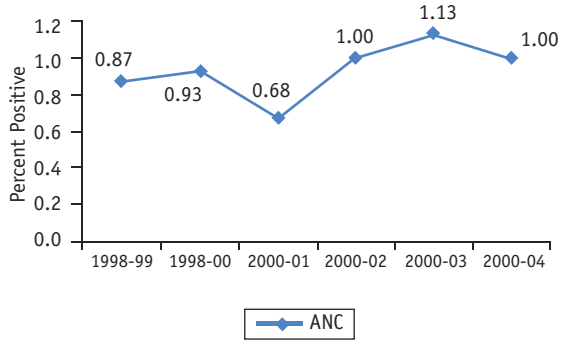


Fig 2: HIV Trends in Ponda



The ANC site at Ponda had high prevalence and was the ANC hotspot of the state. The percent positivity amongst STD clinic attendees was 16.02%, 1.13% amongst antenatal mothers and 1.68% among MSM clinic attendees.

Profile of the HIV positives

MSMs

The core risk group was represented by MSMs. A total of 119 were tested. The majority (72) belonged to the age group of 20-29 years and most of them (82) had had secondary level education and the maximum number (46) belonged to the service class. Of the 2 positives, 1 each was from the age group 20-29 and 30-44 years. Both were educated up to secondary level with a positivity of 2.44%. One of them was an agricultural/unskilled worker and the other was in service. Both the positives were urban residents.

STD patients

In total, 231 STD patients, (148 males and 83 females) were tested and the percent positivity was 16.02% amongst them.

The overall percent positivity washigh in males (18.24%) as compared to females at 12.05%. Migrants had higher positivity at 18.92%, compared to non-migrants (14.64%).

Moreover, the rural residents had higher positivity than their urban counterparts (17.45% versus 13.41%).

Fig 3: HIV Prevalence by Socio-demographic characteristics in Goa in risk groups

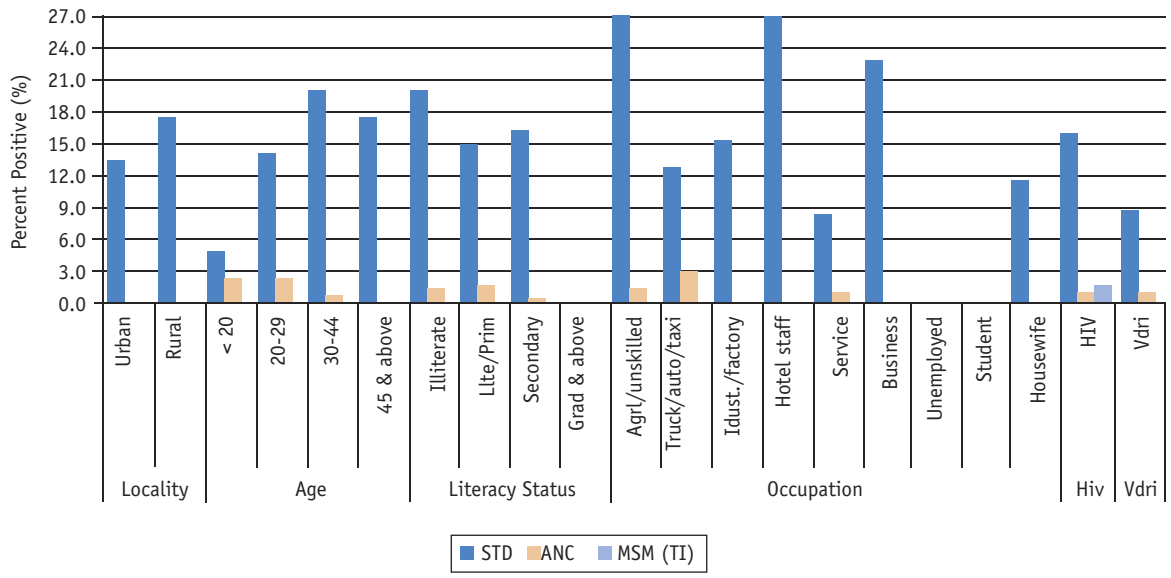


Fig 4: **Age wise percentage distribution of the male STD patients in Goa**

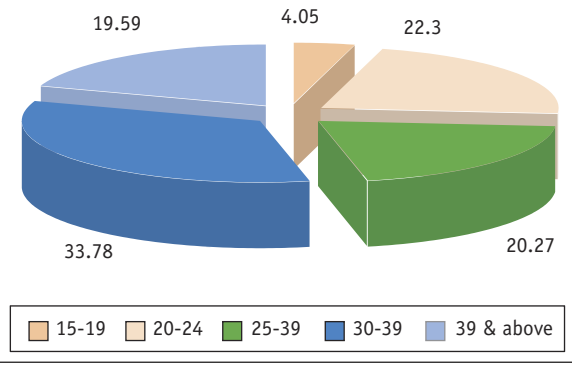
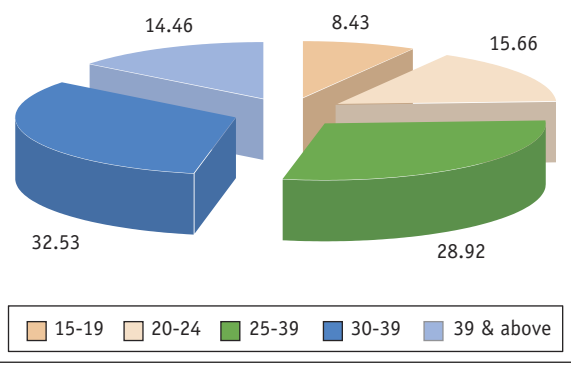


Fig 5: **Age wise percentage distribution of the male STD patients in Goa**



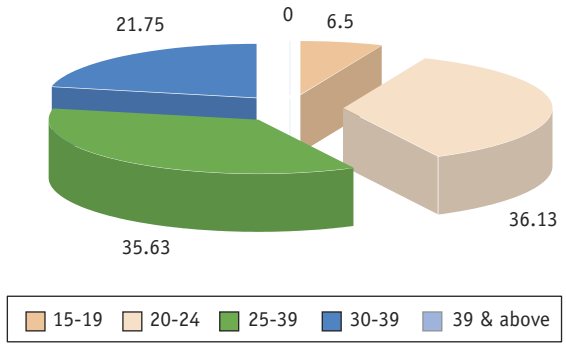
As regards age wise distribution of HIV positivity, it increased with age and was found highest amongst 30-44 years age group at 20.0%. Illiterates had the maximum HIV amongst males whereas young 20 to 29 year women with secondary level of education were more likely to be positive. Agricultural/unskilled workers along with hotel staff were positive in majority and no infection was found amongst the unemployed. The positivity in housewives was 11.59% and significant for women. The maximum HIV positivity of 15.50 % was found among sufferers ofSTDs with discharges. 8.66% was positivity for VDRL

Antenatal mothers

A total of 800 antenatal clinic attendees were tested and their age wise distribution is represented by the figure.More than 70% were below 30 years. and most came from rural areas.

The HIV percent positivity was 1.13% and the nine positives were all non-migrants. There was very slight difference between urban and rural residents (1.17% and 1.11% respectively). As regards age group wise distribution of HIV positivity, it was found to be highest in under 20 years of age group at 2.13% for both sexes. Moreover, the primary level literates had highest positivity at 1.83% in males but in illiterate for females. Although more than half of positives were wives of agricultural/unskilled workers, but highest positivity was amongst wives of truck drivers category at 2.97% usually from rural areas.The VDRL positivity was 1.0% during this round of surveillance.

Fig 5: **Age wise percentage distribution of tested ANC mothers in Goa**



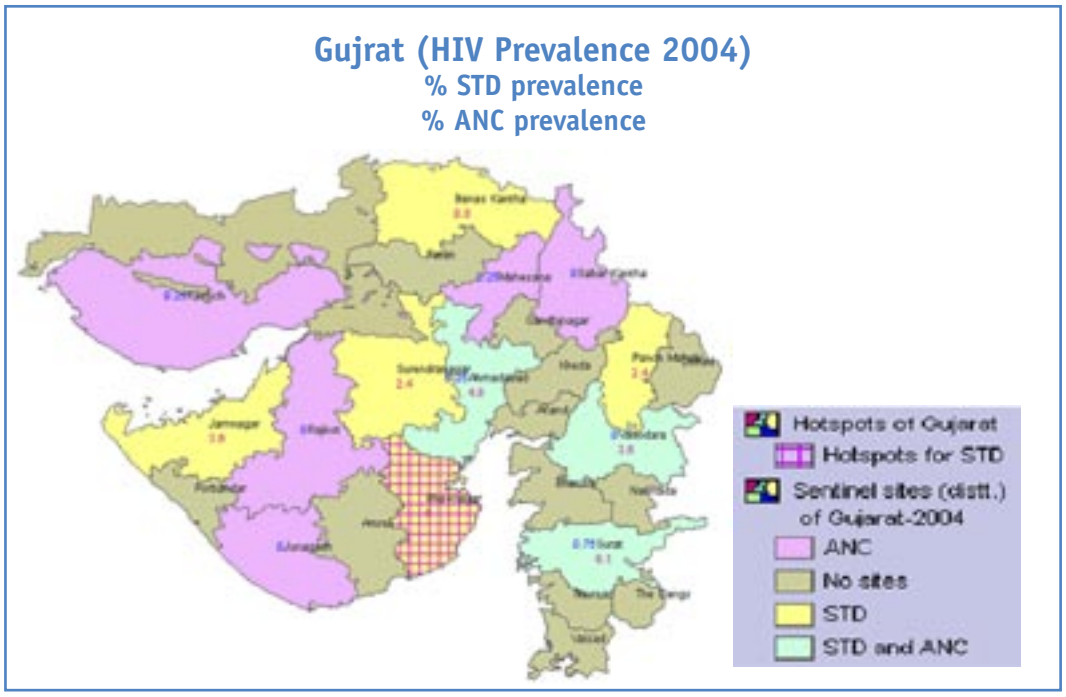
Conclusion & Recommendations

Goa, being a scenic state, attracts many tourists from across the country and the globe and needs stringent measures for control of HIV/AIDS. Targeted intervention focusing on FSW's, migrant populations, hotel staff and STD patients appears to be of immediate importance in the state. In 2004 the core risk group under surveillance was only the MSM group but FSWs should be tested regularly as the prevalence in previous years has been high.

The high percent positivity of about 15% among those with either genital ulcers or urethral/cervical discharges and the high VDRL indicates the need to strengthen STD services in the state.

The HIV values comparable between antenatal mothers and blood banks indicate a high level of infection in the general population. This is in contrast to the low 9% positivity in the VCTC's though the median prevalence in STD groups was 15.77%. Such a situation demands strengthening of IEC and BCC services in the state and a study of risk behaviour dynamics and networks. VCTC services need strengthening too.

Gujrat



Introduction

Gujrat has been classified as a state with concentrated HIV prevalence. 18 sites were chosen to carry out the sentinel surveillance activities in Gujrat for the year 2004. (see State Map) There were 8 STD, 8 ANC, 1 FSW AND 1 MSM site. Data was complete almost for each of the sites.

The median HIV prevalence was 3.67% among STD patients, and 0.20% among antenatal women for the year 2004.

Magnitude of problem

In Gujrat, HIV prevalence has not changed much since 1998. (figure) The South-East

Fig 1: **HIV Trend in Gujrat**

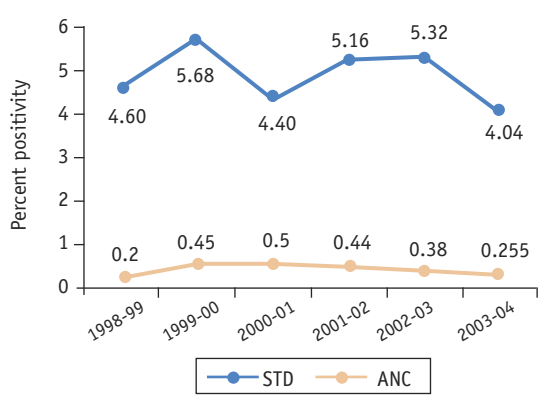
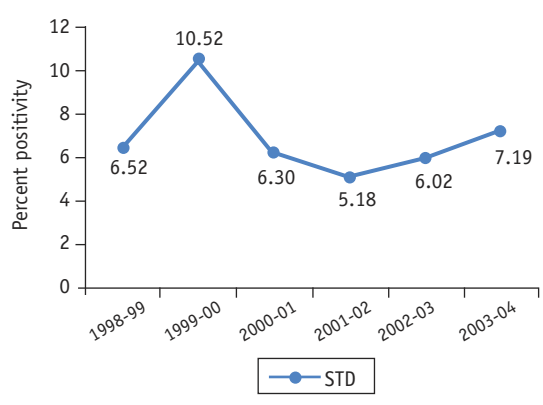


Fig 2: **HIV Trend in Surat**



part of Gujrat has higher positivity. An significant increase has been seen in the prevalence rate for the STD group at Surat at 8% and Ahmedabad continued to have high levels of HIV infection. Bhavnagar (5%) was the STD 'hotspot' (State Map) for the state. In antenatal mothers, the prevalence has been almost stable since 1998-99. None of the ANC sites underwent any significant changes in prevalence.

Profile of HIV positive groups

The core risk groups (FSWs and MSMs)

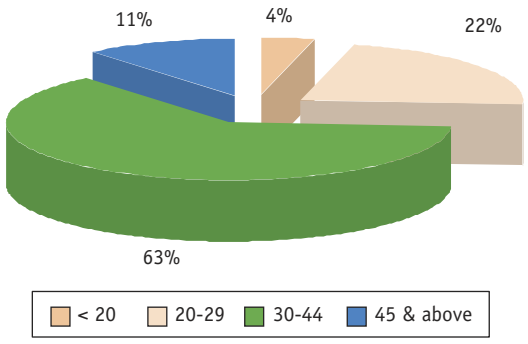
FSWs

The percent positivity among FSW clinic attendees was 9.2%. The female sex workers were tested for the first time in the state in 2004. The age wise distribution of FSWs is given in the figure. More than 90% of all tested were urban residents however, the rural residents had much higher positivity at 22.2% compared to their urban counterparts at 8.2%. The majority of the tested and positive FSWs were in the age-group of 30-44 years. And this group had the highest positivity at 9.55%. The highest positivity was amongst illiterates at 15.74%.

MSMs

There was an MSM site in this round of surveillance. The percent positivity in this site was 6.8%. All but two of those tested were from urban area and all HIV positives were urban residents. As regards urban MSMs almost half of the tested were in the age group of 20-29 years, though MSMs between 30-44 years had highest prevalence (14.75%). Overall positivity was highest among secondary level literates (6.76%) and occupation wise, businessmen had the highest positivity (11.32%).

Fig 3: **Age wise percentage distribution of tested FSW in Gujrat**



STD patients

Out of the 1905 tested, 831 were males and 1074 were females. The age wise distribution of the male and female patients is given in the above figures. Unskilled workers amongst males, and housewives amongst females, formed the major group tested in the state.

The aggregate percent positivity was 3.67% and it was higher among migrants at 4.9% compared to non-migrants at 3.3%. Males had more than 2.8 times higher positivity than female STD clinic attendees (5.78% versus 2.05%). Overall the highest positivity was in 30-44 year age group at 4.5%. The illiterates had the highest prevalence rate with 7.57% among male and 2.51% among female STD patients. The positivity was highest overall among factory workers (7.96%) for both sexes but followed by the unskilled in males and hotel staff in females. The unemployed

Fig 4: **Age wise percentage distribution of tested male STD patient in Gujrat**

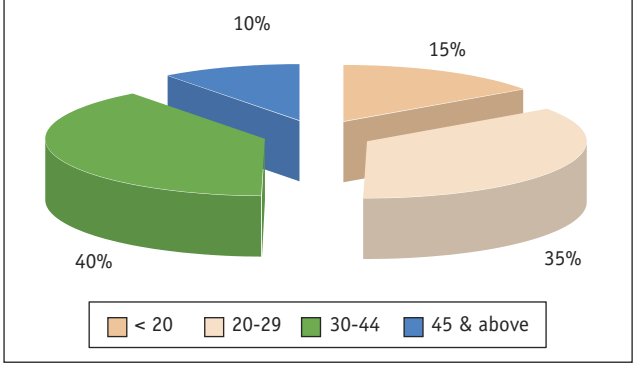
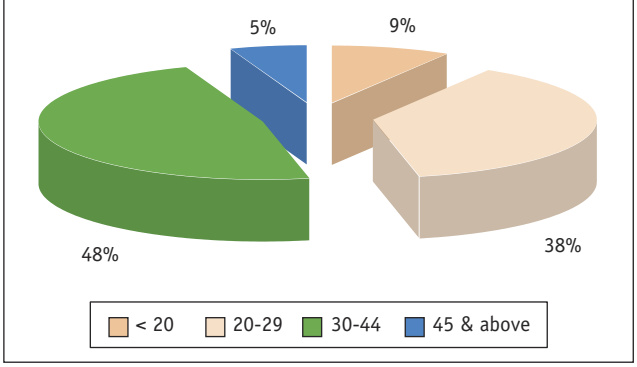


Fig 5: **Age wise percentage distribution of tested female STD patient in Gujrat**

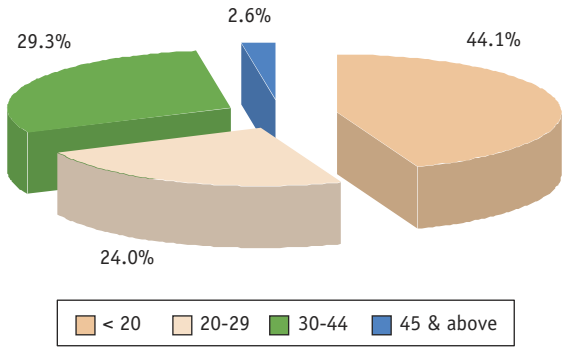


were also highly positive (5.56%). Positivity amongst housewives was 2.15% and they accounted for more than 72% of positive female clinic attendees. The VDRL positivity was 8.18% among males and (4.10%) among females and overall positivity for HIV & VDRL was 0.42%.

Antenatal mothers

The aggregate positivity amongst antenatal clinic attendees was 0.19%. Amongst those tested for HIV, the age group wise distribution has been shown in the figure. Urban: rural ratio of ANC clinic attendees was 3:1. About 0.21% urban and 0.12% rural residents tested positive. Although the ratio between non-migrants: migrants tested was 27:1, yet the percent positivity was higher in later (0.16% and 0.89% respectively). The majority of the tested women were in the age group of 20-29 years, However, the highest positivity was found in 30-44 year age group clinic attendees (0.72%) and amongst primary level literates (0.39%). Wives of those in service had highest positivity at 0.56%. VDRL positivity was 0.50% and 0.06% clinic attendees were both HIV and VDRL positive.

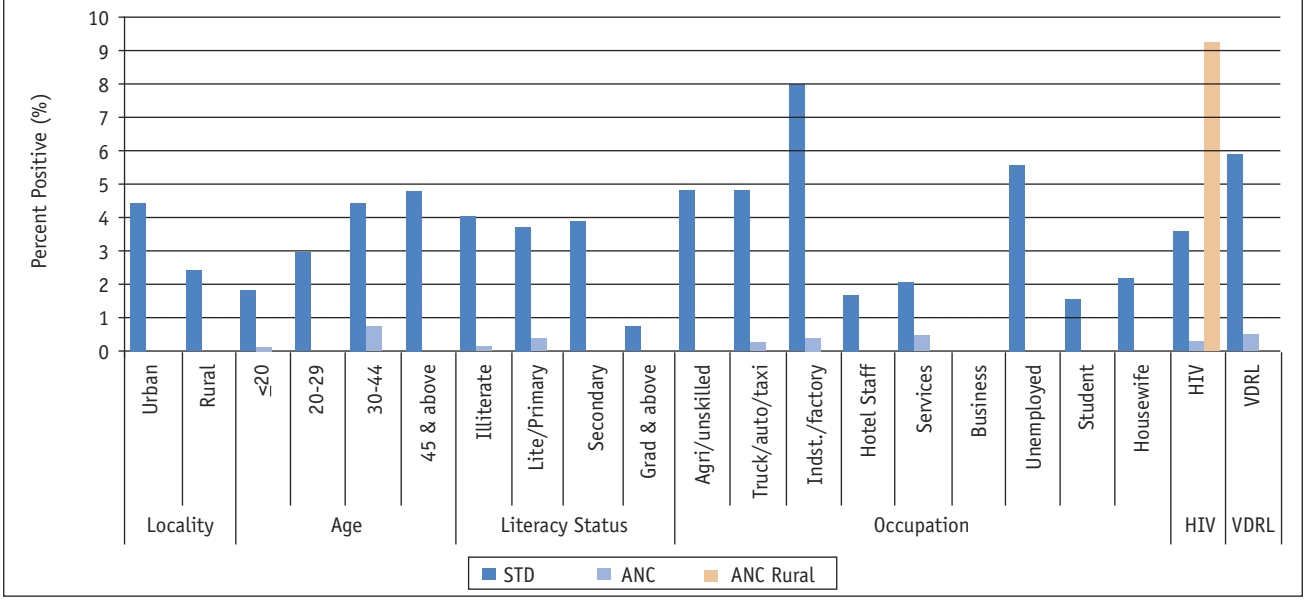
Fig 6: **Age wise percentage distribution of tested ANC mothers in Gujrat**



Conclusion & Recommendations

Gujrat is one of the major industrial belts of India. People from all over the country with different risk behavioural activities come here searching for employment. Therefore, the majority of the population acts as a 'bridge population' for the spread of the infection in the state. The spread of infection into the core risk groups of rural FSWs and urban young MSMs is an area of concern. Awareness programmes should be initiated to make people aware of various STDs including HIV and to promote condom use. STD treatment and counseling should be improved and intensive BCC be done because in Gujrat, the percent positivity among the VCTC attendees was between 7-10% for the past two years, indicating high levels of HIV infection in the population. These steps would prevent further rise of infection in STD patients and antenatal mothers and help Gujrat revert to being a low prevalence state.

Fig 7: **HIV Prevalence by Socio-demographic characteristics in Gujrat in risk groups**



Pondicherry

Introduction

Pondicherry continues to belong, epidemiologically, to the category of states with concentrated HIV epidemic There were 7 sentinel sites in 2004 (3 STD, 2 ANC, 1 FSW (TI) and 1 MSM (TI).

Magnitude of problem

The mean prevalence for antenatal mothers was 0.3% in 2004. STD patients showed a significant increase from 2.40% in 2003 to 4.80% in 2004.

Pondicherry city had the highest HIV prevalence of 11.7% in 2004. Though a declining trend has been identified since 1998, HIV prevalence for both STD and ANC increased in 2004 (fig). A declining trend was observed at JIPMER.

Profile of the HIV positives

The core risk group (FSW's and MSM's)

FSWs

Among FSWs, 82 urban and 124 rural residents were tested. The total percent positivity was 1.94%. All the four positives were migrants with a positivity of 5.80%. The highest positivity was found amongst primary level educated clinic attendees (2.08%). The most commonly involved age group was that of 20-29 years, with highest positivity at 2.06%.

Fig 1: **St. 10 HIV Trend in Pondicherry**

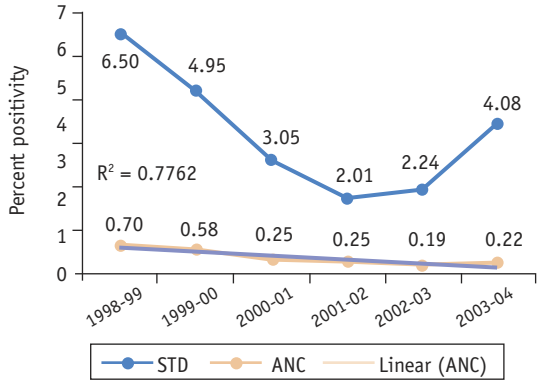


Fig 2: **HIV Trend in Jipmer**

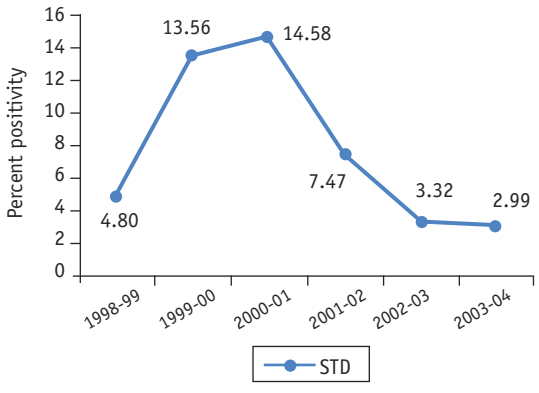


Fig 3: **Age wise percentage distribution of tested FSWs in Pondicherry**

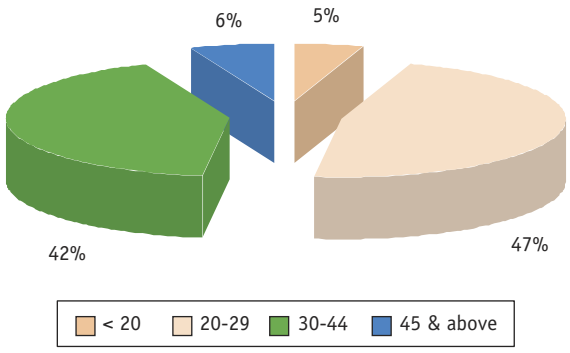


Fig 4: **Age wise percentage distribution of the tested male STD patients in Pondicherry**

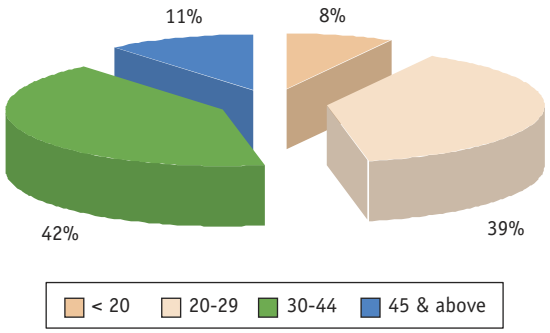
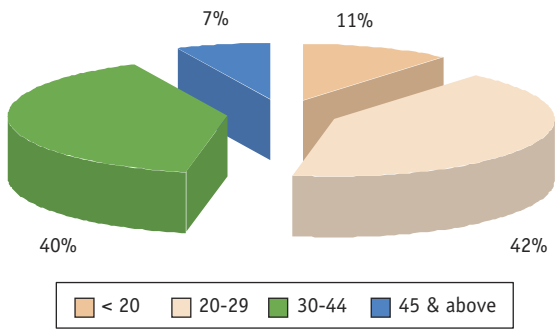


Fig 5: **Age wise percentage distribution of the tested female STD patients in Pondicherry**



MSMs

In total 230 MSM clinic attendees were tested with a percent positivity of 5.22%. Urban: rural ratio of patients tested was 2:1 and positivity was 5.92% and 3.85% respectively. As regards the age wise distribution, the highest positivity was amongst 30-44 years. The highest positivity was found among primary level literates (5.9%) and unemployed MSMs at 11.11%.

STD Patients

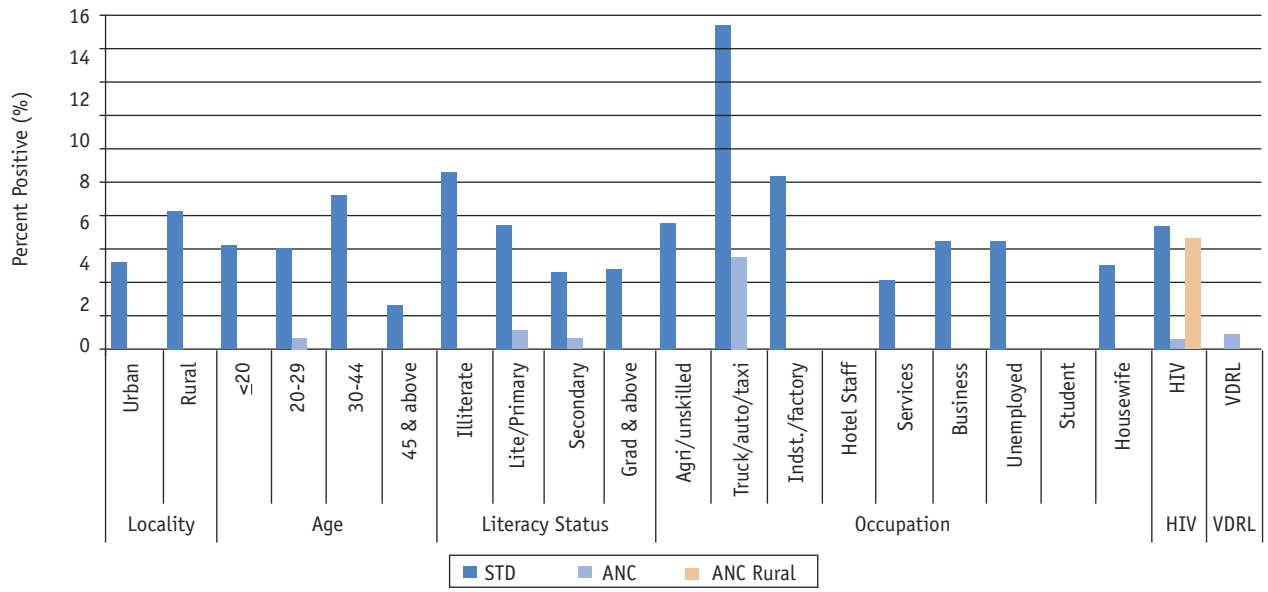
During this round about 286 male and 393 female STD patients were tested and their age wise distribution is given in the following figures where the majority tested were found to be in the 30-44 years age group, and also had highest positivity (7.25%).

The urban: rural ratio of the patients tested was 1:2.5 and the positivity was 4.08% and 6.42% respectively. The percent positivity was 9.09% in males and three times less as 3.31% in females. Male illiterates were more than twice as positive as females (13.4% and 5.9% respectively). Overall highest positivity was found among agricultural/ unskilled workers at 5.83%. Housewives had a HIV percent positivity of 3.90%. Though the highest sufferers were of discharges, yet the positivity was highest in those with genital ulcers at 7.57%. The VDRL positivity was 1.91% and 0.29% was positivity for both HIV & VDRL positives.

Antenatal mothers

The age wise distribution of the 800 mothers tested is depicted in the figure. The total percent positivity

Fig 6: **HIV Prevalence by Socio-demographic characteristics in Pondicherry in risk groups**

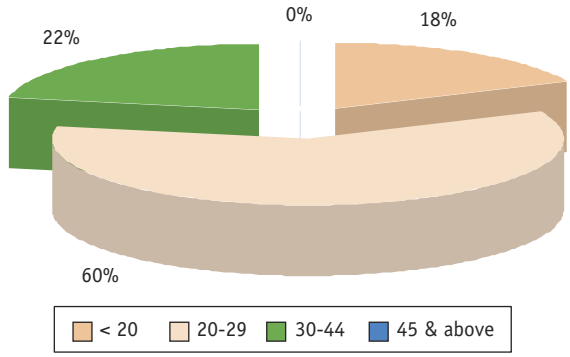


was 0.25% with an urban-rural ratio of tested women was 1:3. A total of 2 rural women tested positive, 1 was a migrant and both were in the age group of 20-29 years. One was educated up to primary level and the other up to secondary level. Both were wives of truck/auto/taxi-driver or cleaners. VDRL positivity was 0.63% during this round of surveillance. None of the urban residents tested positive.

Conclusion & Recommendations

Amongst STD clinic attendees it was found that 6 were HIV positive out of the 154 housewives tested and 6 male HIVpositives belonged to drivers category. Among the rural ANC mothers, also the two who tested positive were wives of truck drivers/cleaners. This can be taken as an indication that the infection could very well be spreading into the general population and various awareness campaigns and targeted interventions, especially for truck drivers, should be intensified.The very low percent positivity in VCTCs - 0.57% in 2004 and 0.39 % in 2003, as compared to 5.74% in STD patients, indicates gross underutilisation of VCTC's by high-risk groups. The near similar prevalence in the ANC group and blood banks adds to the need for strengthening of IEC services and BCC, especially for STD patients.

Fig 7: **Age wise percentage distribution of the tested ANC mothers in Pondicherry**



Low Prevalence States

Andaman & Nicobar Island

Introduction

Andaman and Nicobar Islands is a low HIV prevalence state. There were 5 sites in the 2004 round of sentinel surveillance – 2 STD sites, 2 ANC sites and one FSW site.

Magnitude of problem

HIV prevalence was 1.6% for STD patients,0.50% for FSW clinic attendees and zero for antenatal mothers during this round of surveillance. The HIV prevalence among STD patients has shown an increasing trend over the years though the value had fallen in 2004 (fig.). The STD site at Port Blair has shown significant increase compared to the 2003 round of surveillance.

Socio demographic profile of HIV positives

Antenatal mothers

The overall percent positivity in ANC sites was zero. The urban: rural ratio of the attendees was 1.2:2. More than two third of the women (67%) from both, urban and rural areas were in the age group of 20-29 years and more than half of them had been educated up to secondary level.

STD patients

The overall HIV prevalence among STD patients was 1.60%. A total of 500 patients were tested. The urban: rural ratio of tested was 1:1.5,however the percent

Fig 1: **St. 10 HIV Trend in Andaman & Nicobar**

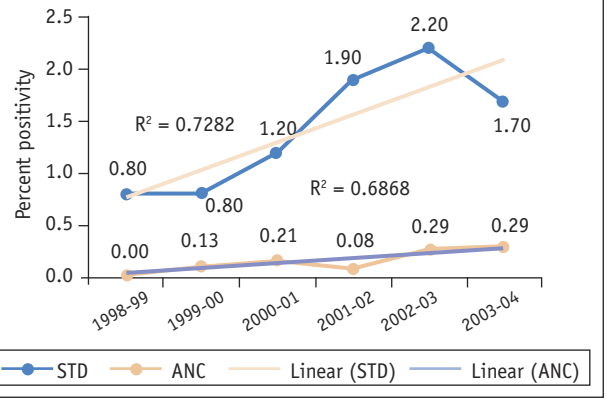


Fig 2: **HIV Trend in Port Blair**

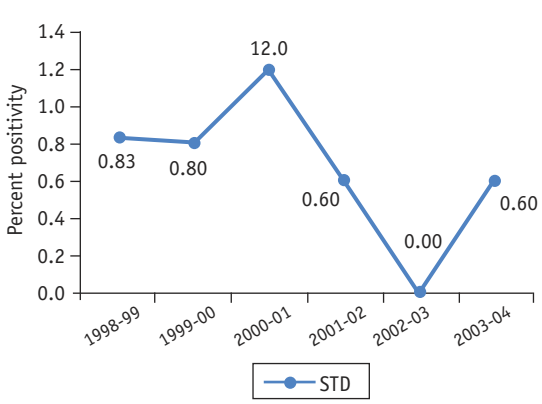


Fig 3: **HIV Trend in Port Blair**

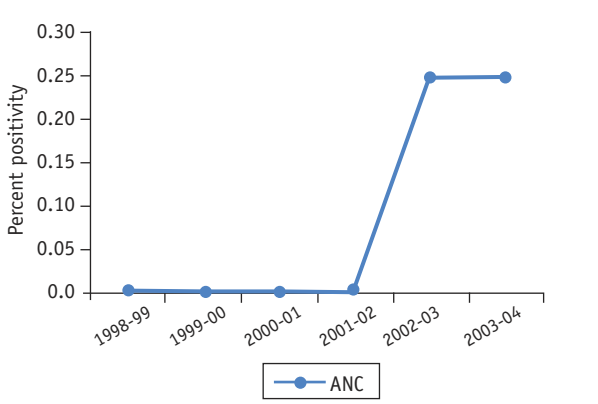
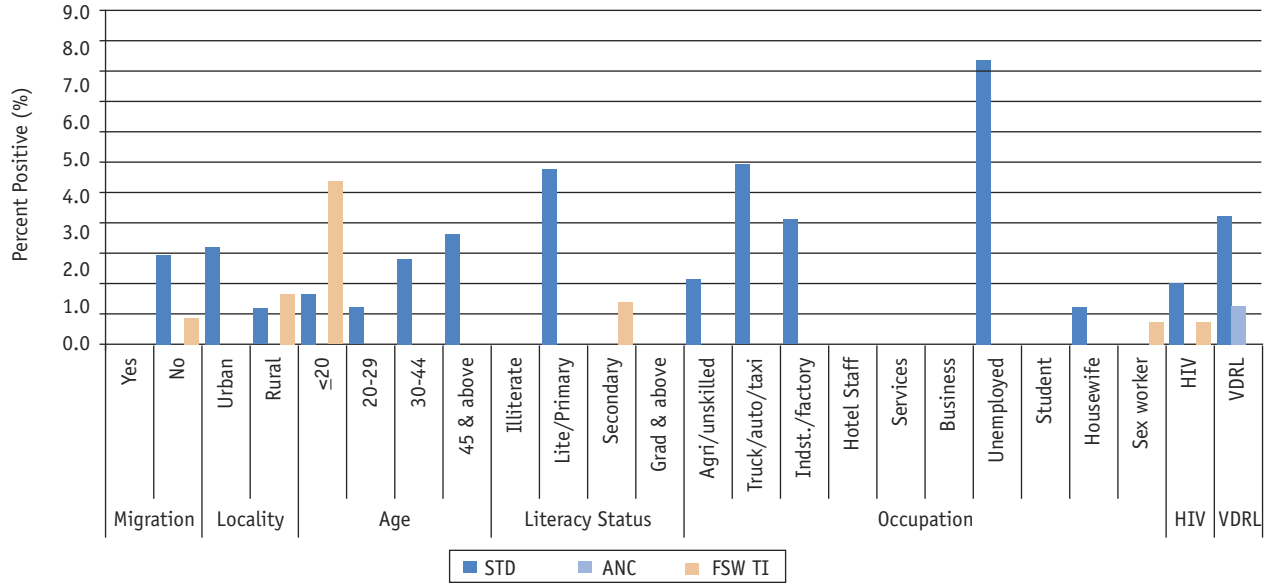


Fig 4: **HIV Prevalence by Socio-demographic characteristics in Andaman & Nicobar Islands**



positivity was higer among former at 2.5%, compared to later group at 1.0%, moreover all the positives were non-migrants. The maximum positivity was observed in the age group of 30-44 years at 2.2%. All the positives males as well as females were just literate or educated up to primary level with positivity at 4.7%. Occupation wise the positivity was highest in truck\ auto drivers at 1.70%.Housewives had a positivity of 0.90%.The highest positivity was amongst sufferers of genital ulcers at 1.90%.The VDRL positivity was 3.40%.

Core Risk Groups (FSWs)

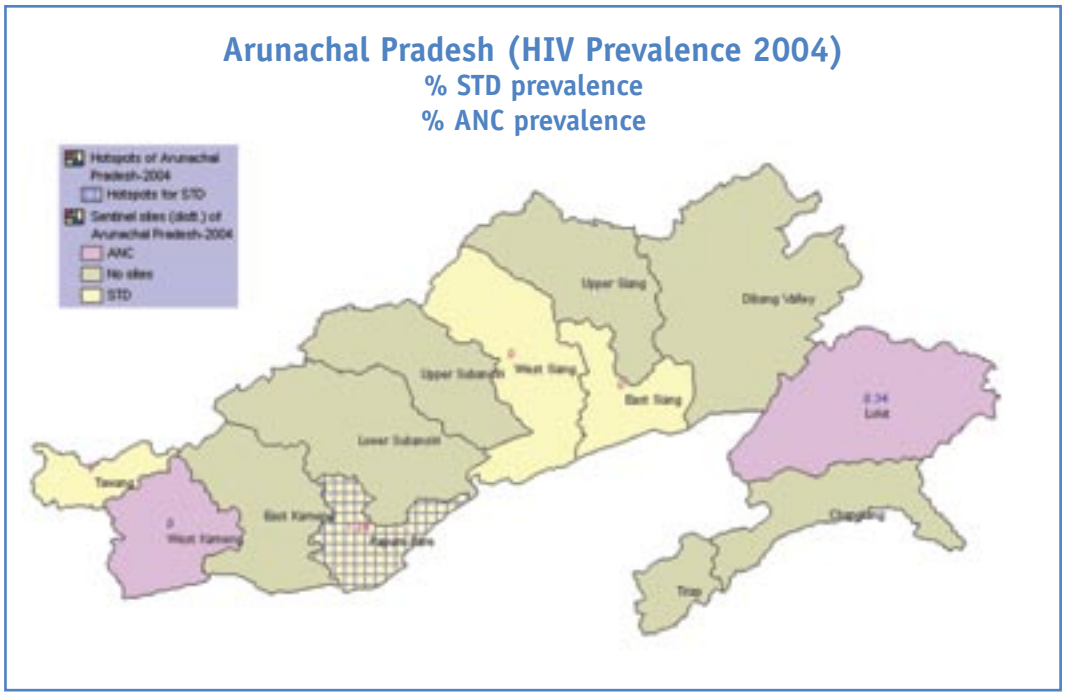
A site was specially designated in the 2004 round to collect data on HIV prevalence among sex workers. The HIV prevalence rate of FSWs was 0.5%. Most of FSWs tested were urban residents and were aged between 20-44 years. Half of them were educated up to secondary or above levels. The one who was found positive was a rural FSW, aged below 20 years and was educated up to the secondary level.

Conclusions & Recommendations:

The HIV percent positivity among the VCTC attendees and among the donors tested in the blood banks was 0. Analysis of the socio-demographic variable shows that the trend of multiple sex partners was driving HIV in the region among workers, truckers and unemployed youth. These groups are not only acquiring STDs and HIV themselves; but are passing the infection onto their spouses. Therefore, awareness generation activities are needed urgently in the Andaman & Nicobar islands.

The profile obtained of 0% positivity indicates that there is lack of utilisation of government VCTCs. g. There should be better IEC and BCC amongst the population to prevent spread from STD groups (that may be the floating population of sailors) to the general population with very low prevalence, (0% as none out of the 800 ANC mothers tested for HIV were found positive).

Arunachal Pradesh



Introduction

Arunachal Pradesh is one of the **low prevalence states** in the country. The Sentinel Surveillance round of 2004 was conducted in six sites across the state at four STD and two ANC sites (as shown in the state map). All the sites were not able to complete their sample size.

Magnitude of problem

The median HIV prevalence in 2004 was zero in STD patients and 0.17% in antenatal women. There has been no significant change in HIV prevalence values in 2004 over the period of a year. However, prevalence in STD has been rising linearly since 1998. There

Fig 1: **HIV Trend in Arunachal Pradesh**

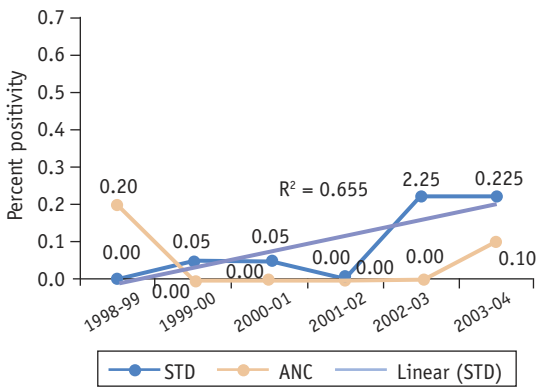


Fig 2: **HIV Trend in Naharlagun**

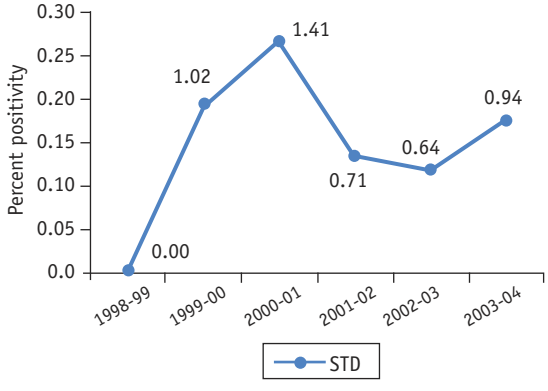
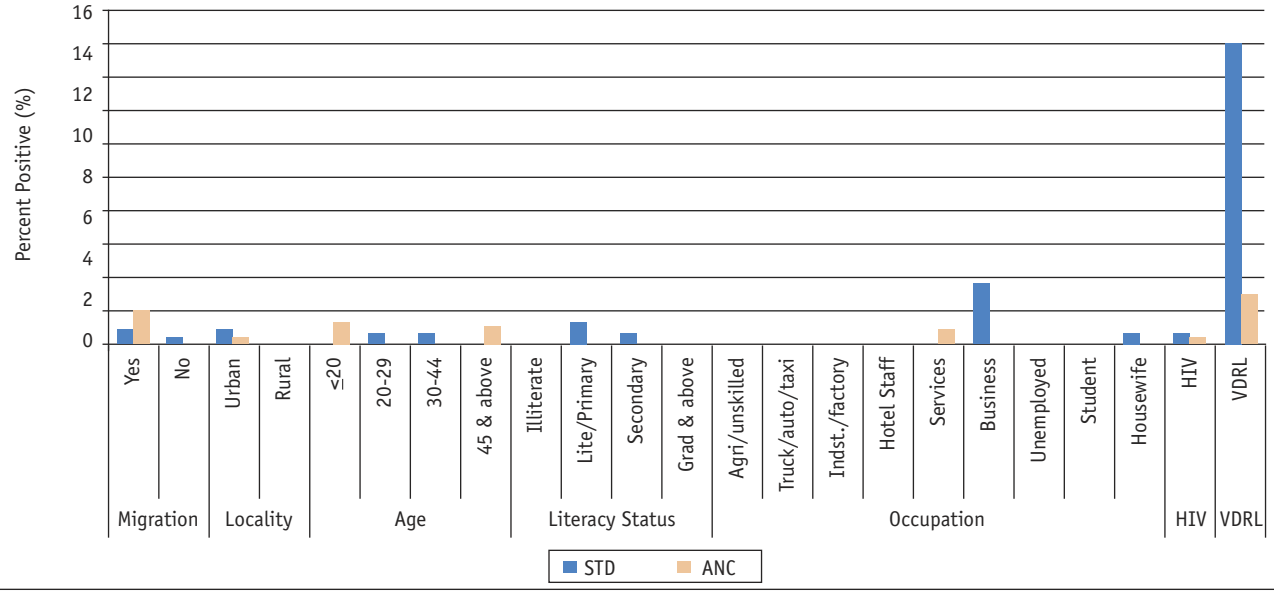


Fig 3: **HIV Prevalence by Socio-demographic characteristics in Arunachal Pradesh**



has been no such trend in antenatal prevalence (state trend) although the percentage has increased from zero in 2003 to 0.10% in 2004. No site in the state has shown any significant changing trend.

Naharlagun was the **STD hotspot** for the state (see map) and showed median HIV prevalence of 1.2% in 2004. The graph depicts the moving average for the last 2 years). At least one patient has been detected as being HIV positive in this site for the past 4 years. There was no ANC hotspot in the state.

A rising trend was observed amongst the STD patients. Though no case had been reported amongst the antenatal women till 2003, one case was found to be positive in 2004.

Profile of HIV positives

STD Patients

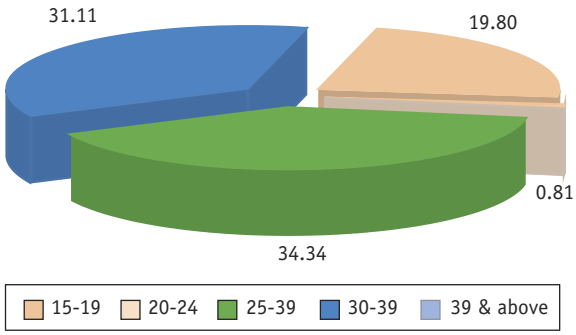
One patient tested positive from both sexes. Both positives were urban residents with a positivity of 0.63%. HIV positivity was more than double (0.55%) for the migrants as compared to the non-migrants (0.25%). Age wise distribution of male and female STD patients is shown in the figures. It is seen that the highest positivity was in the age group of 30-44 years (0.5%).

The male who was tested HIV positive was in the age group of 30-44 years, while the positive female was between 20-29 years. The male was a businessman and was educated up to primary level while the female was a housewife and was educated up to secondary level. Those with discharges had prevalence of 1.56% in males and 0.41% in females and this was the most common presentation as regards syndromic presentation. Overall HIV positivity was 0.35% and VDRL positivity was observed to be 14.34%. None were found positive for both HIV and VDRL.

Antenatal Mothers

As shown in the pie diagram, the maximum number tested were from the age group of 20-29 years. The

Fig 4: **Age wise percentage distribution attending ANC clinics in Arunachal Pradesh**

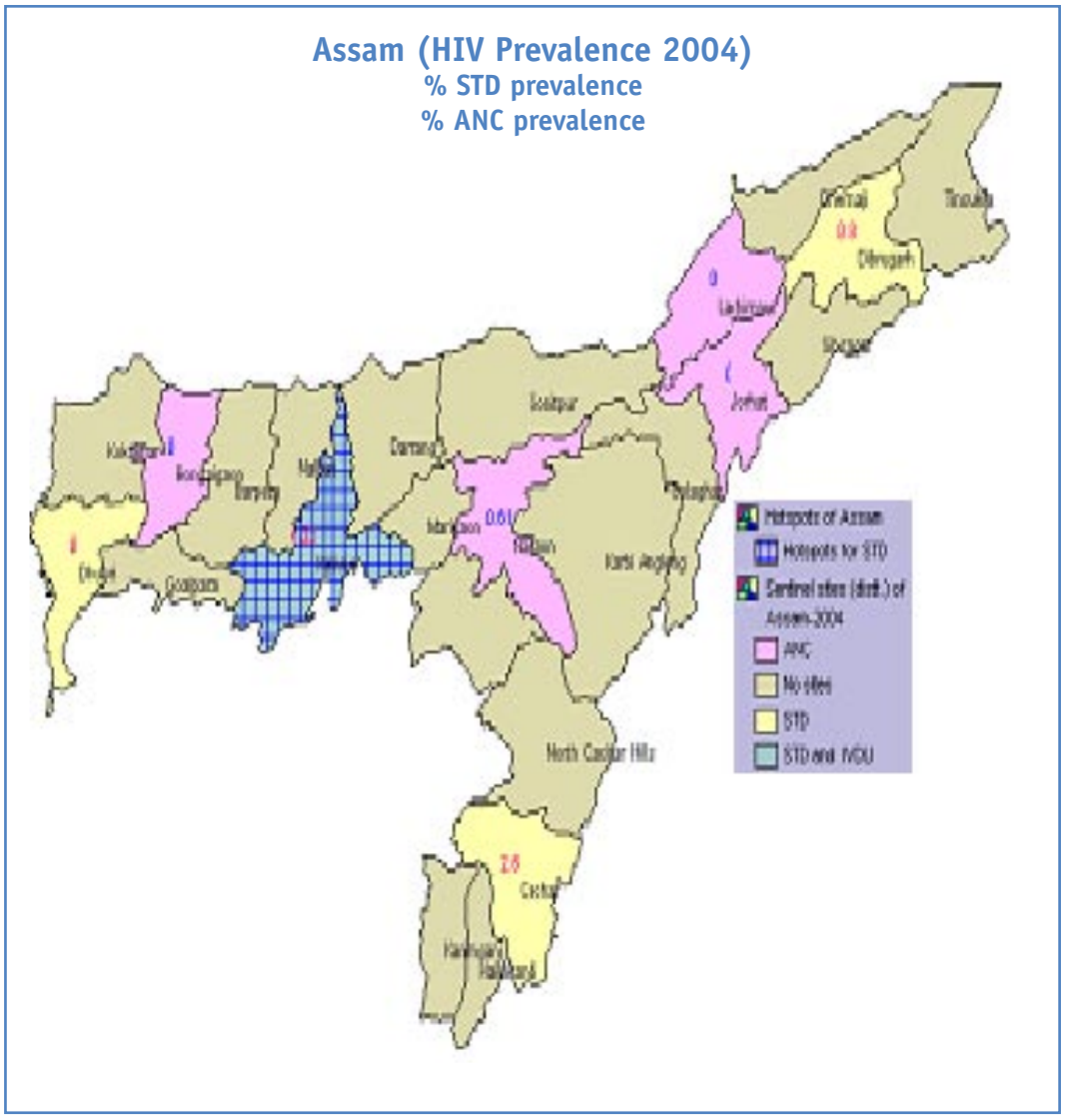


urban rural ratio of tested ANC mothers was 1:0.63. The solitary female who tested positive was a migrant and urban resident. She was in the age group of 30-44 years, having primary level education with the occupation of her husband being serviceman. Overall, VDRL positivity was 2.2% during 2004 and none of the attendees were found positive for both HIV and VDRL.

Conclusion and Recommendations

The North East state of Arunachal Pradesh has an overall VDRL positivity of 14.34%, which clearly shows a high degree of STD. This could very soon especially when migrants can change this stable scenario. IEC campaigns on condom use should be promoted in the high-risk groups. There was zero percent positivity detected in the VCTCs of Arunachal Pradesh both in 2004 and 2003. The percent positivity of those tested in the blood banks was 0.6 in 2004 and 0.3 in 2003. In brief, the state must focus on health awareness and spread of messages pertaining to safe sexual practices and use of condoms.

Assam



Introduction

Assam is a low HIV prevalence vulnerable state. Twelve sentinel sites were involved in surveillance activities in Assam in 2004 namely 4 ANC sites, 5 STD sites, 2 FSW (T1) sites and 1 IDU (TI).

Magnitude of Problem

The HIV percent positivity was 0.14% for ANC, 1.03% for STD and for FSW (TI) it was zero during 2004 round of surveillance. HIV prevalence has not changed significantly from last year in Assam. It was seen that HIV prevalence among STD and ANC clinic has increased slightly compared to last year. HIV prevalence has not been steadily falling in Dibrugarh STD site. At Guwahati STD site the prevalence was on rise. Guwahati (1.3%) was the **STD hotspot** in Assam. There was no ANC hotspot.

Fig 1: **HIV Trend in Assam**

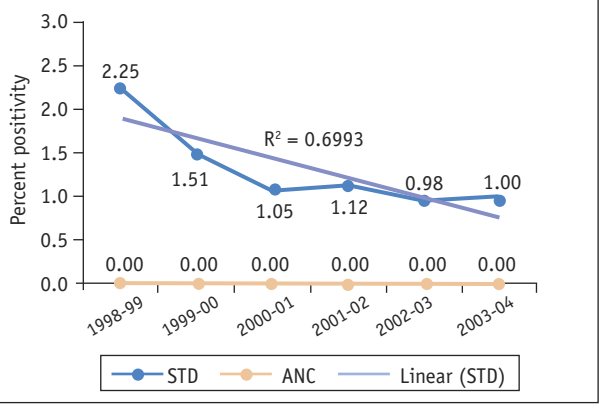
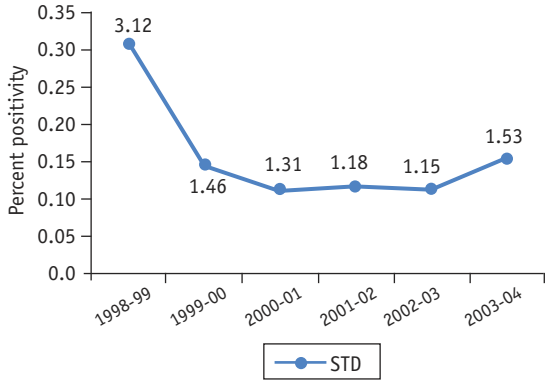
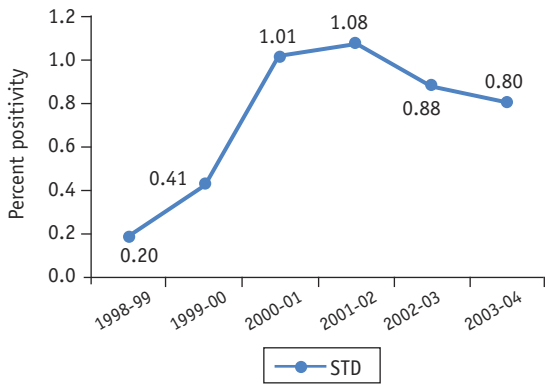


Fig 2: **HIV Trend in Guwahati**



No noteworthy trend was observed in STD group since 2000. Though a drop from 1.3% in 2003 to 0.8% in 2004 was observed in the HIV prevalence. The trend in all STD sites since 1998 showed a declining trend whereas the consistent sites since 2001 revealed a steady trend. The trend amongst ANC women was found to be stable over the years.

Fig 3: **HIV Trend in Dibrugarh**

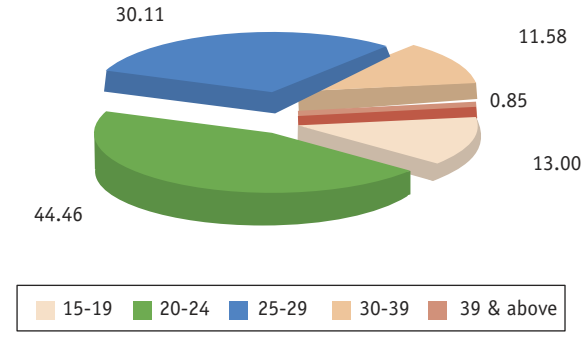


Population distribution of HIV positives

STD Patients

The overall percent positivity was 1.03%. The urban: rural ratio for STD clinic attendees was 3:4. The percent positivity was more in males (1.73%) than in female at 0.49%. The male: female ratio of STD patients was 1:1.33. The percent positivity was higher in rural (1.46%) than in urban residents at 0.44%. All HIV positives were below 45 years of age and highest positivity was amongst 30-44 years of age group at 1.3%. Occupation wise maximum positivity was found in business class (3.54%) followed by drivers (3.25%). As regards the educational status and HIV percent positivity, it was found that secondary level literates had highest positivity at 1.27%. Among women out of 3 positive 2 were housewives and one was in business. VDRL positivity was 4.21% and 0.09% were both VDRL & HIV positive.

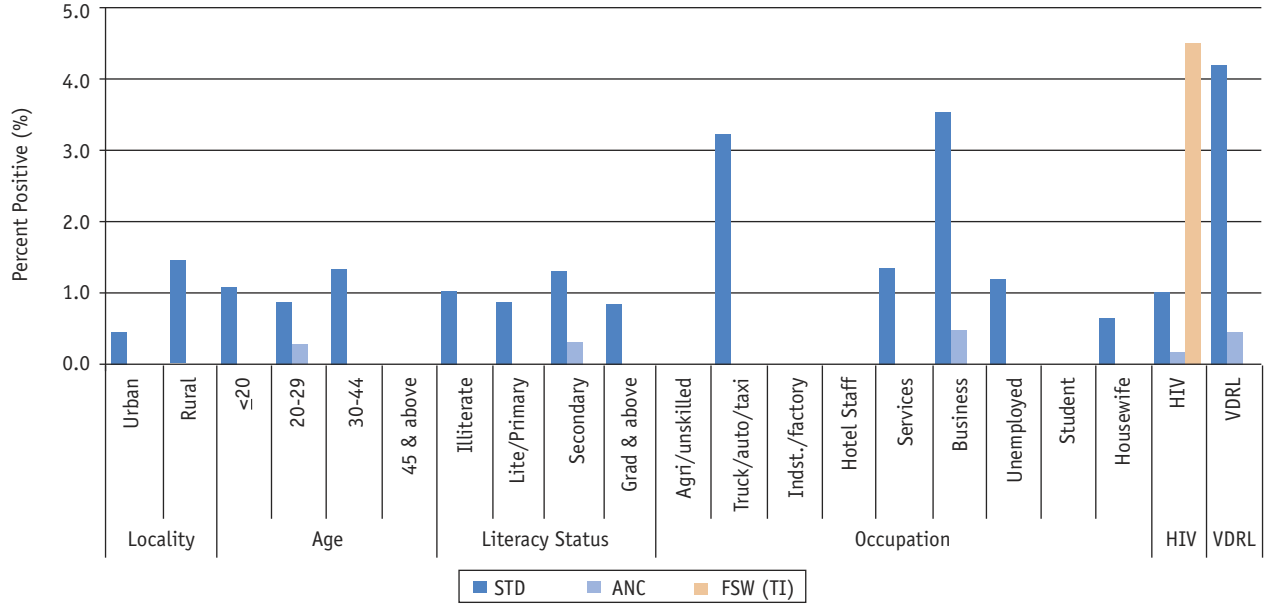
Fig 4: **Age wise percentage distribution of attendees attending ANC Clinics in Assam**



ANC Attendees

The percent positivity for antenatal mothers was 0.14%. There were more rural women than urban among ANC clinic attendees. In total 72% of total attendees were non-migrants. Among ANC attendees, the distribution of those tested according to their age is depicted in the figure. The proportion of 20-29 years age group was more than 50%. Both the women found positive also belonged to this age group. One was rural and the other was urban resident. Both the HIV positive women were educated up to secondary level and were wives of businessmen.

Fig 5: **HIV Prevalence by Socio-demographic in Assam**



Core risk group (FSWs and IVDUs)

FSWs

Targeted intervention site for testing FSWs were introduced in 2003. Of the 339 FSWs tested, 75% were urban residents and majority was between 20 to 44 years of age and were are either illiterate or educated up to primary. None of them was found positive.

IVDUS

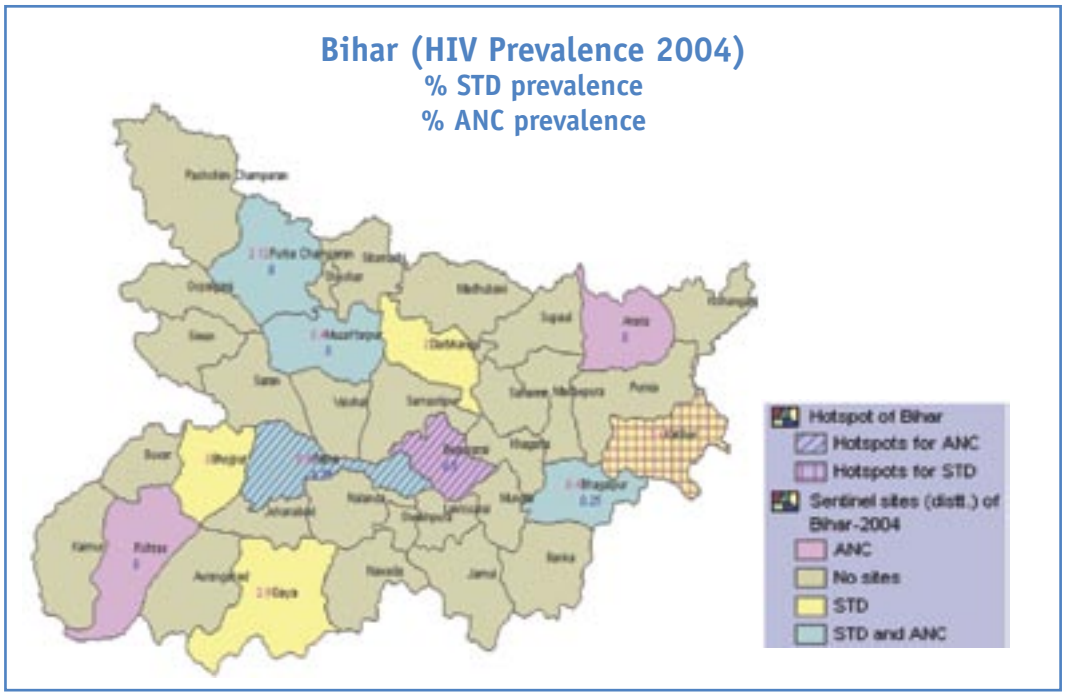
In total 134 IVDUs were tested, the percent positivity was found to be 4.48%. all the six positives were males. The urban residents had a lower positivity at 2.22%, compared to 5.6% among rural residents.

The highest positivity was found in 30-44 year clinic attendees and primary level or literates at 6.7% and 7.5% respectively. The VDRL positivity was zero during this round of surveillance.

Conclusions & Recommendations

The HIV situation in Assam was currently stable at low level. It is, however, surprising that no positives were detected in FSWs and VDRL positivity was also low, even in high-risk groups. It is possible that women from low risk may have been included to complete the sample size for FSWs, thus diluting the risk. However the high HIV infection in IVDUs 4.5% can trigger the epidemic in Assam and is a cause for concern. The HIV positivity among the VCTC attendees in the state of Assam was 3.8% in 2004 and 1.56% in 2003 and it was 0.1% among those tested in the blood banks. Awareness generation and behavior changing activities along with Harm Reduction projects for IVDUS are urgently needed.to prevent further spread.

Bihar



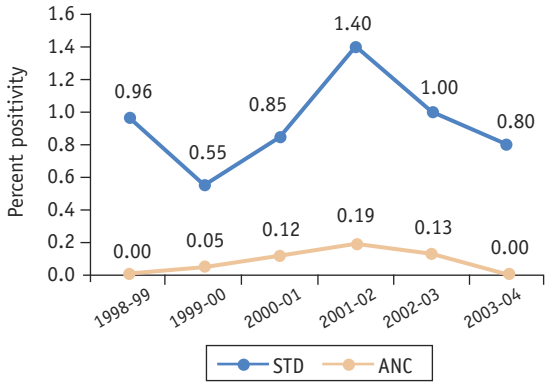
Introduction

Over all HIV prevalence in Bihar is low. During the round of 2004, the total sentinel sites in Bihar were 18- 8 STD, 7 ANC, 2 FSWs (TI) and 1 MSM (TI) (see state map). HIV median prevalence was 1.20% for STD and 0% for ANC; while it was 0.22 % in the case of ANC if the mean is considered. There has been a marginal decline in HIV infection, if the trend from 1998 to 2004 was observed. Trends in all STD sites since 1998 and consistent sites since 2001 did not reveale any significant changes (as depicted in the graph).

Magnitude of problem

Katihar was the **STD hotspot** for 2004 while Patna & Begusarai were **hotspots** for ANCs (as shown in the state map). All these three cities are busy business centres and therefore commercial sexual activities abound in these cities.

Fig 1: **HIV Trend in Bihar**



Profile of HIV positives

STD Patients

The total HIV positivity in STD clinics was 1.2%. Prevalence was

Fig 2: **HIV Trends in Patna**

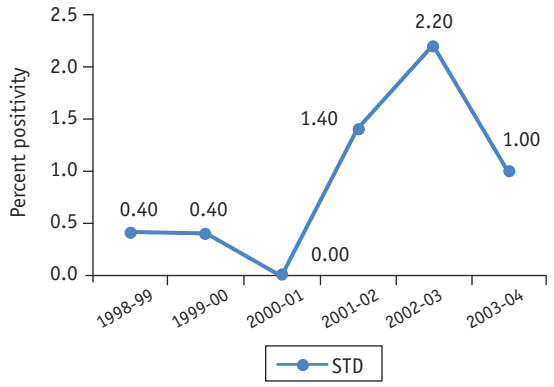
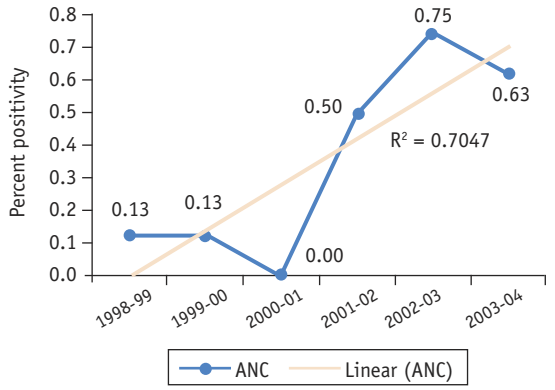


Fig 3: **HIV Trends in Patna**

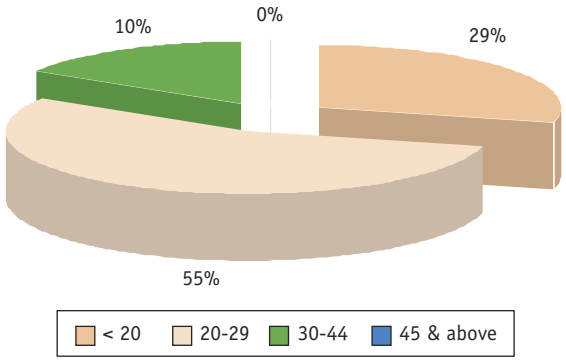


relatively higher in the rural population (1.41%) as compared to the urban population(1.19%). In males, less than 20 years was the commonest age group involved (2.54%) while in females, the age group of 45 years & above, was the most common. (1.52%). Further, illiterates had the highest percent positivity (1.37%).Moreover, one third of males and half of the female HIV positive STD patients were illiterat Unemployed males had the highest positivity (5.97%). In females, 1 out of 5 unemployed females was HIV positive. The most frequent syndromic presentation was genital ulcers in males and /cervical discharge in females. The percent positivity amongst tested housewives was 0.74%. es.

Antenatal Mothers

A total of 2775 ANC mothers were tested and the age wise break up of this population is shown in fig 4. Majority were below 29 years. Only 4 in urban areas and 2 in rural areas tested positive leading to an overall positivity of 0.22%. The percent positivity was about 4 times in urban residents, compared to their rural counterparts (0.43% and 0.11% respectively). Four of these positive ANC mothers were wives of agricultural/unskilled workers. Half of the positive ANC mothers were illiterate though the highest positivity was amongst primary level educated antenatal clinic attendees at 0.24%. ANC mothers in the less than 20 years age group had the highest prevalence (0.37%).

Fig 4: **Age wise percentage distribution of the tested ANC mothers in Bihar**



The core risk groups (FSWs and MSMs)

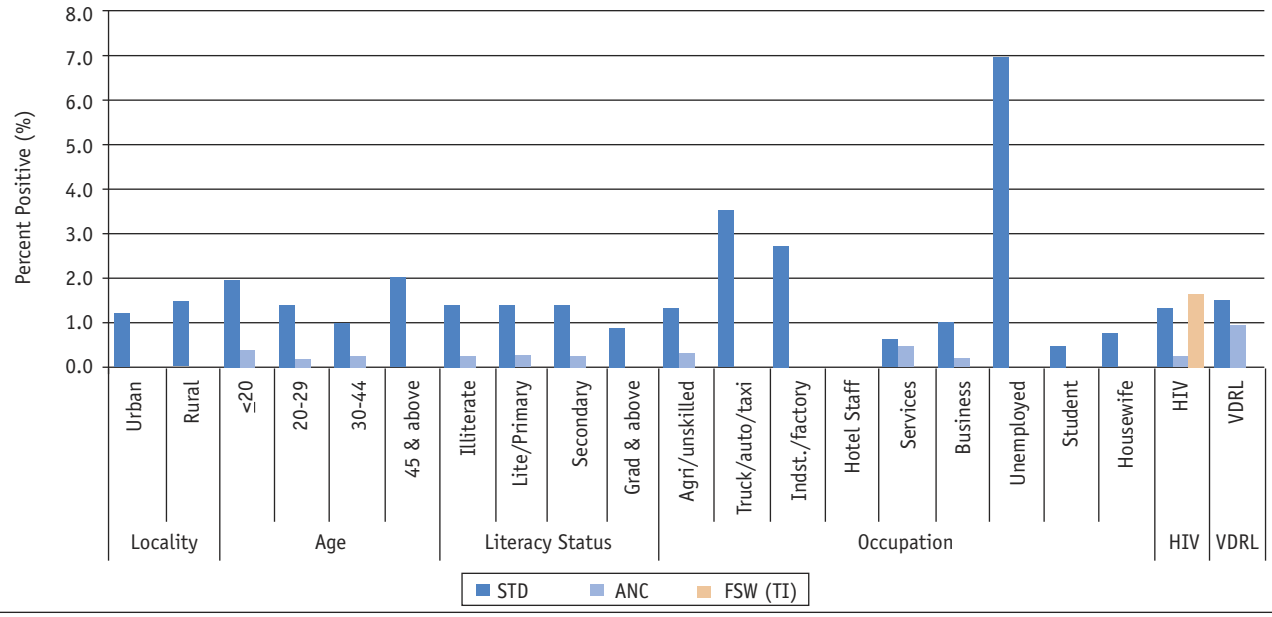
FSWs

A total of 500 FSW's were tested and one was found to be positive (0.2%). She was in the age group of 20-29 years, literate till primary level and was a non-migrant. More than 98% of the FSW tested were urban. Out of the 250 MSM patients tested, only 4 were found positive (1.6%). The rural MSM residents had more than twice percent positivity (2.94%), as compared to urban residents (1.39%). 75% of the positives were educated till the primary level.

Conclusion and Recommendations

In Bihar the HIV infection is in the population, though apparently in low levels.The very low prevalence in the FSW needs a relook. Tourist places like Gaya and busy business centres like Patna, Raxual, etc., require further strengthening of HIV surveillance. The disease, at present, seems to be concentrated among the core risk group of MSMs. The bridge population of STD patients as a whole showed a positivity of 1.21% with truck drivers/cleaners having a high HIV positivity of 3.54%. The positivity amongst VCTC attendees 7.04% was much higher than the STD positivity of (1.31%)

Fig 5: **HIV Prevalence by Socio-demographic characteristics in Bihar**



indicating highly selective clients reporting either to the VCTCs or the STD clinics. The involvement of women under 20 years was another major cause of concern and urgent steps should be taken to educate this group through School Sex Education programmes. The places along the Nepal border need FSW and IVDU sites to track the cross border infections. The overall HIV prevalence in ANC mothers was 0.22% and, in blood bank 0.2% Thus, although the general population as represented by ANC mothers had still low positivity, there was some suggestive evidence that the disease could very well spread from the core risk group through the active bridge population to the general population. Therefore, interventions need to be directed towards these populations.

Chandigarh

Introduction

There were 8 [1 ANC, 2 STDs, 3 FSWs (T1); 1 MSM (T1) & 1 IVDU] sentinel sites in Chandigarh during the 2004 round for sentinel surveillance. The quality of surveillance was satisfactory. The percent prevalence for STD was 1.80%, for ANC 0.5%, for IDU 4.8%, for FSW 0.80%, and for MSM 1.36%.

Magnitude of problem

In the state as a whole, the prevalence in both STD patients and antenatal woman has not changed significantly from the previous year. The prevalence for HIV at PGI STD site for the year 2004 was 1.8%, and was nearly the same as in 2003 (1.6%).

No trend was seen in STD patients as seen in figure however, the prevalence in ANC women continues to be at the decreased value of 0.5%.

Profile of the HIV positives

Core Risk Groups.

FSWs

Fig. 1 depicts the age wise distribution of the FSWs who were tested during the surveillance. A total of 750 samples were tested with a percent positivity of 0.8%. The positivity was around three times amongst migrants (1.06%) than non-migrants at 0.36%. Similarly the ruaral residents had higher positivity at 1.87%

Fig 1: **HIV Trends in Chandigarh**

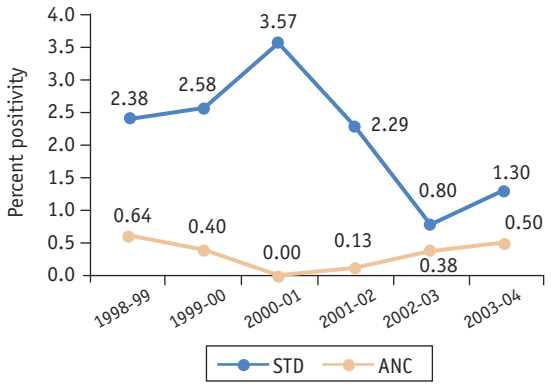


Fig 2: **HIV Trends in PGI, Chandigarh**

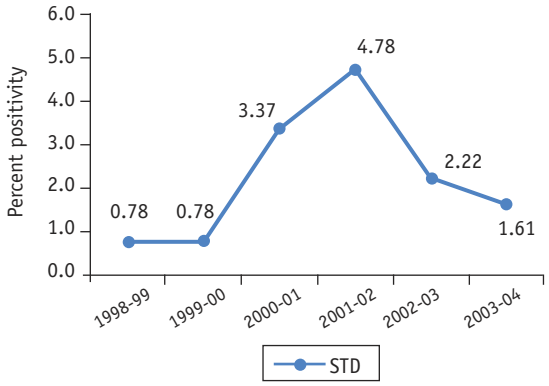
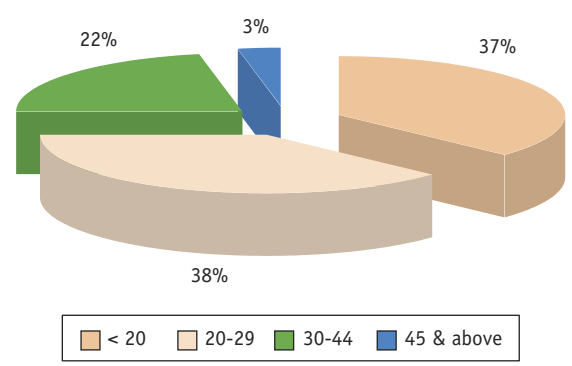


Fig 3: **Age wise percentage distribution of the tested FSWs in Chandigarh**



compared to their urban counterparts at 0.62%. As regrds age wise distribution of six HIV positives, three each belonged to 20-29 years and 30-44 years age group at 1.09%. Moreover, primary level literates accounted for highest positivity at 0.98%.

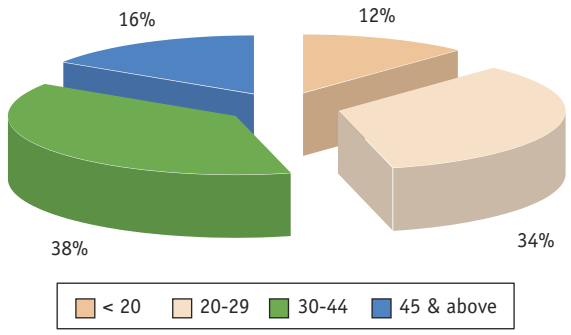
MSM

Among the 220 tested for MSMs, only 3(1.4%) of them were found positive, and 2 of these again, were truck drivers/cleaners.Moreover,2 out of 3 positive for HIV belonged to 20-29 years age group.Rural residents and illiterates accounted for the same number too.

Intravenous Drug Users

Out of 250 IVU patients, 12 were found positive, and 7 of them were in the age group of 30-44 years (9.5%). 4 of the positives were agricultural/unskilled workers, with highest positivity at 5.1%. As regards educational status, it was found that the illiterates had highest positivity at 5.65. Moreover, non-migrants (6.06%) than migrants (4.35%) had higher positivity.

Fig 4: **Age wise percentage distribution of the tested male STD patients in Chandigarh**



STD patients

The figures 2&3 represent the age-wise distribution of the tested STD patients. Majority were in the age group 30-44 years. It was found that the highest HIV percent positivity was among the 20-29 years age group STD clinic attendees at 2.3% Moreover, the males had around 6.5 times higher positivity than females (3.98% versus 0.62%) The educational status and HIV positivity, reflected that education had a positive role, as positivity decreased with higher level of educational status, so it was highest amongst illiterates at 2.86%. STD clinic attendees in service had highest positivity (2.22%), but equally infected were the agricultural and the drivers of trucks &autos. More than half of clinic attendees were housewives with a positivity of 0.38%.

The migrant patients had around 2.35 times higher positivity than non-migrants (3.13% and 1.34%, respectively).Though the sufferers of urethro-cervical discharges accounted for more than 50% of STD clinic attendees, yet the positivity was highest amongst the genital ulcer sufferers at 3.20%. The VDRL positivity was 3.80% and 0.20% accounted for both HIV & VDRL positivity.

Antenatal Mothers

The sample size for ANC site was 400 and Fig. 4 depicts the age wise distribution of these mothers. As expected the most were 20-29 year old. The overall percent positivity was 0.50% and both the positives were non-migrants (079%) and were urban residents (1.12%). Though out of two positives, one each belonged to less than 20 years age group and

Fig 5: **Age wise percentage distribution of the tested female STD patients in Chandigarh**

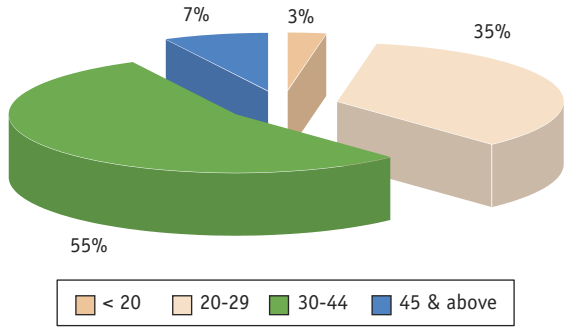


Fig 6: **Age wise percentage distribution of the tested ANC mothers in Chandigarh**

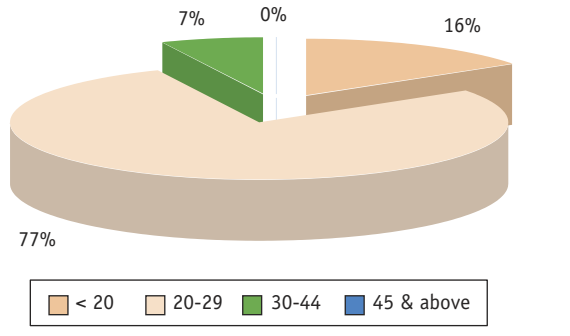
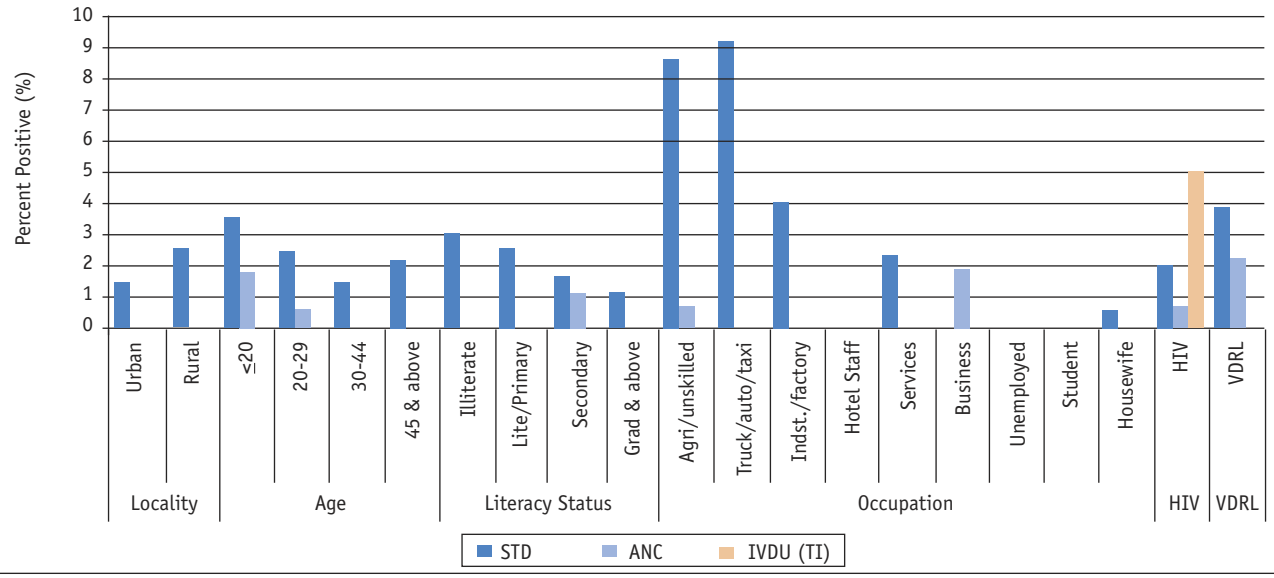


Fig 7: **HIV Prevalence by Socio-demographic characteristics in Chandigarh in risk groups**



20-29 years age group, yet the positivity was higher amongst the former at 1.61%. Both positives were secondary level literates with positivity at 0.96%. As regards occupation, it was found that though more than 50% of clinic attendees were wives of those working as agricultural/ unskilled workers, yet the positivity was highest among the wives of those in business at 1.72%. The VDRL positivity was 2.0% during this round and none was found positive for HIV and VDRL.

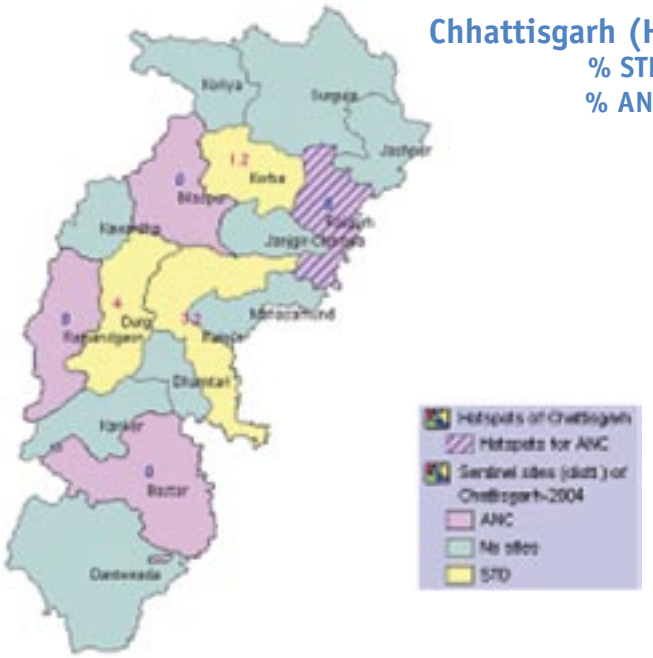
Conclusion and Recommendations

Chandigarh is still rated as a low prevalence state. However, the disease is popping up in certain key core risk group population, as MSM and IDUs who were truck drivers, and 8 of the positive IDUs were also migrants. Again, in the bridge population, 1 out of the 2 positive STD patients was a truck driver/ cleaner. In this same population, 1 housewife was also found positive. In the general population one of the positives was the wife of an agricultural/ unskilled worker and the other was the wife of a businessman.

Moreover, Chandigarh has high potential for sudden increase in HIV positivity, due to its prominent location on the National highway, and on the way to tourist destination of Himachal Pradesh, and also in close proximity with the industrial hubs of Punjab and Haryana. Target interventions towards trucker drivers, and the migrant population need to be strengthened.

The HIV percent positivity among the VCTC attendees 4.99% in 2004, compared to 3.91% in 2003. is rising, though the rate among those tested in the blood banks, was found to be low at 0.2% in 2004, and 0.1% in 2003. Targetted interventions among the core risk groups and BCC in general population are necessary to prevent futher spread. IEC activities should be strengthened so as to spread awareness in the masses.

Chhattisgarh



Introduction

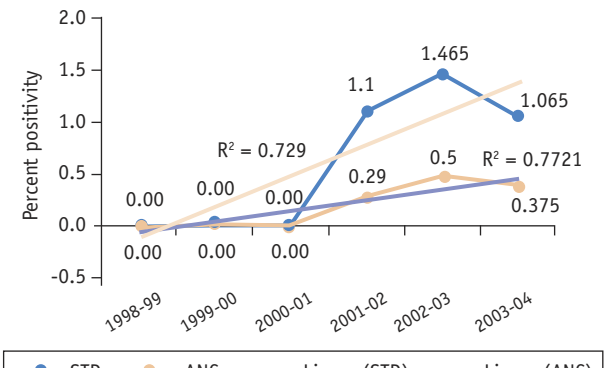
This predominantly tribal state had 3 STD and 4 ANC sites in the 2004 round as shown in the state map. Out of 7 sentinel sites, six were able to complete the desired sample size.

Magnitude of problem:Magnitude of problem

There was a rising trend in positivity in STD as compared to last year (as shown in the trend graph). The HIV prevalence for STD was 2.8% and for ANC it was nil.

Looking at individual site trends, the STD site at Raipur showed decreasing HIV prevalence while the ANC site at Jagadalur had a rising HIV prevalence, possibly reflecting infection of women by partners who migrate for work. Durg is the **hotspot** for 2004. also for the STD patients.

Fig 1: **St. 15 HIV Trend in Chhattisgarh**

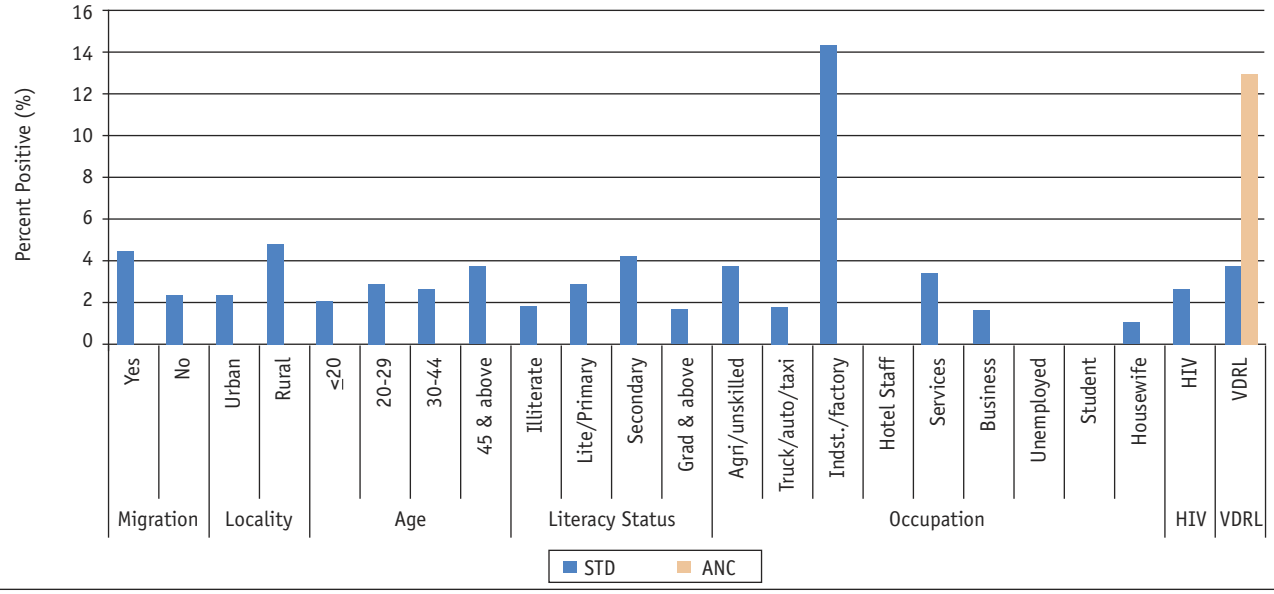


Socio-demographic profile of HIV positives

STD Patients

Majority 20-29 years age group clinic attendees had positivity

Fig 2: **HIV Prevalence by Socio-demographic characteristics in Chhattisgarh**



of 2.86% amongst all ages.Rural prevalence (4.76%) was higher than urban (2.55%). Positivity was almost double in migrants (4.6%) as compared to non-migrants (2.5%) Positivity was higher in men (3.57%) than in women (1.96%) Education status has no association with positivity in Chatisgarh, as both illiterates and literates till graduation had HIV positives. Though the highest positivity was amongst secondary level literates at 4.25%. Occupation wise, positivity was maximum among industrial/factory workers (14.04%). But the drivers, unskilled workers and those in service were also affected. Housewives had a positivity of 1.12%. As regards, syndromic presentation and HIV positivity, it was found that patients presenting with discharges had highest positivity at 3.28%. VDRL positive were3.7% and 0.27% were both VDRL & HIV positive.

Antenatal Mothers

The overall percent positivity was nil in ANC in this round of 2004. The urban: rural ratio of attendees was 3: 1. More than half of the urban and rural women tested were in the age group of 20-29 years. Almost 99% of the ANC clinic attendees were non-migrants. Similarly, the urban residents accounted for 75% of total attendees. As regards occupation of the clinic attendees, the highest around 45% were wives of agricultural/ unskilled workers. 15.65% urban and 4.34% rural women were found VDRL positive.

Conclusions & Recommendations

Chattisgarh needs to make targeted interventions for migrating labourers and workers in factories and agricultural sectors so that appropriate behaviour modifications can be instituted. The percent positivity among attendees of VCTC had significantly increased from 2.3% in 2003 to 15.4% in 2004. Moreover, the higher positivity amongst the rural residents in STD clinic attendees at 4.76% compared to 2.5% in their urban counterparts is an area of concern.

Although till date the HIV prevalence is not very high, outward migration of male members for work followed by their return and the subsequent infection that they transmit to the general population group, is an area of concern. The state is highly vulnerable with a very high HIV infection rate in the VCTCs and also high VDRL positivity. Urgent response in terms of encouraging condom usage and targettsd interventions for the risk groups are requiredto prevent further spread.

Dadra & Nagar Haveli

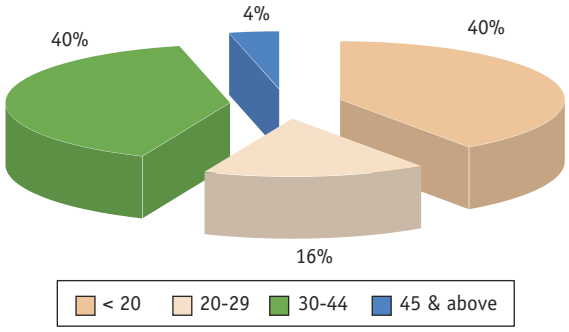
Introduction

Data was collected from one ANC site where the required sample size of 400 ANC women was achieved. Surveillance was satisfactory.

Magnitude of problem No positive case was detected in 2004 amongst antenatal women.

Profile of attendees

Fig 1: **Age wise percentage distribution of the tested ANC mothers in Dadra & Nagar Haveli**



Antenatal Mothers

Four hundred ANC mothers were tested, and Fig.1 depicts the age wise break up of this population. The urban rural ratio among HIV tested antenatal mothers was 1:1.75. The majority of those who were tested at the ANC site were non-migrants in both urban and rural areas. Most of the tested ANC women were from rural areas. Around 40% of clinic attendees were illiterates and around 64% were wives of industrial / factory workers. VDRL positivity was observed to be 0.78% in rural areas and 0% in urban areas. None were found positive for both HIV and VDRL.

Conclusion and Recommendations

During this round of surveillance, there was no single case that was found positive among the ANC mothers who are taken as representative of the general population. Hence, it is recommended that the awareness campaigns should be instituted besides IEC activities for the general population. mo The percent positivity was 7.4% in 2004 and 5.3% in 2003. However, In 2003, there was no positivity detected in the blood banks. IEC campaigns are recommended for the high-risk groups especially the migrants in the state.

Daman & Diu

Introduction

Surveillance was conducted in 2004 at two designated ANC sentinel sites. Both the sites completed the sample size of 400 women per ANC site.

Magnitude of problem

The total prevalence was 0.38% at ANC sites. As seen in the fi the trend of HIV amongst the ANC clinic attendeesiwas increasing gradually over the years.

Profile of the HIV positives

Antenatal mothers

In total 800 antenatal mothers were tested for HIV. The overall HIV prevalence was 0.38%. The age wise distribution was as in fig.1. Around 94% of the tested were non-migrants and none was found positive amongst the migrants. As regards educational status, the illiterates had highest positivity at 0.78%. However, more than 2/3 tested were between 20-29 years and this age group had highest positivity (0.56%). Occupation wise, 356 of them were wives of agricultural/unskilled workers, however the highest positivity was found amongst wives of those in business at 1.43%. The VDRL positivity was 0.25% and HIV & VDRL positivity was 0.13%.

Fig 1: **HIV Trend in Daman**

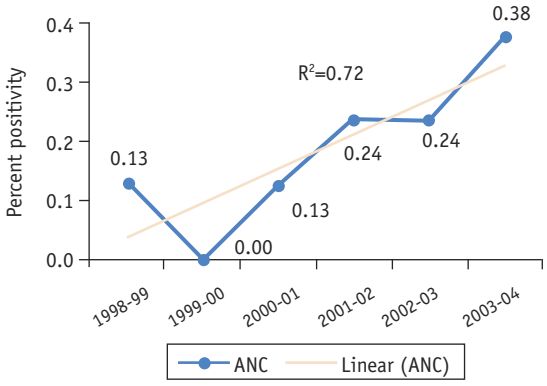


Fig 2: **HIV Trend in Daman and Diu**

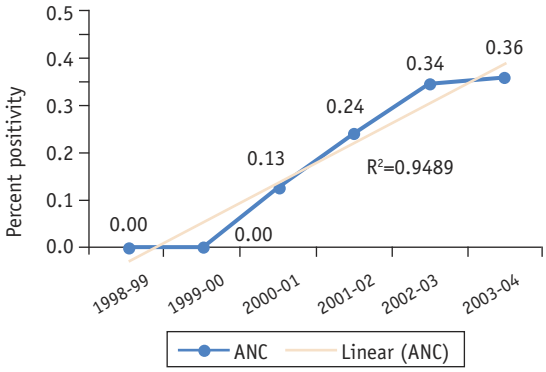


Fig 3: **Age wise percentage distribution of the tested ANC mothers in Daman & Diu**

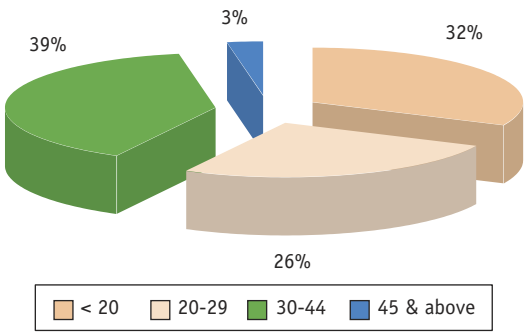
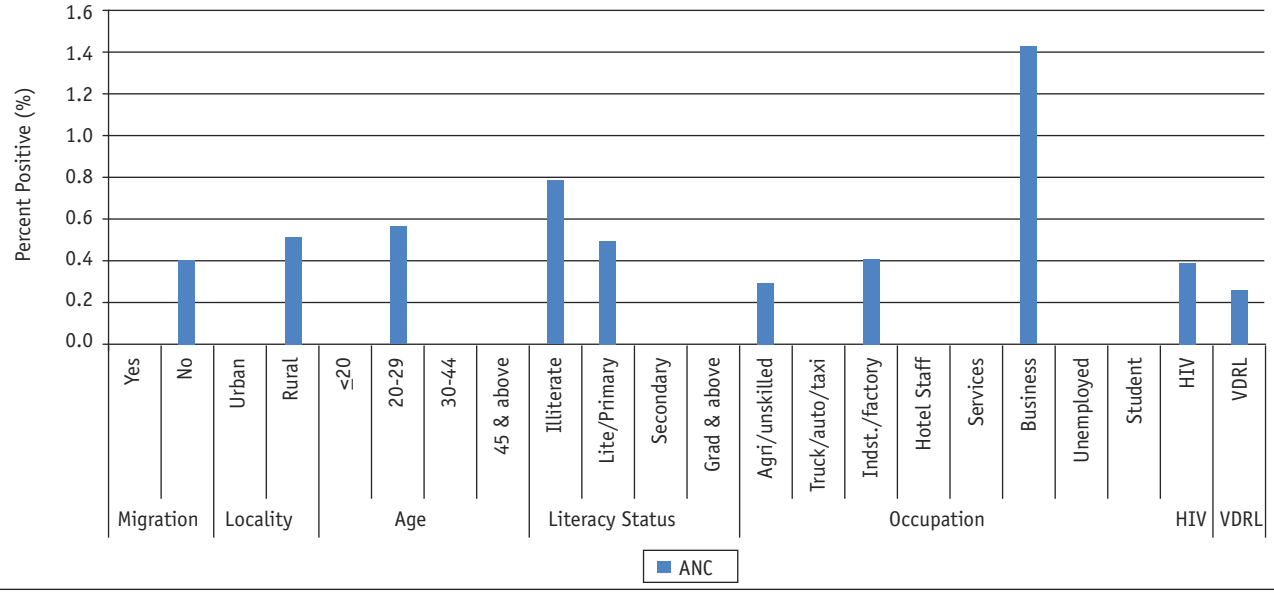


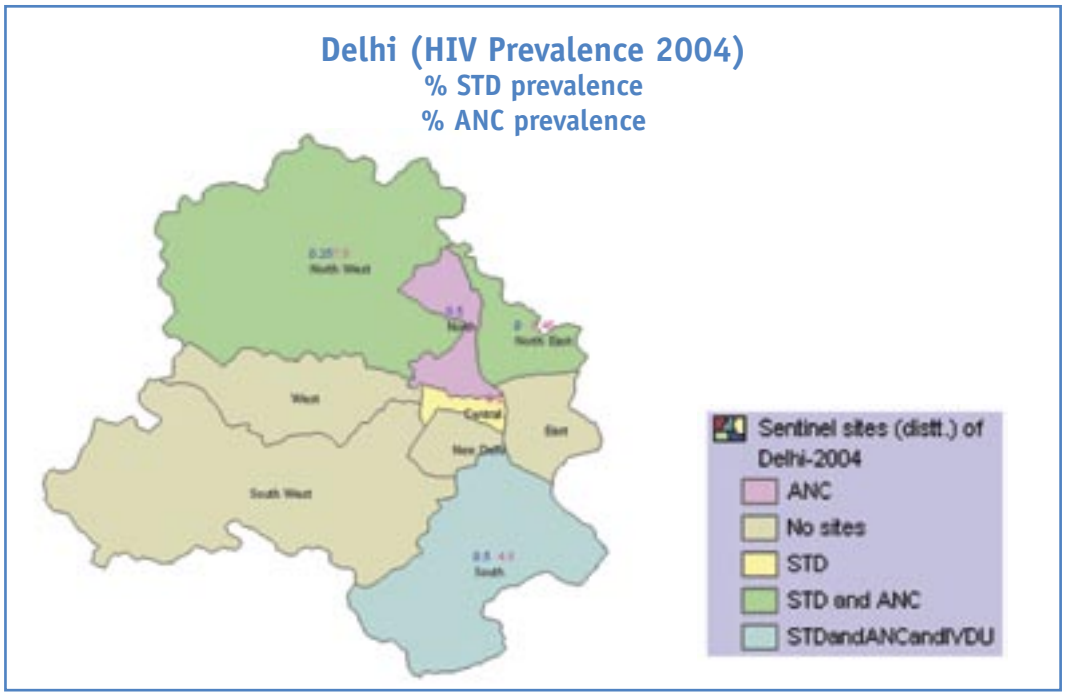
Fig 4: **HIV Prevalence by Socio-demographic characteristics in Daman & Diu**



Conclusion and Recommendations

The overall prevalence in this union territory was found to be low but vulnerability remains. The percent positivity among the VCTC attendees declined from 23.53% in 2003 to 12.50% in 2004. The positivity has also declined from 0.4% in 2003 to 0% in 2004. Specific IEC measures for drivers, businessmen, the unemployed and the general community are recommended.Constant vigilance was needed for prevention in the community.

Delhi



Introduction

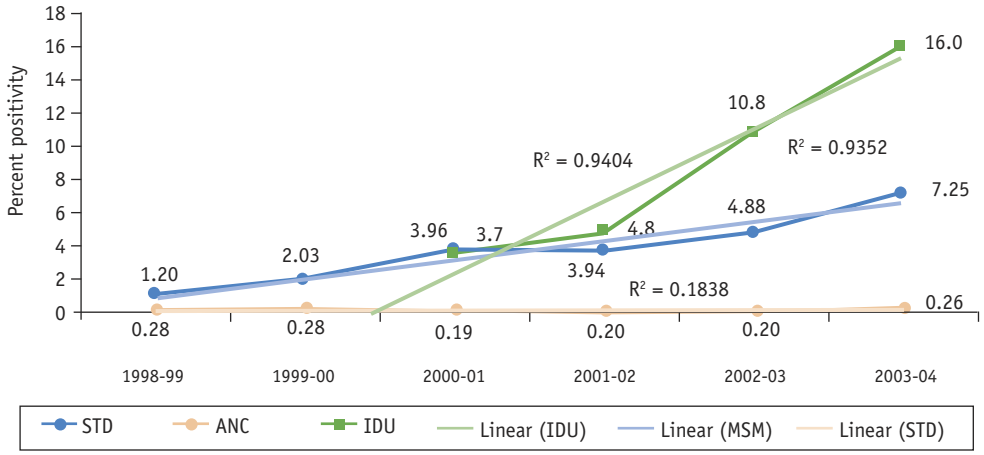
Delhi is amongst the low HIV prevalence but highly vulnerable state. There were 12 sentinel sites for HIV surveillance during the round 2004 (4 for STD, 4 ANCs, 1 IDU, 2 FSW and 1 MSM (see map).

There was no uniform distribution of HIV prevalence in Delhi.

Magnitude of problem

The trend from 1998 to 2004 was observed, it shows asincreasing HIV infection among STD and IVDU patients seen in the figure. HIV median prevalence among STD patients was

Fig 1: **HIV Trends in Delhi**



7.98%, and for ANC women 0.31%, The prevalence amongst IVDUs was 17.60%, among MSM 6.67% and among FSWs 4.6%. There was no STD or ANC hotspot in Delhi during the round of 2004.

STD prevalence has shown an increasing trend since 2002 though ANC prevalence has been stable since 1998. But, IVDUs have shown an increasing trend since 1998 in Delhi The HIV trend was rising in STD clinic at Safdarjang but a downward fall was seen at Mongolpuri ANC clinic

Profile of HIV positives

STD Patients

It is evident from the age wise distribution of male and female STD patients that maximum attendees were from the age group of 20-29 years. More males (9.0%) than females (5.49%) tested positive, and the urban population had higher infection (7.59%) than the rural (6.36%) population. Attendees from the age group of 30-44 years showed the highest positivity towards HIV infection (8.59%) followed by those less than 20 years old (7.06%), and those in the age group of 20-29 years (6.91%). Graduate and above level educated clinic attendees were least infected and hotel staff showed the maximum infection (14.29%), followed by drivers/cleaners (12.96%). Positivity among housewives was 5.88%, which is quite alarming because it shows that the infection had percolated from core risk-groups to the general population through the bridge population.

Antenatal mothers

The age wise distribution of those tested has been shown in the adjacent figure. The maximum ANC clinic attendees were from the age group of 20-24 years as seen in the figure. HIV positivity was 0.35% amongst urban women, and no positive case was found among rural residents. Infection among ANC urban women was found in almost all age groups with maximum prevalence (0.91%) in the 30-44 years age group. Also, positivity was highest in those who were educated up to secondary level.Majority were wives of truck/auto drivers or cleaners.

The core risk groups (IVDUs, FSWs & MSM)

The core risk-groups are represented by intra venous drug users (IVDU), FSWs and MSM. Among IVDUs patients, 17.6% males were found infected, HFemales were free from infection. Education did not have any relation with infection in this group of affected males.

Among FSW sites, HIV infection was observed in

Fig 2: **HIV Trends in Safadarjung (STD)**

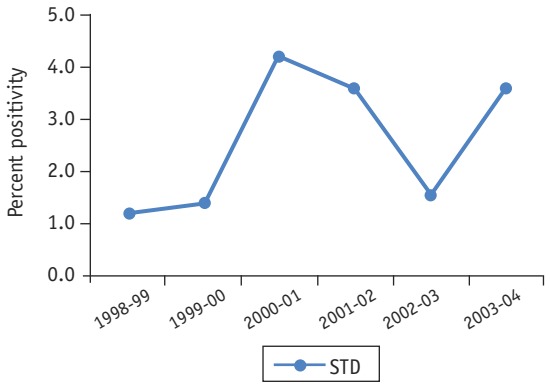


Fig 3: **Age wise percentage distribution of the pregnant women attending ANC clinics in Delhi**

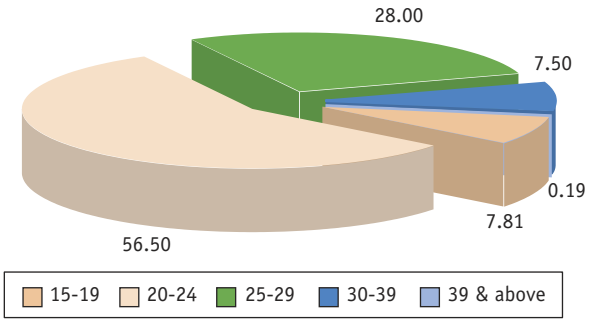


Fig 4: **HIV Trends in Mangolpuri (ANC)**

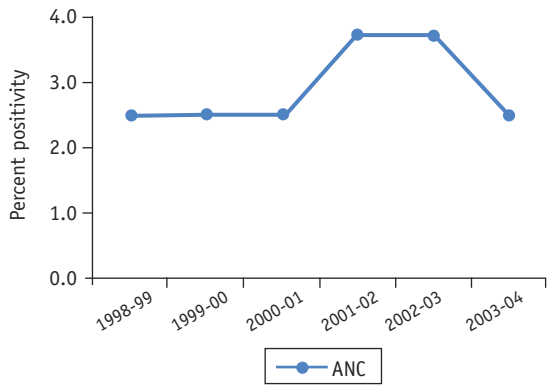
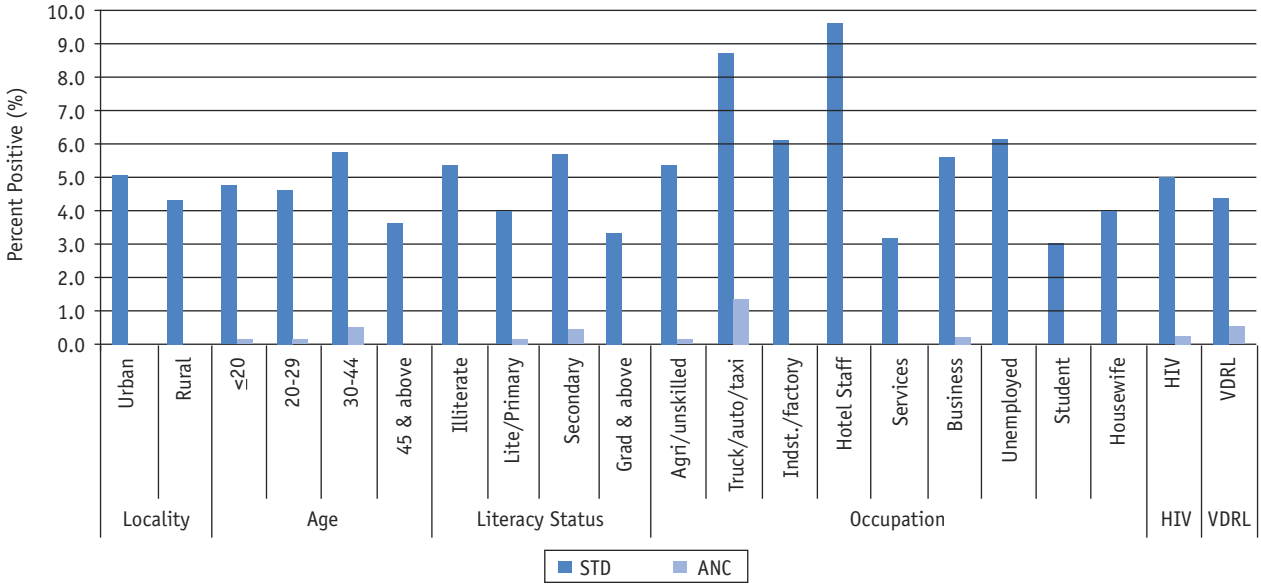


Fig 7: **HIV Prevalence by Socio-demographic characteristics in Gujrat in risk groups**



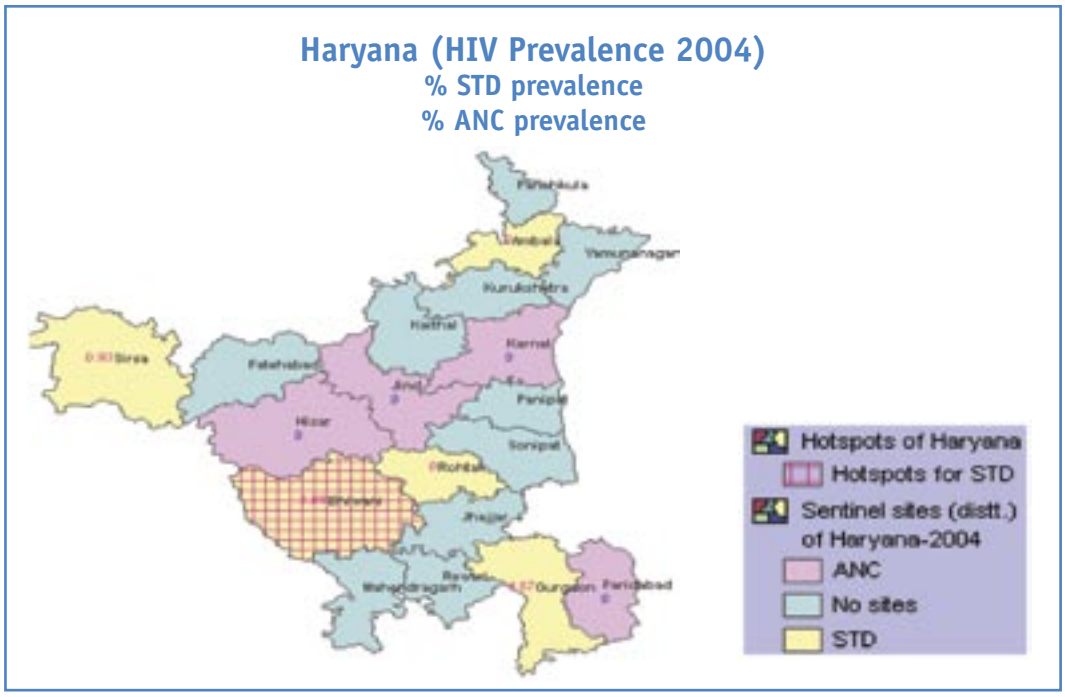
two age groups only 20-29 years (8.44%) and 30-44 years (2.29%). HIV positivity was found more in the illiterate group (5.77%) followed by the literate/primary (3.42%) level educated.

As regards the MSM the percent positivity was 6.67%, with 6 out of 7 males from rural areas. Highest positivity was amongst the 30-44 years age group (8.33%) and amongst the literate/primary level educated.

Conclusion and Recommendations

Delhi is a low HIV prevalence state, but prevalence among the IVDUs was quite high (17.60%). Prevalence was also high amongst FSWs (4.60%), and STD patients indicating a need for more focused targeted interventions, particularly among the high-risk groups. However, Delhi's data indicated a lower prevalence of 4.6% in FSWs in comparison to the STD prevalence of 7.98% The very high HIV amongst STD patients may be contributed by the migrant floating population and need special targeted interventions. The low prevalence of HIV in antenatal mothers and in blood banks about 0.31%. with 3.74% at VCTC clinics indicate the vulnerability of the situation and the inability to track the hard core FSWs as interpreted by the low HIV prevalence amongst them and that called for concerted efforts. Harm reduction strategies should be initiated urgently for IVDUS which has an alarming rate of increase.

Haryana



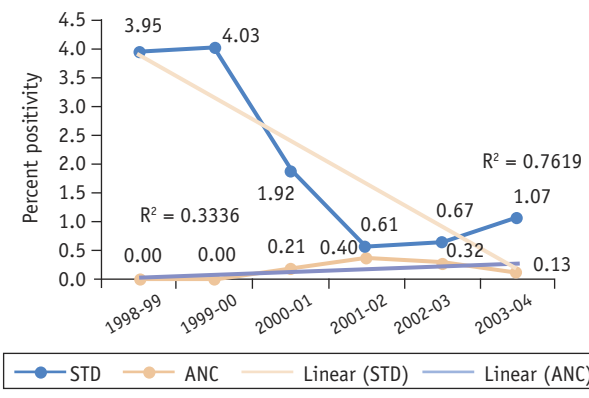
Introduction

The state of Haryana, one of India's low prevalence states for HIV, had 9 designated sites (5 STD & 4 ANC sites) for surveillance in 2004 (map). The required sample size of 250 STD patients could not be completed at all in five STD sites

Magnitude of problem

A significant declining trend has been noticed in the HIV prevalence rate for the STD patients as seen in the figure, and the median HIV prevalence rate was 0.93%. Marked decrease has also been noticed for STD site at Rohtak as seen in the figure. Though the trend in STD population was declining, a rise occurred compared to 2003. A stable but slightly rising trend was seen in ANC women though the value dropped to zero. Bhiwani remained the **STD hotspot** for the state in 2004 with a prevalence of 2.1% (state map) though Gurgaon had a positivity of 4.9% for the first year. No ANC site had HIV prevalence in the state.

Fig 1: **HIV Trend in Haryana**



Profile of HIV positives

STD Patients

The age wise distribution of male and female patients attending the STD clinics showed the maximum number as belonging to the age group of 20-29 years. The urban: rural ratio of HIV positivity was 1:1. Non-migrant females had higher positivity (1.61%) whereas migrant males had more percent positivity (2.78%). HIV positivity was higher in males (2.21%) than in females (1.50%) and the highest positivity was seen in the 45 years and above age group for both the sexes. Secondary level educated patients were found to be the most affected section with prevalence rates as high as 2.26%. Occupation wise, the maximum HIV positivity was found among drivers followed by those in business. Moreover, the positivity for housewives was found to be (1.69%). According to syndromic diagnosis, urethral discharge was the most common symptom in males (2.88%) and genital ulcers were similarly common (4.55%) in females. VDRL positivity was observed to be 3.21%. One case among males and two cases among females were found to be positive for both HIV and VDRL infections.

Antenatal mothers

The age wise distribution of ANC mothers tested is shown in the adjacent figure. The maximum number of ANC clinic attendees were from the age group of 20-24 years (58%) in rural as well as urban areas. The

Fig 2: **HIV Trends in Rohtak**

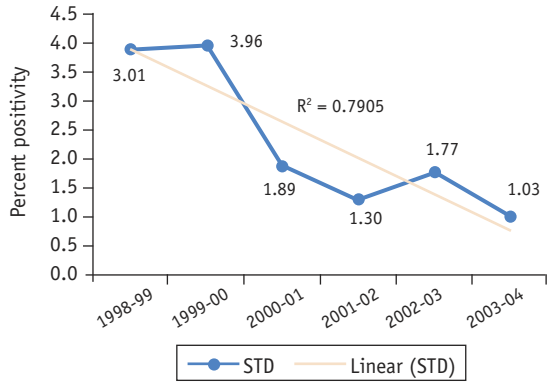


Fig 3: **Age wise percentage distribution of attendees attending ANC clinics in Haryana**

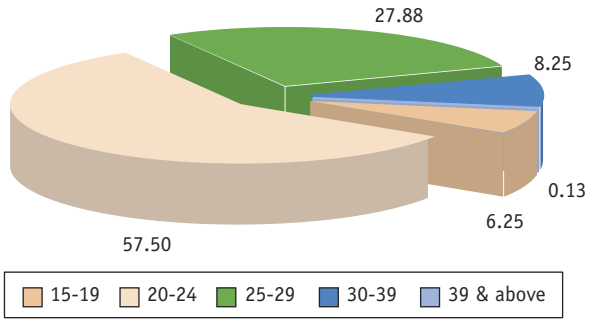
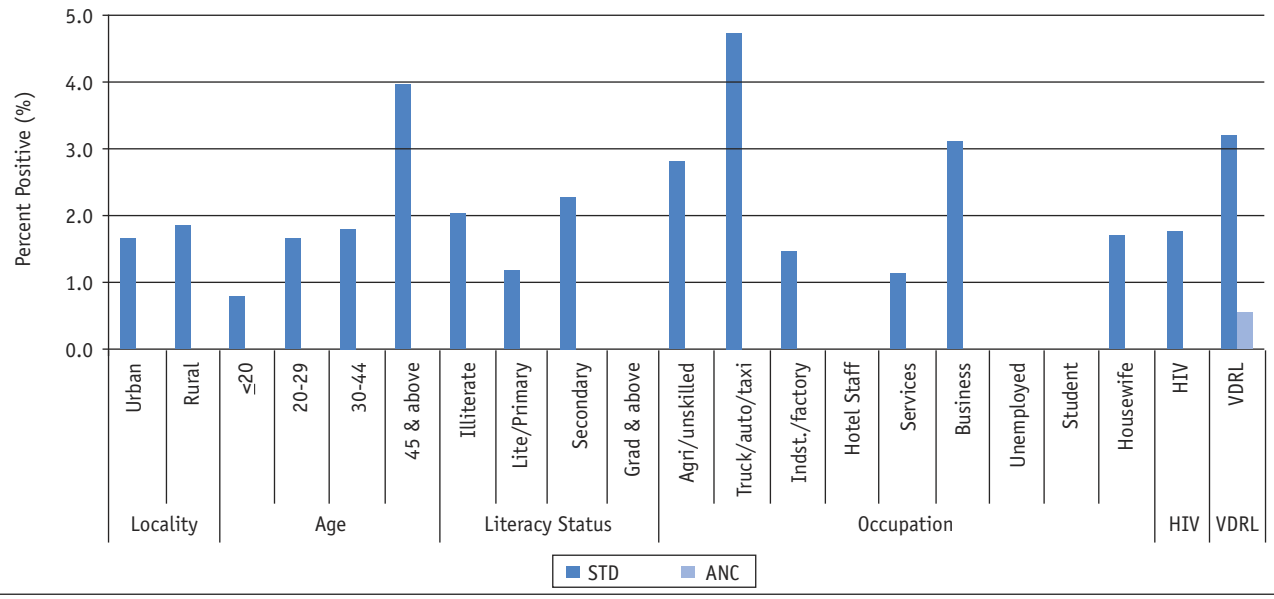


Fig 7: **HIV Prevalence by Socio-demographic characteristics in Haryana in risk groups**

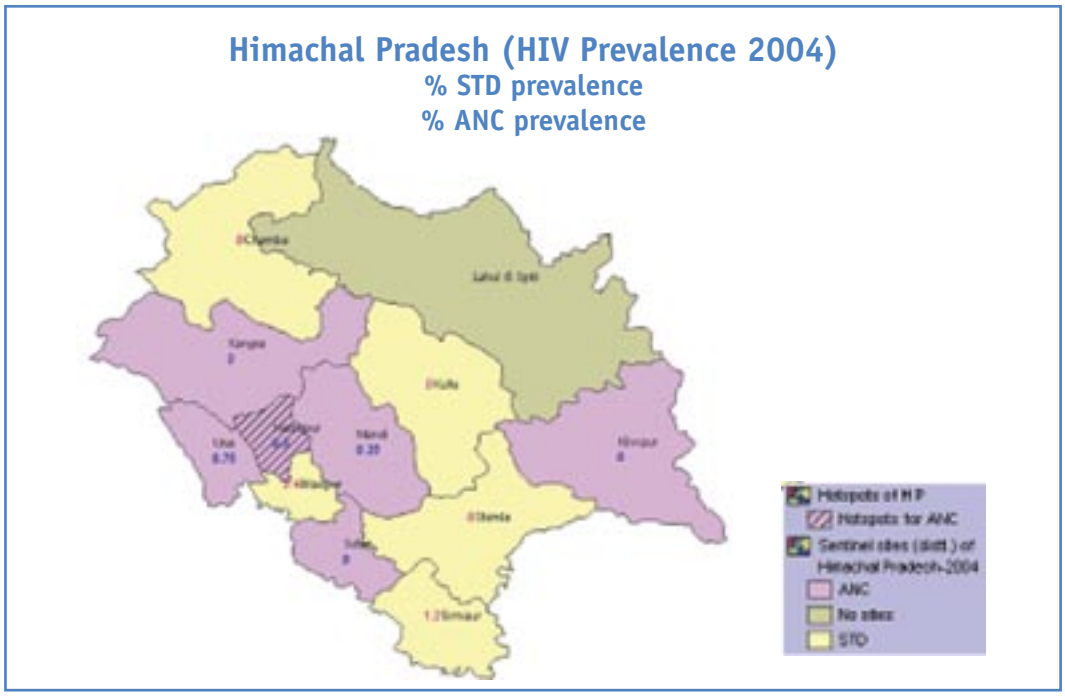


urban: rural ratio among tested mothers was 1:0.86. No positive case was observed among the ANC women of Haryana.

Conclusion and Recommendations

There is need for IEC, promotion of condom use and emphasis on behaviour change among truck/ auto/taxi-drivers or cleaners among males and also amongst housewives in Haryana. Among those who attended the VCTCs, the percent positivity was approximately 5.5% since 2003 which though not high should be prevented from rising further. The high risk population at Bhiwani should be covered with targettd intervention to curb the rise.

Himachal Pradesh



Introduction

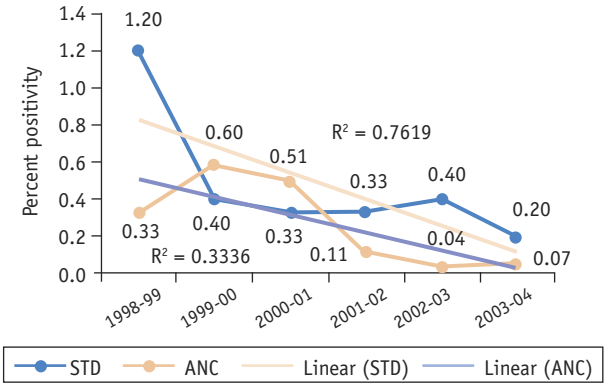
Himachal Pradesh is one of the low prevalence states. The total number of sentinel sites in different risk groups for the round of 2004 were 12 (5 STDs, 6 ANCs, 1 FSW (map). Though the median HIV prevalence was zero, t two positives were recorded at different sites and the mean for STD in the round of 2004 was 0.75%, which has shown an increase since the round of 2003 (0.58%). For ANC, no change observed in 2004 (0.25%) as compared to 0.28% in 2003. (fig)

The overall trend of HIV infection shows a significant decrease from 1998 to 2004 (as seen in the figure); however, at the ANC sentinel site of Hamirpur, t there was increasing trend.

Magnitude of problem

The low level of HIV infection in himachal masks the high HIV pocket,e.g.Hamirpur a 'hotspot' for the ANC group for the round of 2004. The median value of 0 masks 1,2% & 2.4 % at Sirmaur and Bilaspur respectively. Most of the places in Himachal Pradesh are tourist places and there is the possibility of commercial sexual

Fig 1: **HIV Trends in Himachal Pradesh**



activities contributing to increased HIV infection in the state, in addition to the spread of infection through drivers (taxi/auto/truck) in the state. The trend at Bilaspur was upward amongst STD patients and similarly for ANC at Hamirpur though the value was lower in 2004 compaed to 2003.

Profile of HIV positives

The core risk group (FSWs)

250 FSW women were tested and fig.1 represents the age wise distribution of these women. Only 2(0.8%) were found positive and both of them were in the age group of 30-44 years. One of the positive was the wife of a truck driver.

STD Patients

The urban population had more HIV infection (1.47%) than the rural (0.60%). There was no positive case in two age groups- that less than 20 years, and that of 45 years and above, while the 20-29 years age group shows the maximum prevalence (0.96%). The highest prevalence was seen amongst primary level educated people (1.28%), followed by the secondary level educated patients (0.78%). Occupation-wise,industrial/factory workers showed the maximum infection (2.78%), followed by the business class (2.13%) in the state.

Antenatal mothers

The age wise distribution of ANC mothers is depicted in fig. As far as occupation is concerned, it was found that more than 1/3rd of those tested were wives of agricultural/unskilled workers. Out of the found positive, 3 women were e wives of truck drivers/cleaners.

Conclusion & Recommendations

Although Himachal Pradesh is still a low prevalence state, it needs to be on full alert and constant vigil as far as HIV prevalence is concerned. Although only 2 out of the 250 tested from the core risk group (FSWs) population tested positive, one of them

Fig 2: **Age wise percentage distribution of the FSWs in Himachal Pradesh**

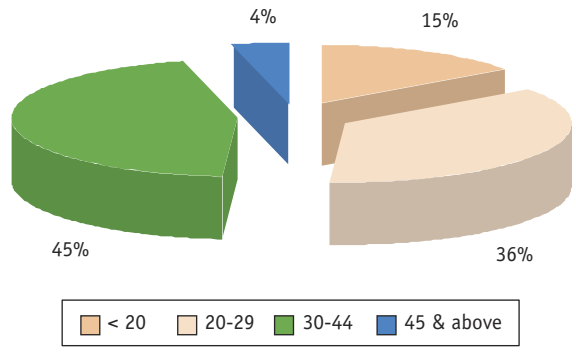


Fig 4: **Age wise percentage distribution of the tested ANC mothers in Himachal Pradesh**

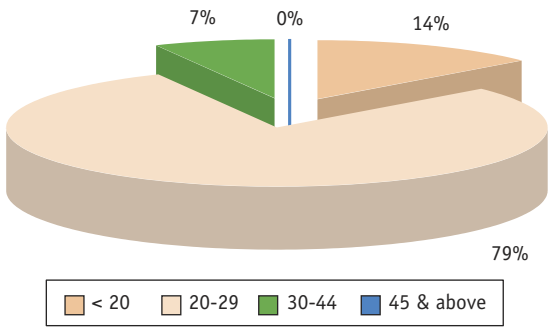


Fig 3: **HIV Trends in Bilaspur (STD)**

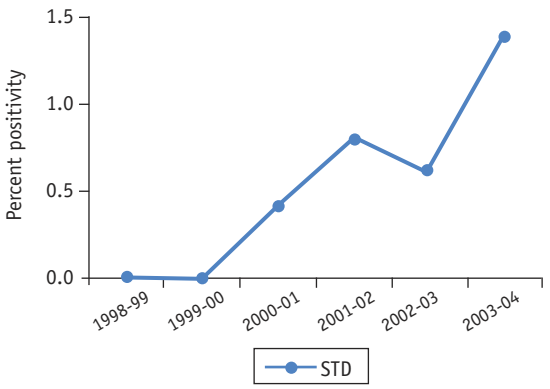


Fig 5: **HIV Trends in Hamirpur (ANC)**

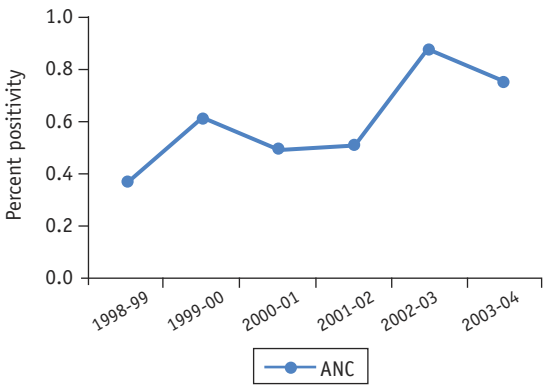
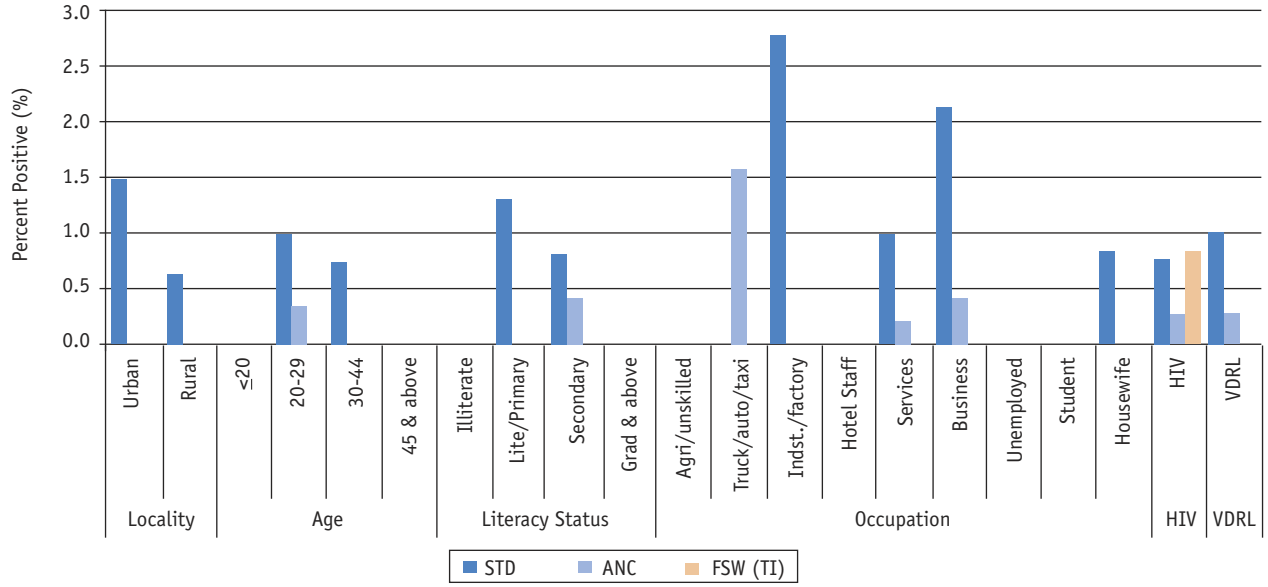
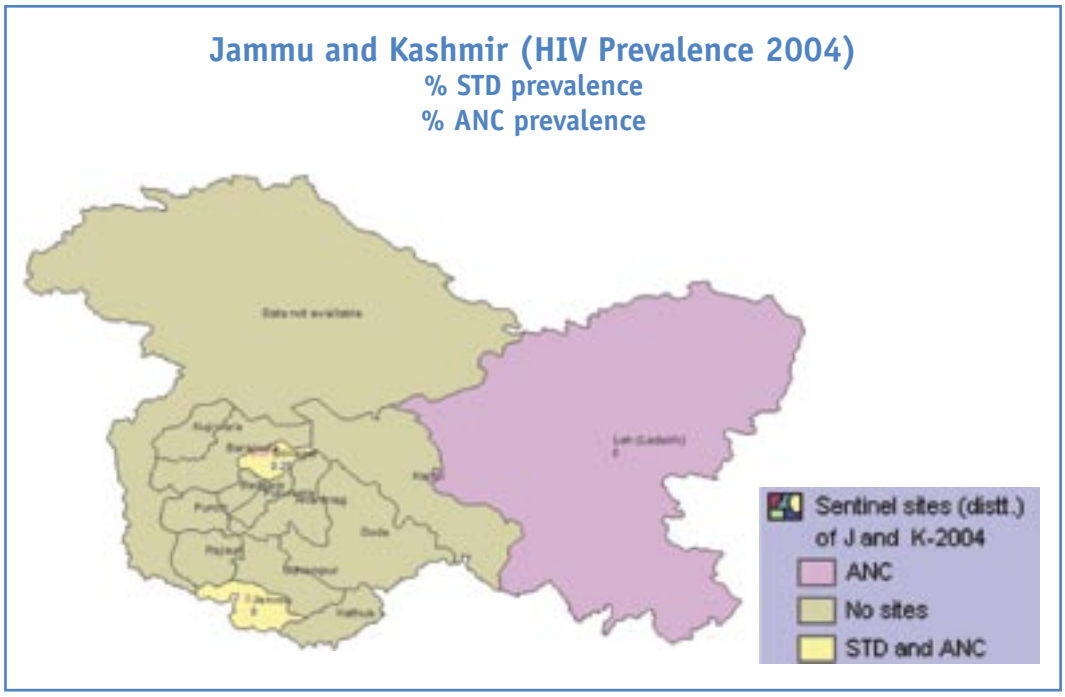


Fig 6: **HIV Prevalence by Socio-demographic characteristics in Himachal Pradesh**



was the wife of a truck driver/cleaner. Amongst the bridge population, the positivity of housewives was 0.82% and in the general population, 3 out of the 6 positives cases were, again, the wives of truck driver/ cleaners. Hence, specific interventions directed at these groups are strongly recommended. The percent positivity among the VCTC attendees in the state was 2.63% in 2004 and 1.65% in 2003 as compared to the positivity among STD patients (0.75%) indicating lower utilisation of STD clinics. Among the voluntary donors who were tested in the blood banks, the percent positivity was 0.2% in 2004 and 0.3% in 2003, while the positivity among the ANC mothers was 0.25%, which is comparable. IEC and BCC in the long run would prevent further rise.

Jammu and Kashmir



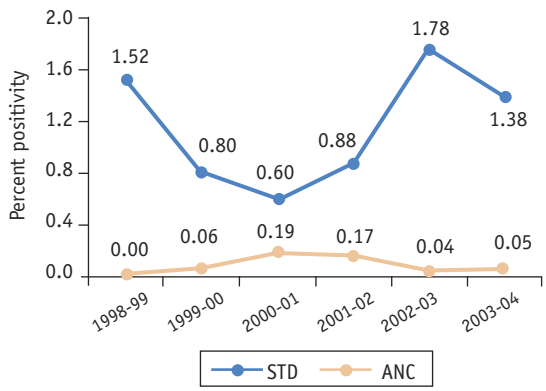
Introduction

Jammu & Kashmir is categorised among the **"Low prevalence states"** in India. The sentinel surveillance round of 2004 was conducted in six sites across the state – two STD sites, three ANC sites and one IVDU TI site (Map).

All the sites, except one IDU-, were able to complete their sample size

Magnitude of prblemThe mean HIV prevalence in STD patients was 0.16% and it was 0.08% in antenatal women. A rising trend of HIV prevalence was observed at the sentinel STD site of Jammu. Overall, the state has shown a rise in HIV positivity since 2001 among the STDs, while among ANC women the prevalence was zero. The trend amongst the ANC women was observed to be stable.

Fig 1: **HIV Trends in Jammu & Kashmir**

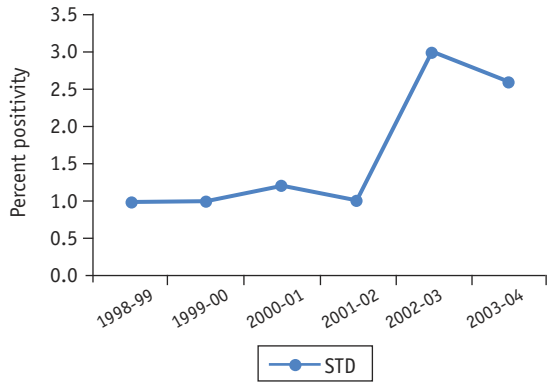


Profile of HIV positives

The core risk group (IVDUs)

The core risk group in Jammu and Kashmir is represented by the IDUs. All of them were males. Only 9 IDUs were tested. Seven

Fig 2: HIV Trends in Jammu (STD)



of them were in the 20-29 age group and 1 each was in the age group of 30-44 and 45 & above. Four were truck drivers/ cleaners. No HIV positive case was found among the IDU TI patients in the state of Jammu & Kashmir.

STD patients

The percent positivity among STD patients was just 0.16%, i.e., one was found positive out of a total of 617 STD patients tested (326 were males and 291 were females). The age wise distribution of the male and female patients has been depicted in the following figures.

Fig 3: Age wise percentage distribution of the tested male STD patients in Jammu & Kashmir

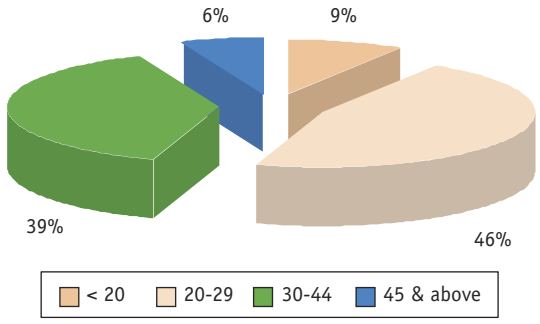


Fig 4: Age wise percentage distribution of the tested female STD patients in Jammu & Kashmir

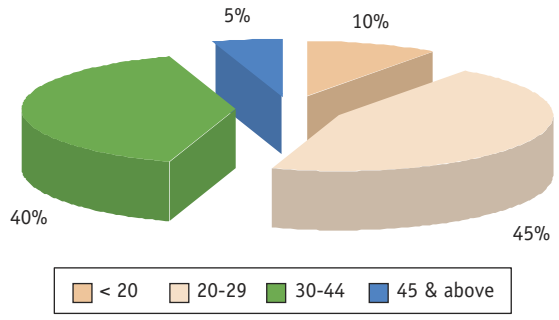
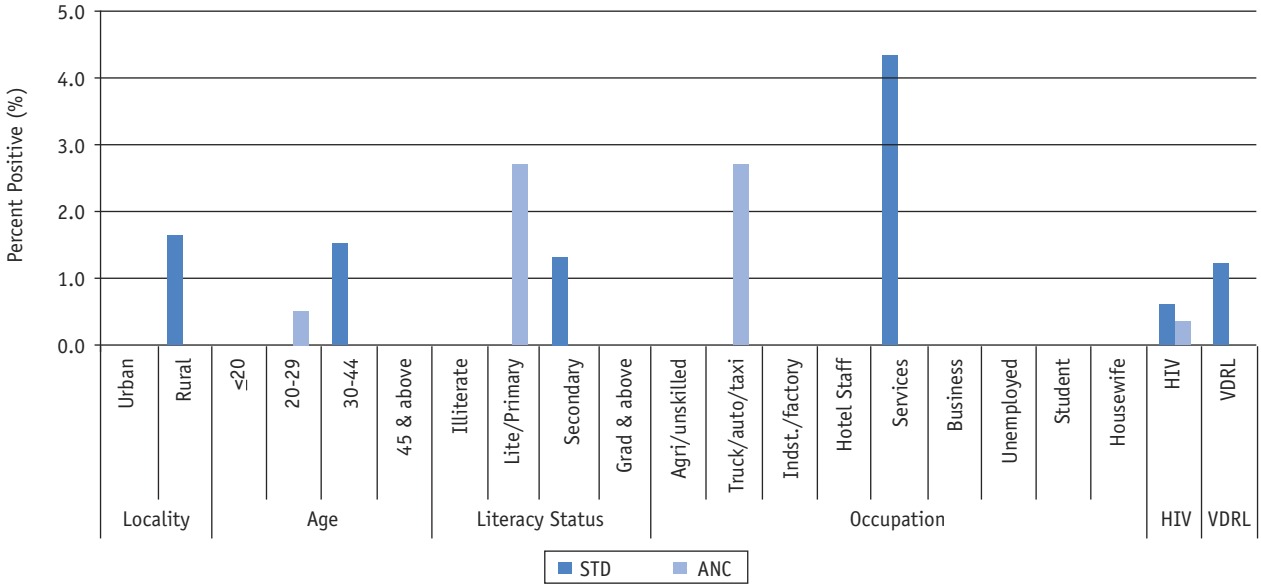


Fig 5: HIV Prevalence by Socio-demographic characteristics in Jammu & Kashmir

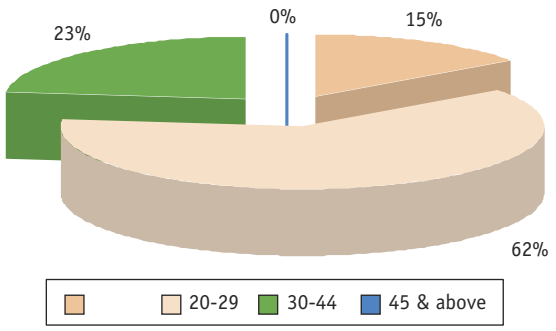


The male: female ratio amongst the tested STD patients was 1:0.89 and the urban: rural ratio among the tested patients was 1:0.60. The only STD patient who tested positive for HIV in the state was a migrant male. He was from a rural area and was in the 30-44 years age group with education up to secondary level. He was in service and had urethral discharge as the syndromic presentation. Two VDRL positive cases were found in female patients attending the STD clinics. No one was found positive for both HIV and VDRL.

Antenatal mothers

The HIV prevalence amongst ANC mothers was 0.08%. The age wise distribution of ANC mothers is depicted in figure 3. Occupation wise, it was found that 268 of the women were wives of agricultural/unskilled workers, but the positivity was highest amongst the wives of drivers/cleaners (0.72%). Only one ANC mother was found positive out of the 1200 tested. The only ANC mother who tested HIV positive was a non-migrant and was from an urban area. She was in the 20-29 years age group. She was educated up to primary level and her husband was a truck/auto/taxi driver. No VDRL positive case was found amongst the ANC women of Jammu & Kashmir among the 778 tested. None were positive for both HIV and VDRL in the state.

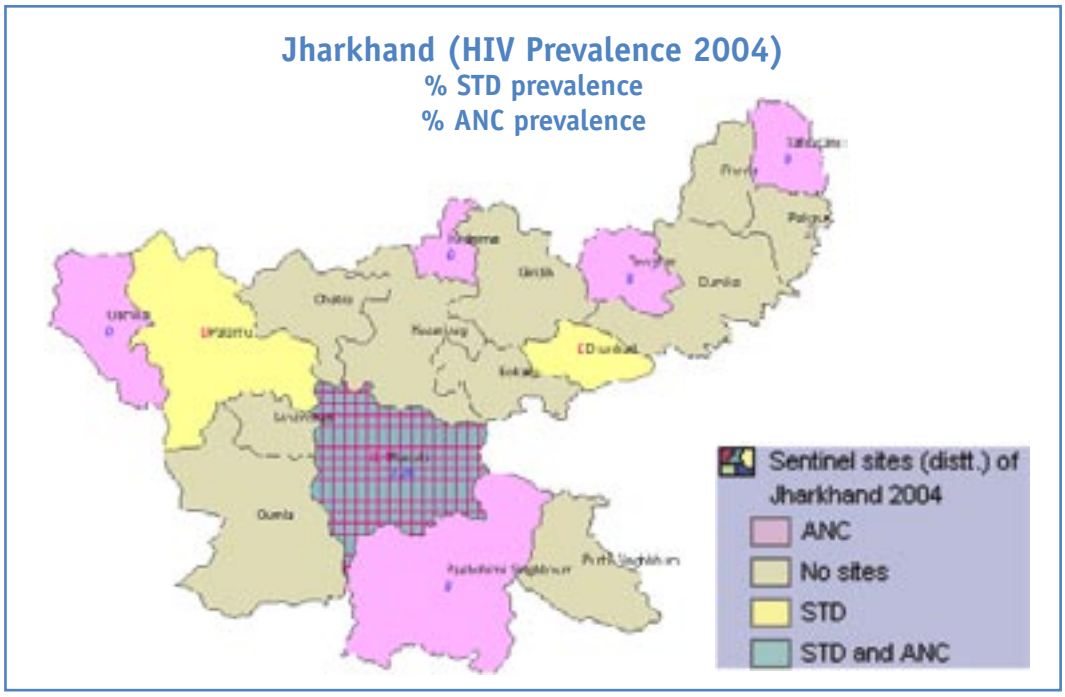
Fig 4: **Age wise percentage distribution of the tested ANC mothers in Jammu & Kashmir**



Conclusion and Recommendations

At the moment, the surveillance data reveals very low HIV prevalence rates in the state. With one positive STD patient and the lone positive among the general population was the wife of a truck driver. No one was found positive among the 20 truck drivers who were STD patients, this is an area of concern and targeted interventions are necessary to prevent the spread of disease in the state. The percent positivity among attendees of VCTC has slightly increased to 8.5% in 2004 from 8.1% in 2003. Moreover, IEC campaigns are needed to sustain the efforts. There should be emphasis on health awareness and modes of spread of HIV and safe sexual practices. Since with the control of terrorism in the state, the tourist inflow is bound to increase drastically in coming years.

Jharkhand



Introduction

Jharkhand a low HIV prevalence state. The state had a total of 10 sites (6 ANC, 3 STD and 1 FSW) Map to be corrected that participated in sentinel surveillance round 2004 (state map).

Magnitude of problem

The median HIV prevalence for ANC & STD was 0% (although there was one positive case among each group at Ranchi); FSW was also zero during the 2004 round. There have been no significant changes in both STD & ANC prevalence over the last years. Both STD and ANC groups have shown a downward trend since 2001 (fig.).

Profile of HIV positives

The core risk group (FSW)

During this round of surveillance, 250 FSWs were tested for HIV. The age wise distribution of the attendees is depicted in figure 1. large majority of them were in the age group of 30-34 years, i.e. 72% followed by 21% in the age group of 20-29 years. Only 17 were migrants and more than

Fig 1: **HIV Trends in Jharkhand**

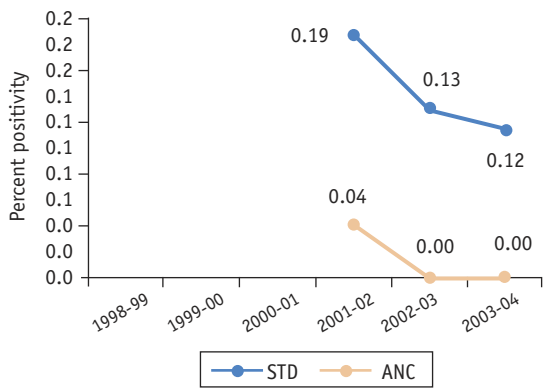


Fig 3: **Age wise percentage distribution of the tested FSW in Jharkhand**

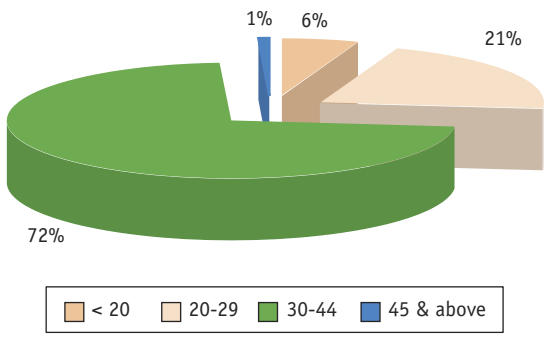
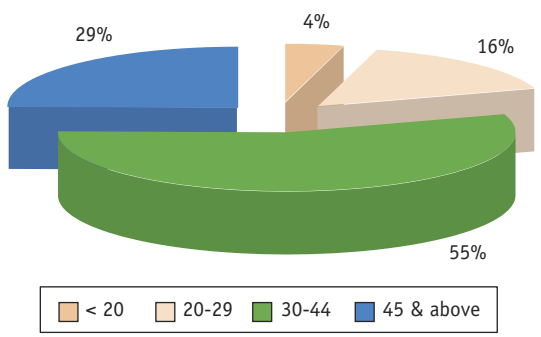


Fig 4: **Age wise percentage distribution of the tested male STD patients in Jharkhand**



10% of them were illiterates or just literates. However, there were no FSWs who tested positive for HIV.

STD patients

Amongst the STD patients 751 (386 males and 365 females) were tested at sentinel sites during this round of surveillance. The age wise distribution of the STD patients according to sex is depicted in the above figures. Occupation wise, among males, 88 were agricultural/unskilled workers, and 81 were businessmen, besides others. Among females, the majority, i.e., 312 (85.47%), were housewives. However, only one woman was found positive for HIV. She was a non-migrant, urban dweller housewife, belonging to the age group of 20-29 yrs and was just literate till the primary level.

Fig 5: **Age wise percentage distribution of the tested female STD patients in Jharkhand**

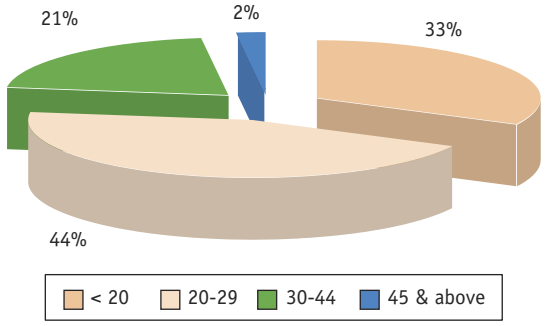


Fig 6: **HIV Prevalence by Socio-demographic characteristics in Jharkhand**

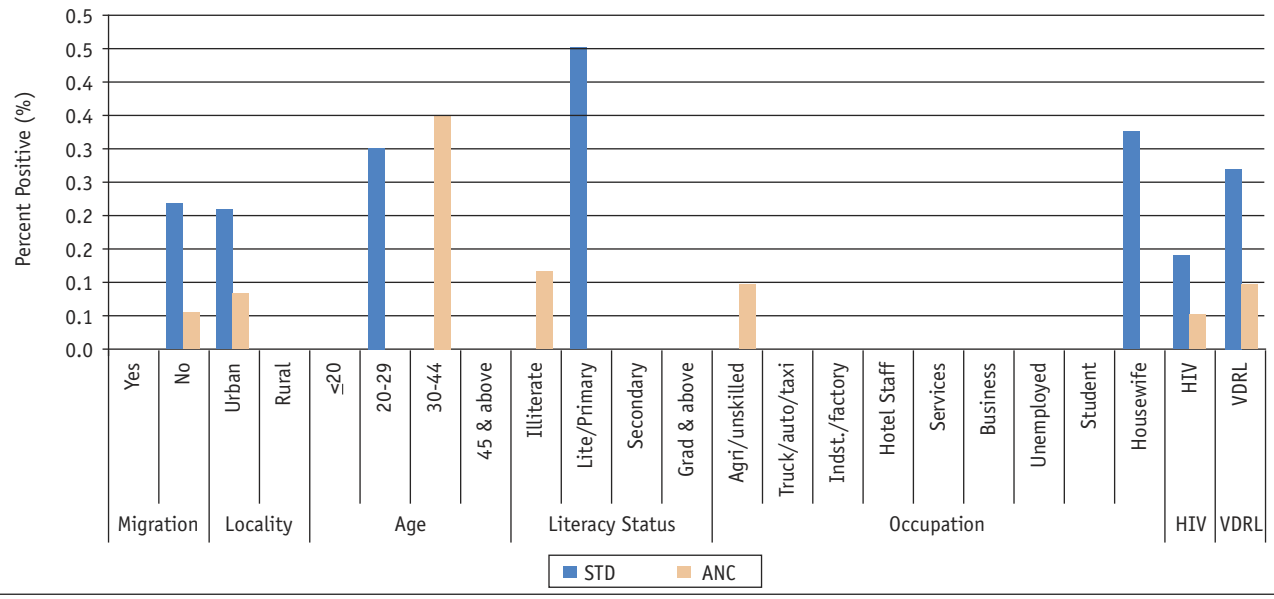
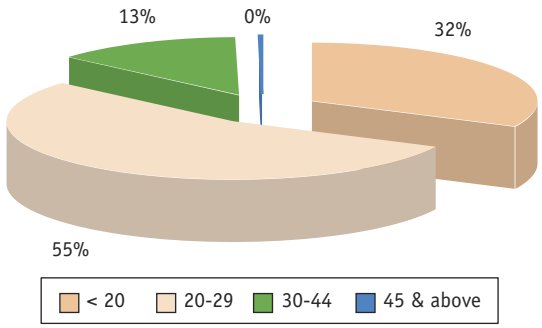


Fig 4: **Age wise percentage distribution of the tested ANC mothers in Jharkhand**



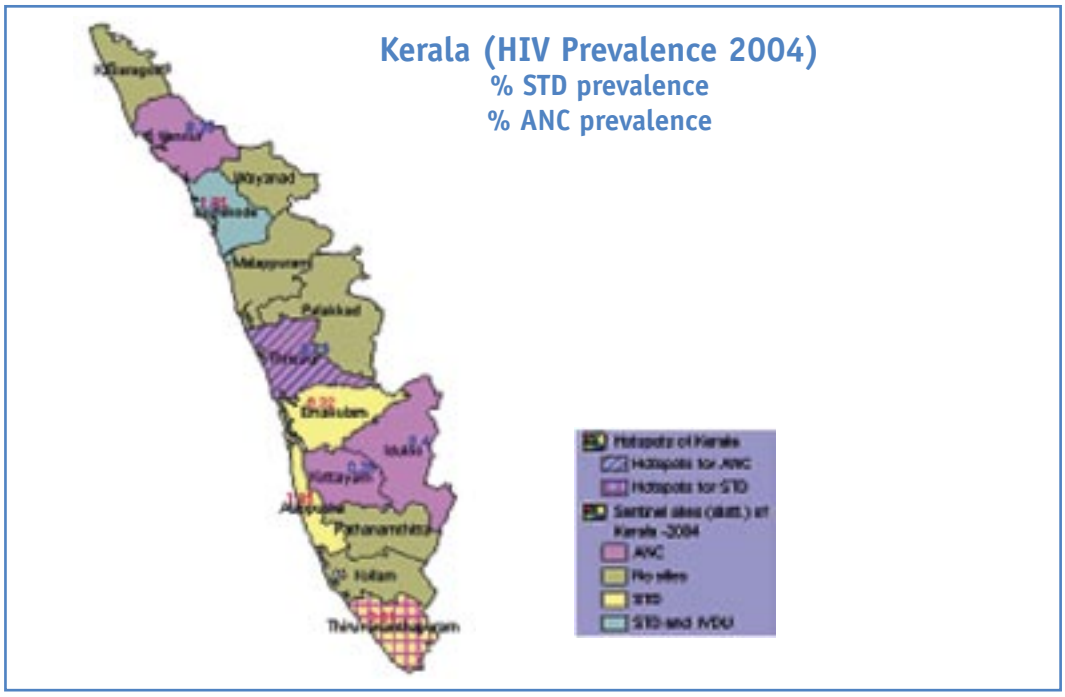
Antenatal mothers

2158 ANC mothers were tested during this round of surveillance. The overall HIV positivity was 0.05% (1 positivity out of 2158). The age wise distribution of the population tested is shown in fig. 4. The tested ANC mothers were equally distributed among literate groups to the level of graduation. More than half of the population consisted of wives of agricultural/ unskilled workers and about a fifth of them were wives of businessman. However, only one woman was found positive and she was a non-migrant belonging to the age group of 30-44 years, was illiterate and was the wife of an agricultural/unskilled worker.

Conclusion & Recommendations

The state of Jharkhand truly seems to be in the low prevalence state category. Among the three groups of population, only one each in the category of bridge population and general population was found positive. The fact that a females were found positive is a point to be noted and indicates the emergence of the infection in the population. The percent positivity among attendees of VCTC though decreased slightly from 12.3% in 2003 to 11.9% in 2004 was again suggestive of infection in the population and given the labour migration factor awareness generation activities among the general public should be sustained in all regions of the state, especially in and around industrial areas. Moreover, special targeted interventions in miners and other factory workers should also be carried out in the state.

Kerala



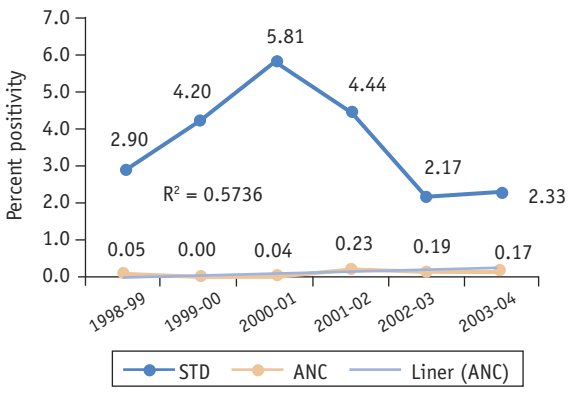
Introduction

Kerala has been a low prevalence state despite being surrounded by high prevalence neighbours. Six sentinel sites were dropped this year (3 ANCR and 3 FSW). Ten sentinel sites carried out surveillance activities in 2004 (4 ANC, 4 STD, 1 new IDU and 1 new MSM (TI)) (Map). Four sites (1 STD, 1 ANC, 1 IDU and 1 MSM) tested less than 75% samples. Median HIV prevalence was 0.33% in ANC women and 2.78% in STD patients. There has been no significant change in the overall HIV prevalence among antenatal women and STD patients although it was higher than that in 2003.

Magnitude of problem

STD patients have shown a declining trend of HIV since 2000 but the percentage rose from 1.8% in 2003 to 2.7% in 2004 (see site trend). HIV prevalence at the Ernakulam site showed a significant increase as compared to last year's data. For the state Thrissur (0.8%) was a hotspot for ANC in the 2004 round. The trend amongst STD patients in Trivandrum was constantly increasing.(fig)

Fig 1: **St. 21. HIV Trends in Kerala**



Profile of HIV positives

The core risk group (IDUs and MSMs)

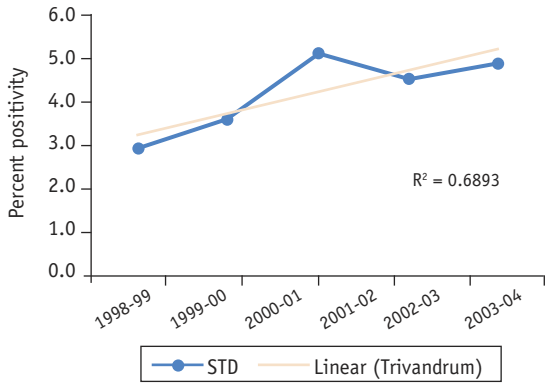
All except 3 of the IVDU tested were males, and about four fifths were urban non-migrants. Occupation wise, 92 (59%) of them were agricultural/unskilled workers. All four HIV positive were in the 30-44 years age group, 3 were urban residents, 2 were migrants. Three of the positives were agricultural/unskilled workers and were educated till the secondary level.

The other core risk group was the MSM and one out of 112(0.9%) was found to be positive. He was in the age group of 20-29 years, was educated till the secondary level and was in service.

STD Patients

Out of the 853 tested STD patients, 238 were males and 615 were females. Most of them were from rural areas (71%) and non-migrants (82%). Occupation wise, most of the men were agricultural/unskilled workers, factory workers and drivers/ cleaners. HIV positivity was higher for men (4.2%). Out of the ten HIV positive men, seven were non-migrants and six were rural residents. Occupation wise, the percent positivity was 5.13% amongst agricultural/unskilled workers but hotel staff and unemployed were also involved. Among females, 21 were found positive with 3.4% positivity and of these 15 were housewives.

Fig 2: **St. 24.1 HIV Trend at STD site Trivandrum**



They were mostly non-migrants (15), rural (13), and one was below 20 years of age.

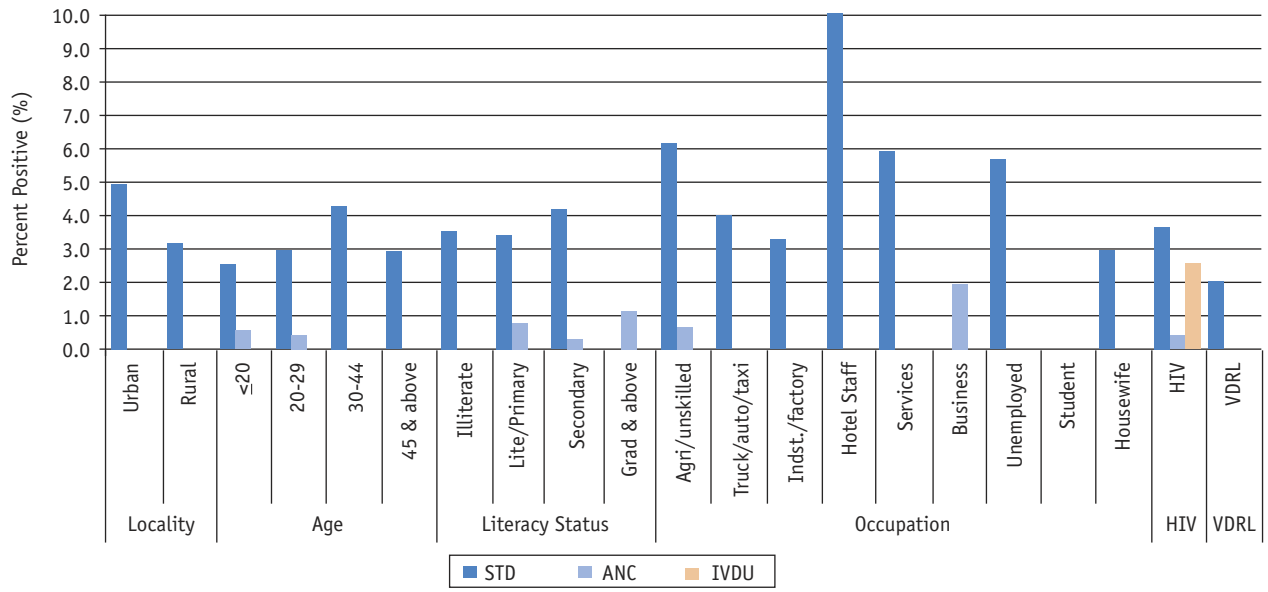
Antenatal mothers

HIV prevalence amongst ANC mothers was 0.42%. Out of the 1440 ANC mothers tested, six were found positive. 5 were non-migrants, in the age group of 20-29 years. Three had education till the secondary level and were from a rural background. Four of these 6 positive ANC mothers were wives of agricultural/unskilled workers and 2 of them were wives of businessman.

Conclusion and Recommendations

The 2004 findings show an increase in prevalence in the bridge population. Core risk groups were brought

Fig 3: **HIV Prevalence by Socio-demographic characteristics in Kerala in risk groups**



under surveillance for the first time in the state. All groups show HIV infection and include migrants, rural people, drivers, factory workers and unskilled workers. 11% of the VCTC attendees were also positive. Although Kerala is still in the low prevalence category, despite being surrounded by high prevalence neighbours, these facts, along with pockets of high prevalence lying in Ernakulam and Thrissur, are areas of concern. This calls for active intervention and close surveillance activities. IEC activities and condom promotion are required to prevent the disease from spreading into the general population.

Lakshadweep

Introduction

The Union Territory of Lakshadweep is a low prevalence area for HIV infection. Surveillance activities were conducted in two ANC and one STD sentinel site in Lakshadweep. The STD site at Kavaratti and the ANC site at Minicoy did not complete the requisite samples of 250 and 400 respectively. The STD site at Kavaratti has very poor patient load and should be discontinued as only 5 cases were tested.Sites.No one tested positive in ANC group.

Profile of HIV Attendees

STD Patients

A total of 2 males and 3 females were tested at the STD clinic. Both the males were non-migrants, in the age group of 20-29 years; both were secondary level educated, and were in service. Both males were diagnosed with genital ulcer as syndromic presentation. The three female patients tested were also non-migrants, one each in the age groups of 20-29 years, 30-44 years and 44 & above years. All of them were housewives and had discharges as syndromic presentation. However, no one was found positive for HIV.

Antenatal mothers

376 ANC mothers were tested during this round of surveillance. No one was found positive. The age wise distribution of those tested is depicted in fig. 1. The majority were secondary level literates and more than half of them were wives of those in service.

Conclusion and Recommendations

No one was found positive in the bridge population or the general population of ANC mothers or in the VCTC and blood banks of Lakshadweep. In Lakshadweep, the percent positivity among attendees of VCTC has remained zero during 2004, like in 2003. Hence, it can be concluded that the state was HIV free in the year 2004. However, IEC campaigns should be sustained and launched in hotels and tourist spots, especially for those working as drivers, unskilled workers and the unemployed.

Fig 1: **HIV Trends in Lakshadweep**

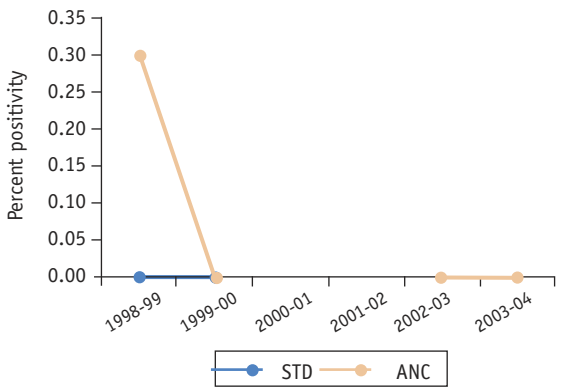
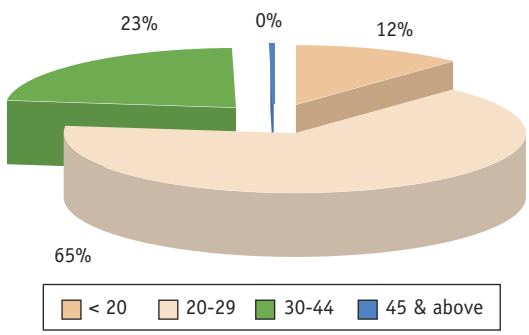
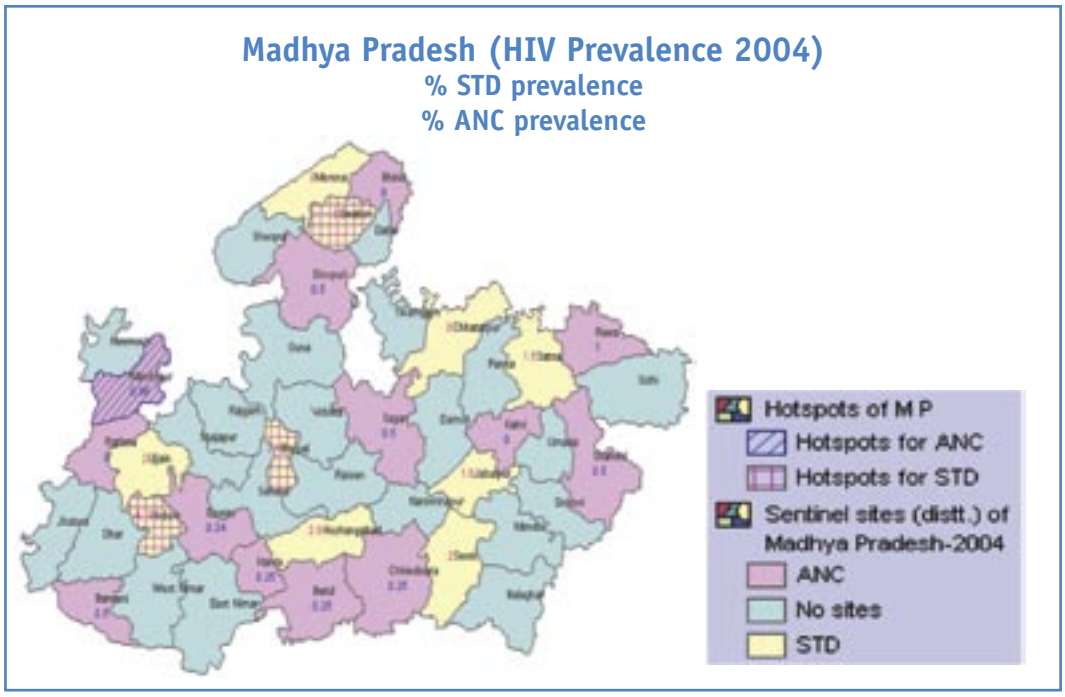


Fig 2: **Age wise percentage distribution of the tested ANC mothers in Lakshadweep**



Madhya Pradesh



Introduction

Madhya Pradesh is a low HIV prevalence state. There were 23 sentinel sites in the 2004 round of sentinel surveillance (10 STD and 13 ANC sites) (map). Overall, the data collected was satisfactory. There was not much difference in the median percent prevalence for STD (1.8%) as compared to the last year (1.81%).

Magnitude of problem

For ANC, the median prevalence was (0.25%) and has increased since the last year (0%). Bhopal (3.4%) and Indore (4.2%) were **STD hotspots** for the state. Gwalior has shown a significant decrease from last year. Mandsaur was the **ANC Hotspot** for the state. Indore

Fig 1: **St. 20. HIV Trends in Madhya Pradesh**

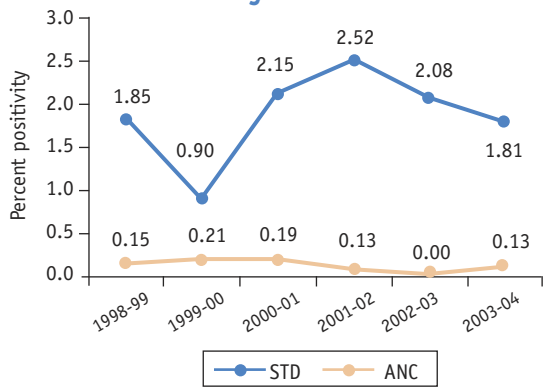
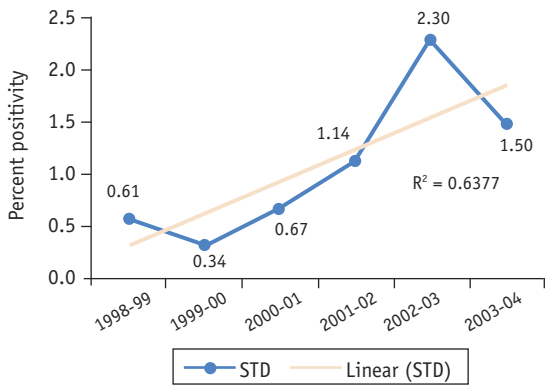


Fig 2: **HIV Trends in Gwalior**



and Gwalior have shown a decreasing trend line compared to the last year, while Bhopal has shown an increasing trend.

Profile of HIV positives

STD Patients

1002 male and 1220 female STD patients were tested and their age wise distribution is depicted in the figures below. Among males, about 45% of those tested were agricultural/unskilled workers. Among females, the largest subpopulation that was tested was that of housewives, who constituted more than 40% of the total tested.

The aggregate percent positivity amongst the STD patients was 1.62%. Male positivity was almost double the female positivity (2.20% and 1.15% respectively). Non-migratory males had the highest positivity (2.25%). The maximum HIV positivity was found in rural males (2.75%). In male STD patients, the highest positivity was in the age group of 30-44 years (4.07%). In female STD patients, the highest positivity was in the age group of below 20 years (2.19%). Illiterate male STD patients showed the maximum positivity (3.07%). Literate female STD patients with secondary education showed the maximum positivity (1.63%). Male STD patients working as truck/auto/taxi drivers/cleaners showed the maximum positivity (9.43%). Unemployed female STD patients showed the maximum positivity (25.0%) (only 4 were tested). Male STD patients with genital ulcers showed the maximum positivity (3.18%), while female patients with discharges showed the highest positivity (2.96%).

In male STD patients, VDRL positivity was 5.39%. HIV & VDRL positivity was 0.50%. In female STD patients, VDRL positivity was 3.93% and both HIV & VDRL positivity was 0.16%.

Antenatal mothers

5204 ANC mothers were tested during this round of surveillance and the figure below represents the age wise distribution of the tested mothers. The median percent prevalence for ANC mothers was 0.25%. If occupation was considered, around 45% were wives of agricultural/unskilled workers and the next largest number was that of the wives of those in business.

The aggregate percent positivity was 0.38% for ANC mothers. The positivity was almost the same for urban (0.39%) as well as rural (0.38%) areas. Non-migratory ANC mothers showed the maximum positivity. None of the migratory ANC mothers was found positive out

Fig 3: **HIV Trends in Bhopal**

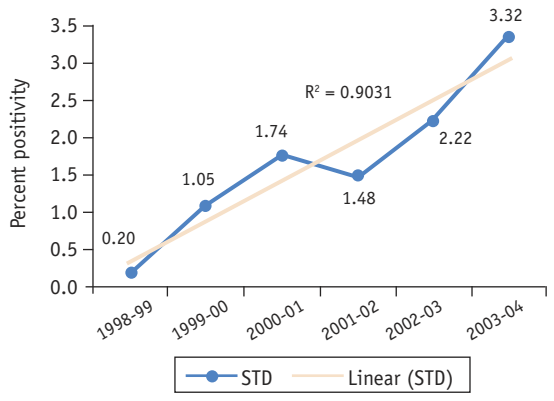


Fig 4: **HIV Trends in Indore**

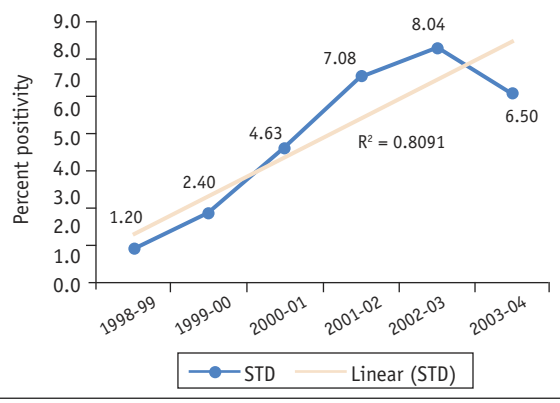
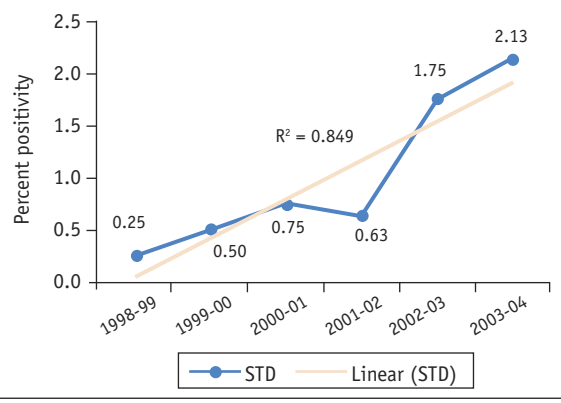


Fig 5: **HIV Trends in Mandsaur**



of the 182 tested, as compared to the 20 positives out of the 5022 non-migratory ANC mothers tested. In urban and rural areas, positivity was equally distributed in all the age groups except that of above 45 years; the highest being in the age group of below 20 years (0.54%). In rural areas, the 30-44 years age group showed the maximum positivity (0.52%), while in urban (0.52%), as well as rural areas (0.70%), literate ANC mothers with primary education showed the maximum positivity. In urban areas, ANC mothers whose husbands were working as truck/auto/taxi drivers/ cleaners showed the maximum positivity (2.21% and 2.82% respectively). In urban areas, VDRL positivity was 1.11% as compared to 1.23% in rural areas.

Conclusions & Recommendations:

HIV prevalence in Madhya Pradesh has been low and stable overall. However, among the bridge population, represented by the STD patients, it is seen that out of the 36 who tested positive, eight were housewives, and among the general population represented by the ANC mothers, 8 of the 20 found positive were wives of truck drivers/ cleaners. The percent positivity among attendees of VCTC was 5.5% in 2004 and 5.7% in 2003. Thus, the dynamics of spread of the infection are existent in the state and therefore intervention with special emphasis on drivers & workers is required. Sites for core risk groups should be taken for surveillance.

Fig 6: **Age wise percentage distribution of the tested ANC mothers in Madhya Pradesh**

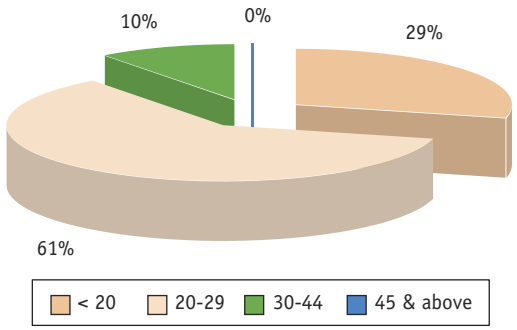
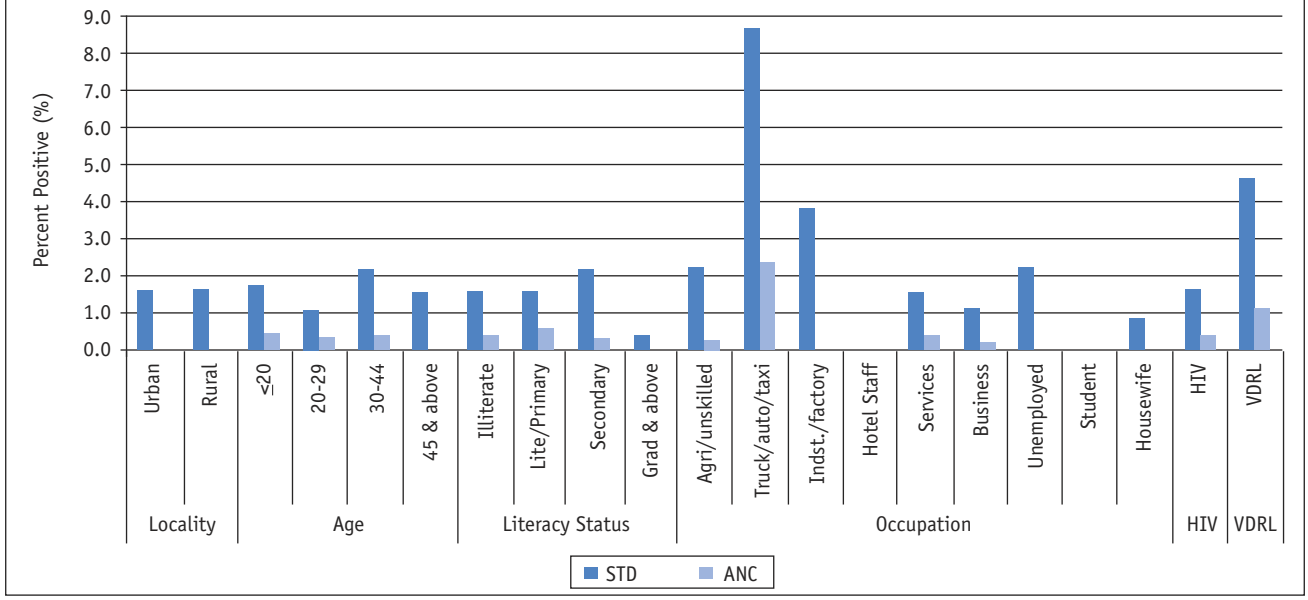
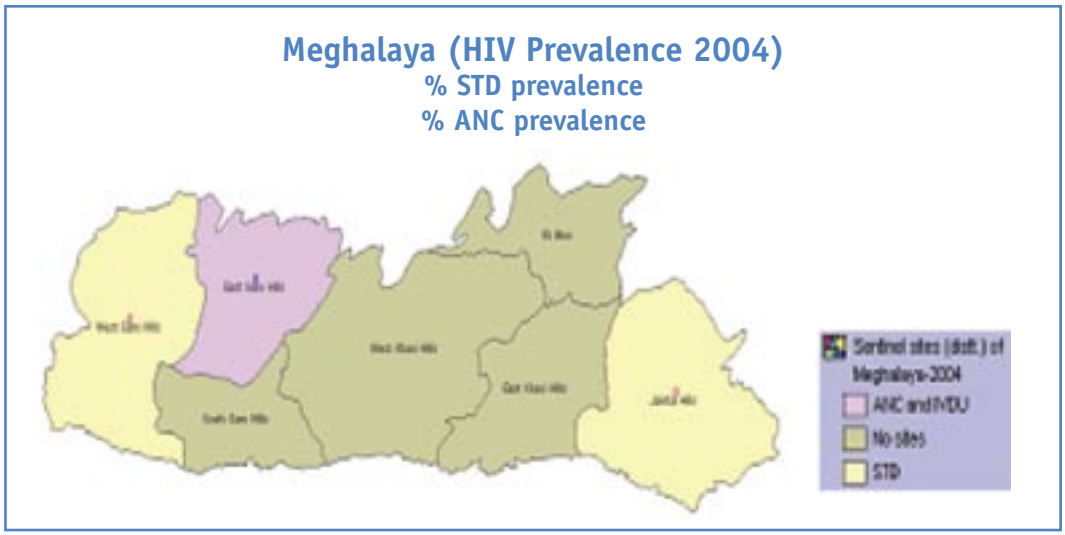


Fig 7: **HIV Prevalence by Socio-demographic characteristics in Madhya Pradesh**



Meghalaya



Introduction

Meghalaya is a low prevalence state. There were 4 sentinel sites in the 2004 round of sentinel surveillance; 2 STD, 1 ANC and 1 IDU (as shown in map). The data generated was satisfactory even though the sample size was incomplete.

Magnitude of problem. No one tested positive in any of the sites. There was no significant change from last year among any of the risk group categories in the state. Both ANC and IDU prevalence seem to be stable in the state, while STD prevalence has shown a decreasing trend.

Profile of HIV Attendees

The core risk group (IDUs)

There were a total of 30 who were tested during this round of surveillance and of these, 28 were men. The majority had education up to secondary level and 7 of them were graduates. Nine were in business, followed by 8 in service. However, no one was found positive in this group.

STD patients

500 STD patients were tested during this round of surveillance. The age wise distribution of the male and female STD population is shown in Fig.s 1 and 2. Out of

Fig 1: **St. 23. HIV Trends in Meghalaya**

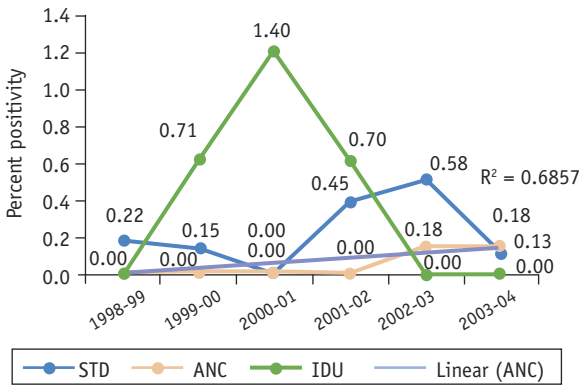


Fig 2: **Age wise percentage distribution of the tested male STD patients in Meghalaya**

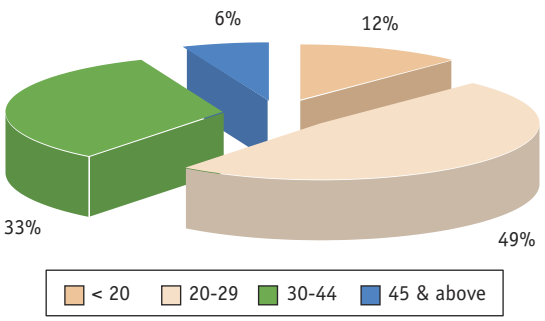
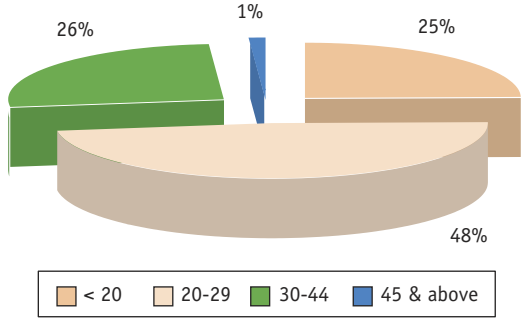


Fig 3: **Age wise percentage distribution of the tested female STD patients in Meghalaya**



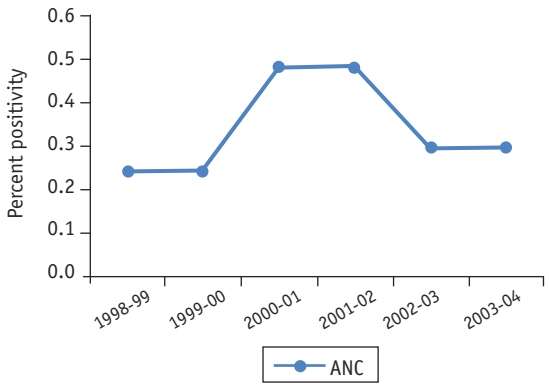
the 500 tested, none were found HIV positive at the designated sentinel sites.

Only 66 males, as compared to 434 female STD patients were tested. Among the males, there were 17 truck drivers/cleaners and 16 were in service. Occupation wise, among the female patients, 120 belonged to the agricultural/unskilled workers category and 128 were housewives.

Antenatal Mothers

400 ANC mothers were tested, but none were found positive during this round of surveillance. The age wise break up is given in figure 3. Occupation wise, 60% were the wives of agricultural/unskilled workers and were in the 20-24 years age group.

Fig 4: **HIV Trends in Garo**



Conclusions and Recommendations

Since the state of Meghalaya is located very close to Manipur and Nagaland, migration can change the scenario in the state very dramatically and quickly. Therefore, widespread awareness about HIV should be created and targeted intervention need to be implemented, especially in STD patients in the Garo hills, with special focus on the importance of condom use. Large-scale IEC activities and the social marketing of condoms for the general population, as well as

Fig 5: **Age wise percentage distribution of the tested ANC mothers in Meghalaya**

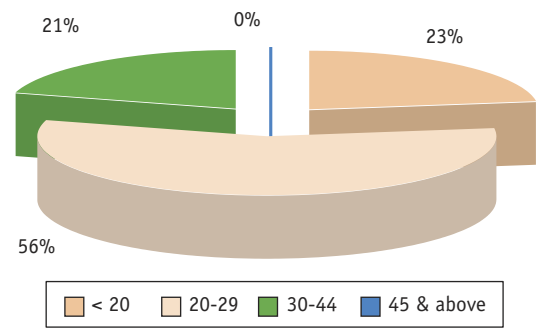
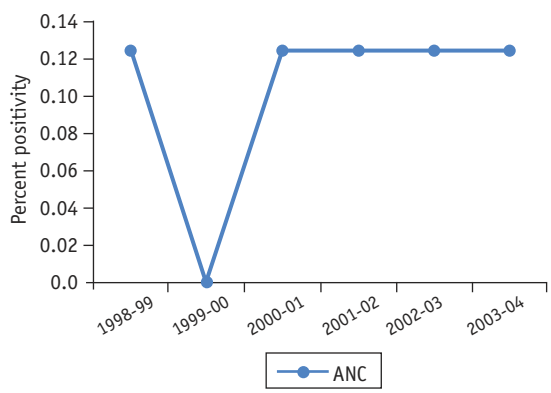


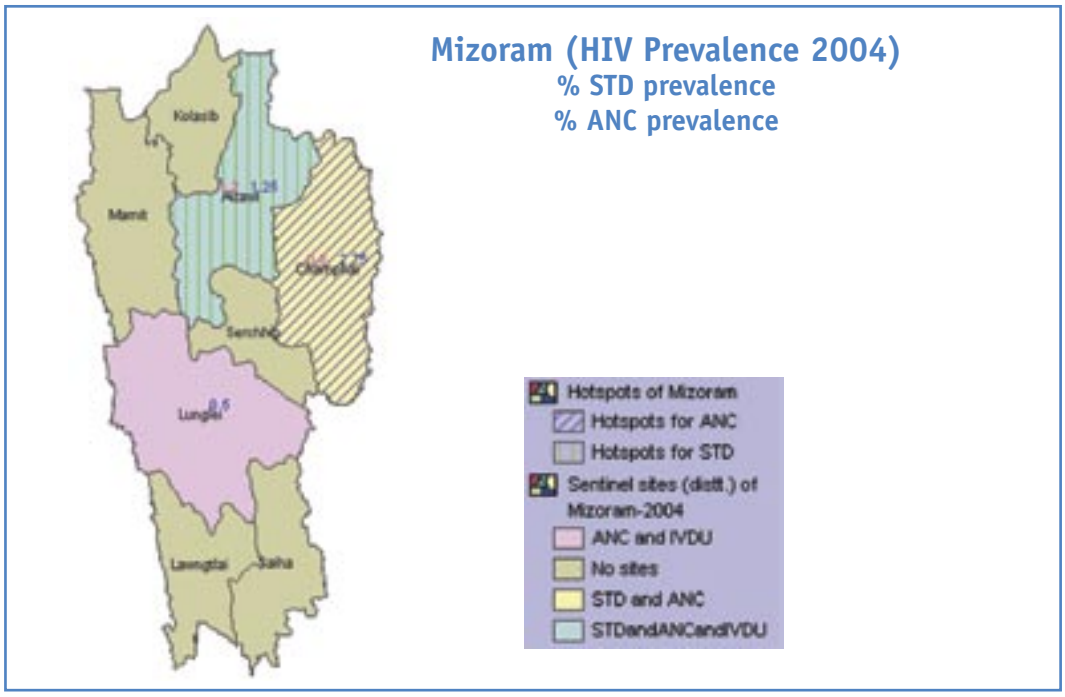
Fig 6: **HIV Trends in Shillong**



Behaviour Change Communication (BCC) for high-risk groups can be effective preventive strategies.

The percent positivity among the VCTC attendees in the state of Meghalaya was 2.86% in 2004 as compared to 0% in 2003. positivity among In the blood banks, the percent positivity was 0.1% in 2004 and 0.2% in 2003 as compared to 0 % positivity among the ANC mothers. Cons tant vigilance and identification of new risk groups are needed.

Mizoram



Introduction

Mizoram is a low prevalence state. There were 8 sentinel sites for the 2004 round of surveillance (2 STD, 3 ANC, 2 IDU (TI), 1 FSW (TI)) (as shown in map). The data was satisfactory. There was no significant change in HIV prevalence in the ANC group. The mean HIV prevalence for ANC was 1.25%. HIV prevalence among STD patients (1%) and IDU-TIs (6.8%) has shown a declining trend from last year (as shown in figure).

Magnitude of problem

Aizawl (1.2%), which was the STD **hotspot** in 2004, has also shown a declining trend. Champai (2.8%) was the ANC **hotspot** in 2004. STD patients have shown a rising trend

Fig 1: **St. 22. HIV Trends in Mizoram**

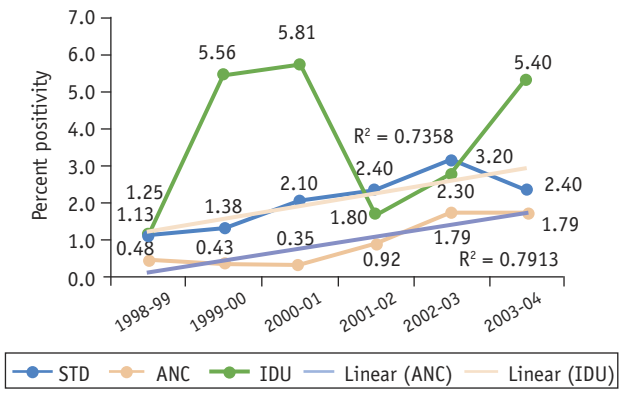
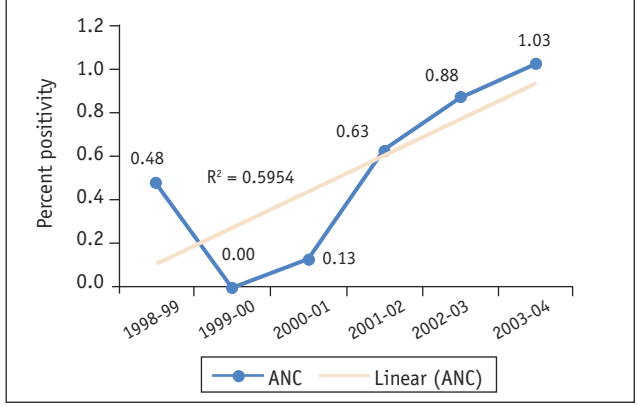


Fig 2: **HIV Trends in Aizwal**



since 1998 but the value dropped to 1% in 2004 from 3.8% in 2003. ANC women have shown a rising trend of HIV infection since 1998 but the percent positivity dropped from 2% to 1.5% (2003-04), as can be seen from site trends.

Profile of HIV positives

The core risk groups (FSWs and IDUs)

168 FSWs were tested during this round of surveillance and fig.1 represents the age wise break up of the population. Almost all, i.e., 166 of them, were non-migrants and the majority had been educated up to the secondary level. 23 FSWs tested positive for HIV and 15 of them were in the age group of 20-29 years. The positivity amongst FSWs was 13.69% and all positives were non-migrants. 11.31% of the FSWs were VDRL positive, and three were positive for both HIV and VDRL during this round of surveillance.

A total of 500 IVDUs were tested during this round of surveillance. Almost one fourth were migrants. Occupation wise, it was observed that 211 were unemployed. Twenty ANC mothers were also included for testing and three were found positive. The percent positivity was 6.8% amongst the IVDUs. The rural to urban ratio among positives was 1:1 and most of them were in the age group of 20-29 years, followed by the 30-44 years age group. Maximum positivity was found among the unemployed and 2 among truck drivers/cleaners were also found positive.

STD patients

The age wise distribution of the male and the female STD population is depicted in figs. 3 and 4. In all, 241 males and 259 females were tested. Among the males, most had been educated up to the secondary level; 92 were unemployed and most of them showed urethral discharge as a symptom. Among the female patients, 60% were in the secondary level education

Fig 3: **Age wise percentage distribution of the tested FSWs in Mizoram**

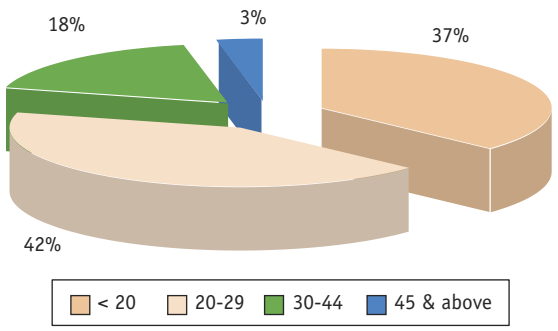


Fig 4: **Age wise percentage distribution of the tested IDUs in Mizoram**

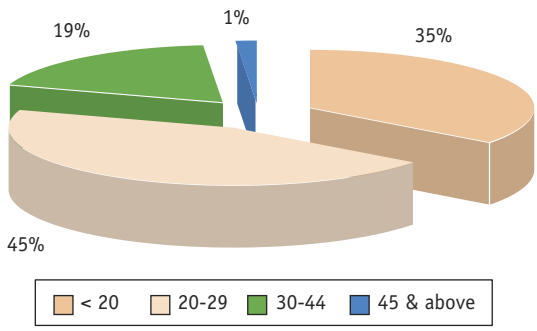


Fig 5: **Age wise percentage distribution of the tested male STD patients in Mizoram**

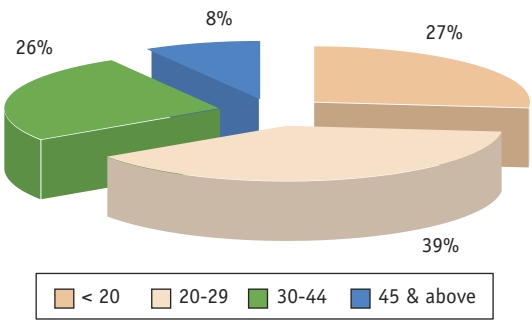
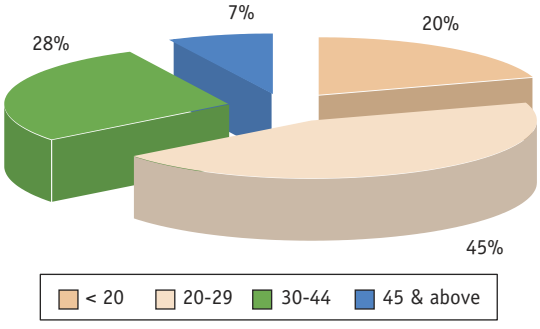


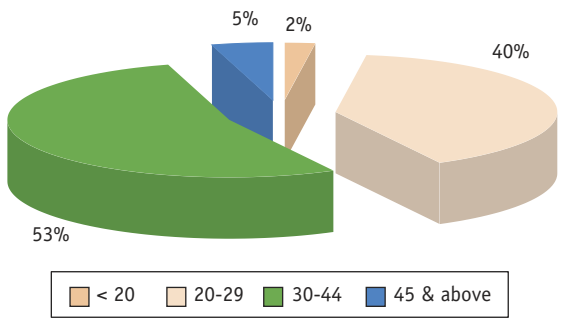
Fig 6: **Age wise percentage distribution of the tested female STD patients in Mizoram**



bracket, 163 were housewives and more than 75% showed urethral/cervical discharge as syndromic presentation.

Out of the four males found positive, 3 were non-migrants and all 4 were from urban areas. 3 were in the age group of 30-44 years. Occupation wise, one was a truck driver/cleaner, one was a businessman, and 2 were unemployed. Among the females, only one was found positive. She was a migrant, in the age group of less than 20 years, was educated up to the secondary level and was a housewife.

Fig 7: **Age wise percentage distribution of the tested ANC mothers in Mizoram**



Antenatal mothers

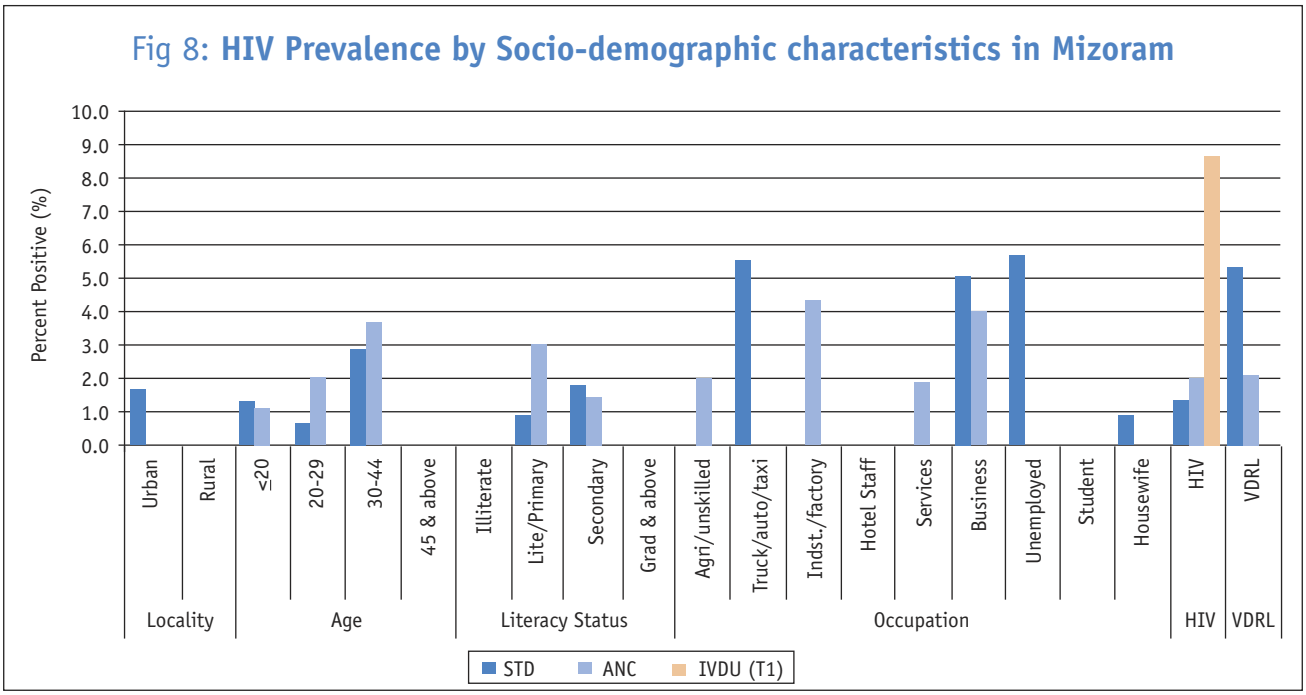
During the 2004 round of surveillance, 1200 ANC mothers were tested for HIV in Mizoram. Figure 5 represents the age wise distribution. Occupation wise, it was observed that 404 were wives of agricultural/ unskilled workers and 274 were unemployed. However, only 18 were found positive for the HIV infection. Six of the positive women were wives of agricultural/ unskilled workers and 5 were wives of unemployed individuals. Luckily, none of the ANC mothers, who were wives of the 138-truck/taxi drivers/cleaners, were found positive.

Conclusion & Recommendations:

The state of Mizoram, although a low prevalence state at the moment, needs to be on high alert. The infection is showing up in some vulnerable groups. Among the core risk population of the FSWs, the maximum tested and found positive were non-migrants, while among the migrant IDUs, HIV percent positivity was about 5.65%. Another 2 out of the 32 truck/taxi drivers/cleaners also tested positive. This data shows that the disease is vibrant and has the capacity of emerging at a larger scale at any point of time in the state.

Among the bridge population, although only 5 tested positive, one was a truck/taxi driver/cleaner, 2 were unemployed and 1 was a housewife. Only 18 were found positive among the general population and 6 of them were wives of agricultural/unskilled workers, while 5 were wives of unemployed individuals. This indicates that the disease is present both in the non-migrant

Fig 8: **HIV Prevalence by Socio-demographic characteristics in Mizoram**

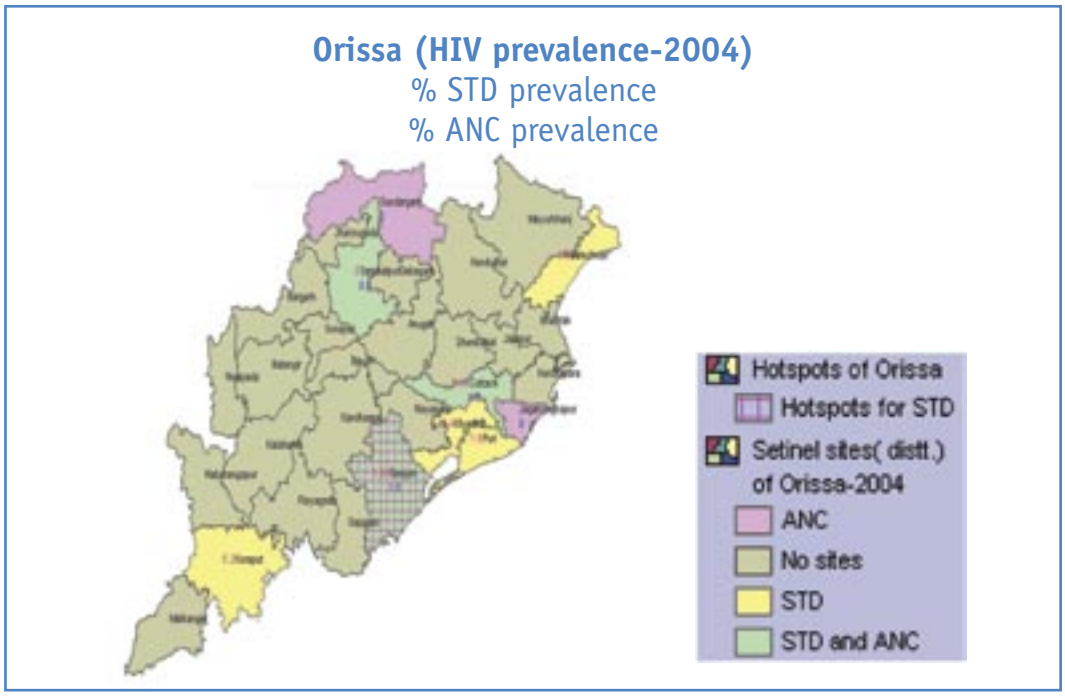


and the migrant populations. The maximum positivity among the IDUs was seen in the unemployed. This is characteristic of the north-eastern state and needs to be looked into in greater detail on a long-term basis so as to rectify the situation.

In the state of Mizoram, the percent positivity among those tested in the VCTCs was 6.11% in 2004 and 5.92% in 2003, which when compared to the STD positivity of 1%, indicates under utilisation of STD clinics.

The percent positivity in the blood banks was 0.74% for both 2004 and 2003 and the positivity among the ANC mothers was 1.5%. This shows that the blood bank practices were good and adequate. Activities need to be targeted towards the unemployed and the taxi/truck drivers in the state.

Orissa



Introduction

Orissa state has low HIV prevalence, but the vulnerability is very high with migrant &tribal population and low literacy in the states. Surveillance activities were conducted at 14 sentinel sites (5 ANC, 7 STD and 2 FSW) across the state. All the sites were able to test the minimum designated number of clinic attendees.

Magnitude of problem

The prevalence (median) stands at 0.5 % and 2.8 % (Table 1a) for ANC mothers and STD patients respectively. The trend of HIV from 1998 to 2004 indicates a gradual dip & then increase in the prevalence amongst the STD group while in the antenatal mothers the prevalence continues to be stable. HIV prevalence amongst the FSWs was 5.18%. A linear increase was observed amongst the pregnant women in Cuttack, while in Balasore,

Fig 1: St. HIV Trends in Orissa

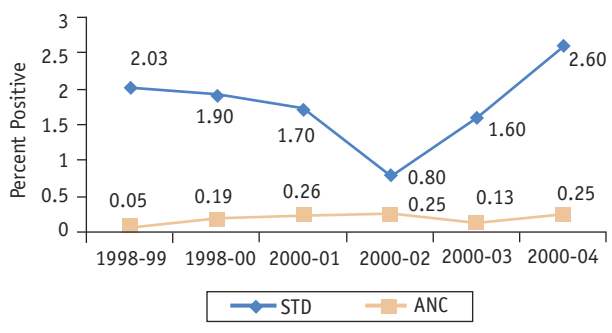
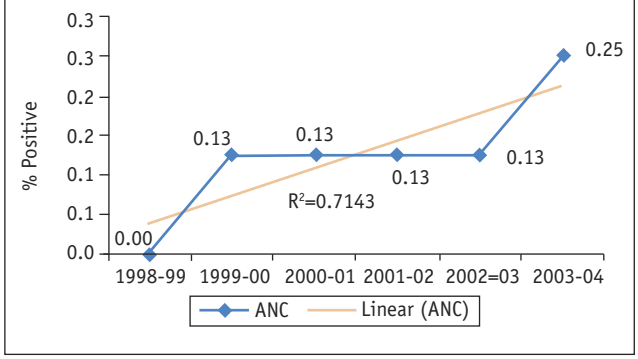


Fig 2: HIV trend in Cuttack



most of the tribal population is involved in polygamy and this may be the reason for high HIV infection. HIV prevalence has shown a rising trend since 2001 in STD patients as seen at Puri and Cuttack iwhile in Behrampur a constant increase is seen but it has been stable amongst ante-natal clinic attendess.

Sociodemographic profile of HIV positives

The core risk groups (FSWs)

A total of 502 FSWs were tested and of these, 498 were from urban areas. It is also significant that 496 were migrants. The age wise distribution of the population is depicted in Fig.1. and shows women between 30-44 years to be majority in sex work. Around 85% of the FSWs tested were illiterates with percent positivity at 5.6%. The overall positivity was 5.18% and the maximum number belonged to the age group of 20-29 years (7.11%). Among the migrants FSWs, positivity was found to be 5.24%

STD patients

During this round of surveillance, 894 male and 858 female patients were tested. Their age wise break up is shown in figures 2 and 3.

Fig 3: **Age wise percentage distribution of the tested FSWs in Orissa**

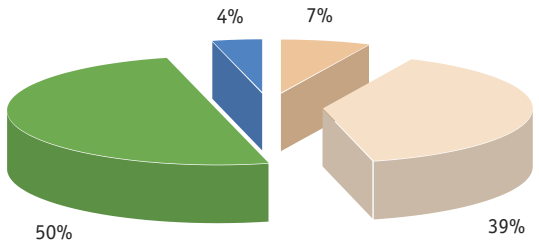


Fig 4: HIV Trend in Behrampur

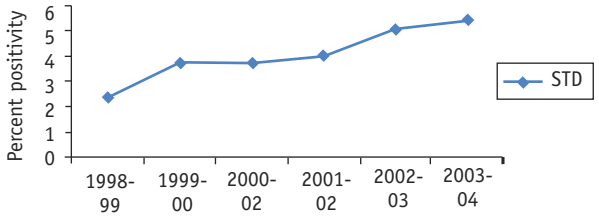


Fig 5: HIV Trend in Cuttack

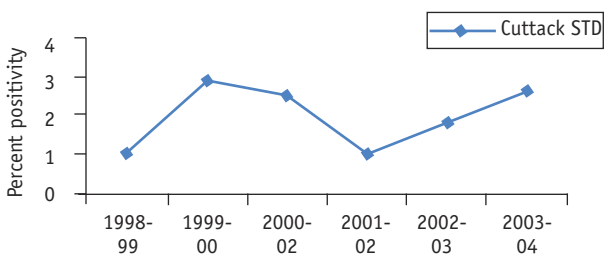


Fig 6: HIV Trend in Puri

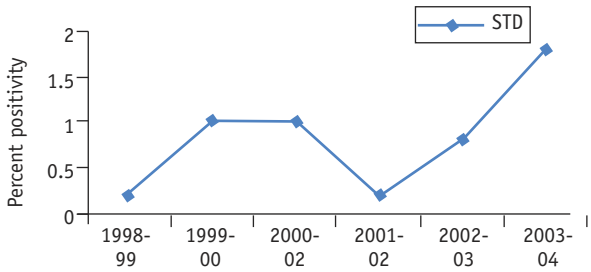


Fig 7: **Age wise percentage distribution of the tested male STD patients in Orissa**

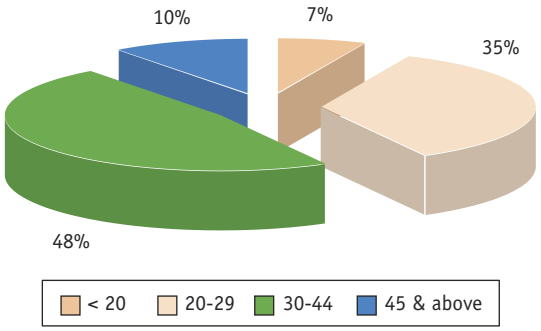
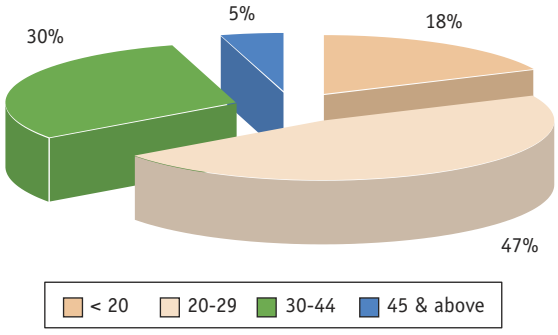
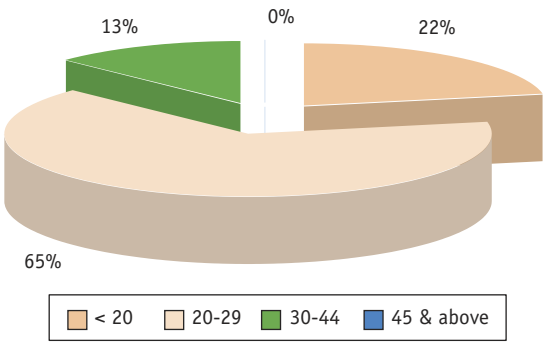


Fig 8: **Age wise percentage distribution of the tested female STD patients in Orissa**



More than 90% of those tested were non-migrants. The percent positivity was much higher in migrants (5.36%) compared to non-migrants (3.13%). The positivity was also higher in males at 4.0% than in females (2.33%). The age-group of 30-44 years showed highest positivity (5.08%). Moreover, secondary-level educated were found to have highest positivity at 3.50%. It is rather interesting to see that the infection has crept into the graduate level bracket also unlike in the past. Occupation-wise, the infection rates were highest in truck drivers/cleaners at 12.80% followed by industral workers and hotel staff. Those having genital ulcers had the maximum positivity (3.50%) when syndromic diagnosis was taken into consideration.

Fig 9: **Age wise percentage distribution of the tested ANC mothers in Orissa**



The VDRL positivity was 3.60% and 0.17% was positivity for both HIV & VDRL.

Antenatal Mothers

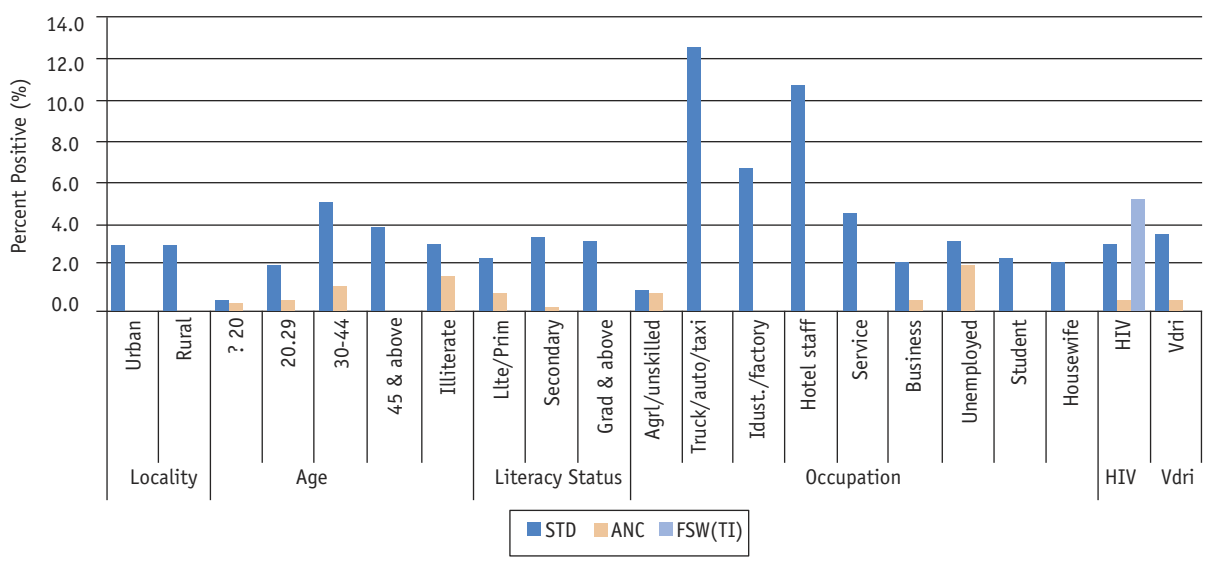
Two thousand ANC mothers were tested with almost equal participation from both urban and rural areas. More than 90% of those tested were non-migrants. The age wise distribution is shown in figure 4. the highest positivity was found amongst the illiterates at 1.52%. Occupation wise, most of the women tested were the wives of agricultural/unskilled workers, though the positivity was amongst wives of unemployed husbands at 1.52%

The overall positivity was 0.5% and 60% of the positives belonged to the age group of 20-29 years with a percent positivity of 0.46%

Conclusions & Recommendations

Orissa, despite neighboring the high prevalence state of Andhra Pradesh and yet remaining a low prevalence state, is to be viewed cautiously. It is important to note that of the total 502 FSWs tested in Orissa, 496 were migrants and all the 26 positive cases belonged to this category. This signifies that the core risk group is pouring into the state from elsewhere. In the bridge population, the maximum number were non-migrants; and the disease being

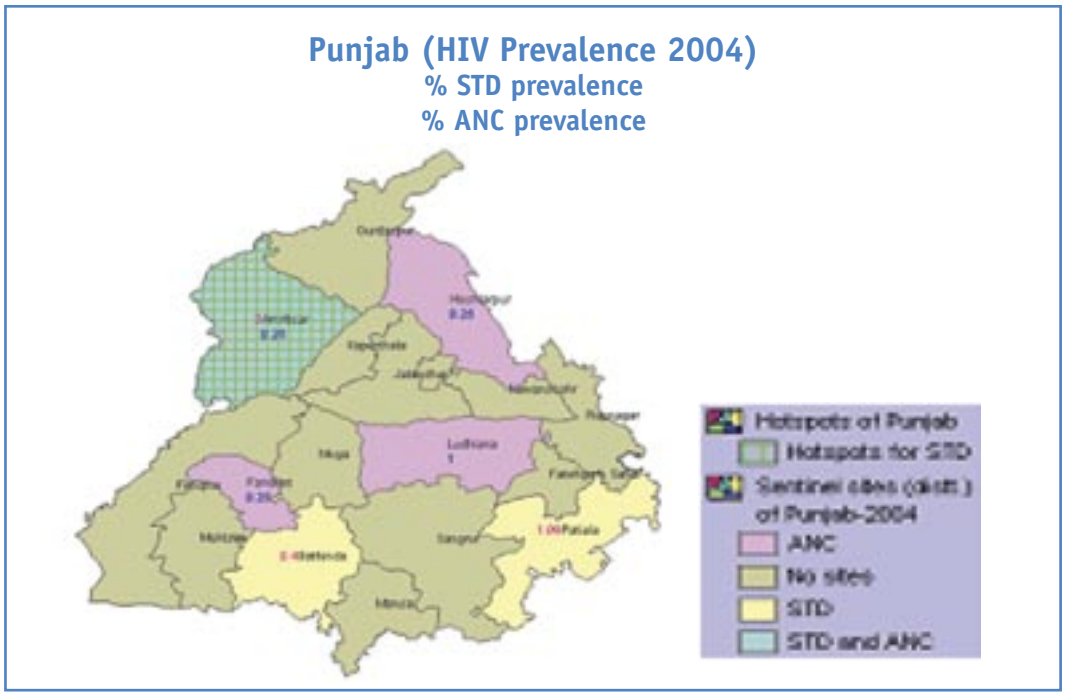
Fig 9: HIV Prevalence by Socio-demographic characteristics in Orissa



found among truck drivers/cleaners, factory workers, hotel staff and housewives (among the females), adds to the vulnerable condition of the state. Luckily, as of now, in the tested general population, only 6 of the positives were wives of agricultural/unskilled workers. main focus of targeted intervention should be on migrant FSWs and their non-migrant clients who are represented by the STD patients.

Among the VCTC attendees, the percent positivity was found to be 13.43% in 2004 and 17.12% in 2003, as compared to the 3.20% positivity among STD patients. In the blood banks, the positivity detected was about 0.2% in 2004 and 0.1% in 2003 in comparison to the 0.50% positivity among the ANC mothers. High positivity in the VCTCs indicates infectious pool in the population.Tribal population,migrant workers and expanding economy in the big cities are raising the infections. Intensive IEC campaigns needed in the state as level of literacy is low in the vulnerable population and amongst the migrants.

Punjab



Introduction

Punjab, like many North Indian states, is also a low prevalence state for HIV. The state had 3 STD and 4 ANC sites, and all the sites were able to complete the required sample size of 250 STD patients and 400 ANC women in 2004 (map). The median HIV prevalence was 1.09% among STD patients and 0.25% among ANC mothers.

Magnitude of problem

As compared to 2003, HIV prevalence in STD patients, and in ANC attendees has shown a decline in 2004 (fig.). Similarly, in the individual sites, Amritsar shows a downward trend in HIV in both antenatal and STD clinic attendees (site trend) (fig.). though this site is

Fig 1: HIV trend in Punjab

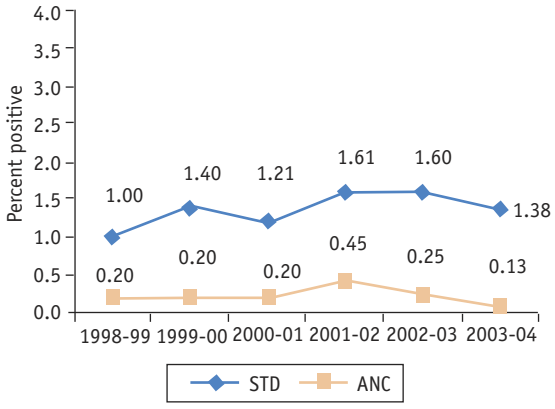
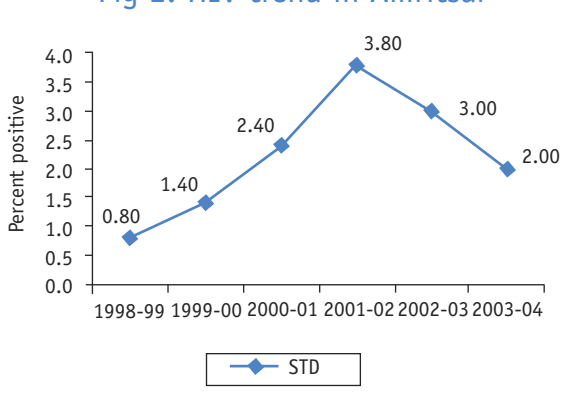


Fig 2: HIV trend in Amritsar



also the STD hotspot, with percent positivity at 2.0% in Punjab and therefore, requires focused intervention to prevent HIV spread into the general population. No ANC site had very high positivity during this round of surveillance.

Both STD and ANC groups have shown a stable trend since 1998. However, a mild decline was observed when consistent sites with more than 75% samples were considered since the year 2001.

Socio-demographic profile of HIV positives

STD patients

A total of 774 STD patients were tested during this round of surveillance, Their age wise &sexwise distribution have been depicted in the following figures.

The highest positivity was found in 30-44 years age group at 1.56%. Though the ratio of migrants :non-migrants tested was 1:8.2, yet the positivity was almost similar at 1.19% and 1.16% respectively. As regards the educational status, it was found that the illiterates had the highest positivity at 4.11%.

Among the males, the highest positivity was in agricultural/unskilled workers category with 1.31% as percent positivity and among the females, similar figures were for housewives (2.08%). Only 2 tested positive among the male patients and one of them was a migrant. Both of them were from urban areas and were agricultural/unskilled workers. One had been diagnosed with genital ulcer and the other with discharge, as syndromic presentation. 7 female patients were found positive and one was the wife of an agricultural/unskilled worker, while the remaining 6 were housewives. VDRL positivity was also higher in women (6.32%) than in men (3.99%). One woman was found to be positive for both HIV and VDRL.

Antenatal mothers

The HIV percent positivity amongst ANC clinic attendees was 0.44% and 1600 antenatal mothers were tested and their age wise distribution is depicted in figure 3. Positivity amongst migrants was higher (1.45%) than non-migrants 0.29%, although the ratio of ANC clinic attendees amongst migrants: non-migrants was 1:6.3. Out of 7 positives, 3 each belonged to the 20-29 year and 30-44 year age groups with highest positivity amongst the latter at 1.32%. Education had a positive role and the percent positivity decreased with increase in educational status and it was highest amongst illiterates at 1.31%. Though the majority of tested were wives of agri/unskilled workers, yet the highest positivity was

Fig 3: **Age wise percentage distribution of the tested male STD patients in Punjab**

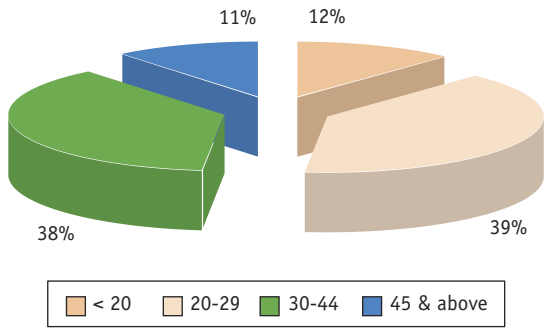


Fig 4: **Age wise percentage distribution of the tested female STD patients in Punjab**

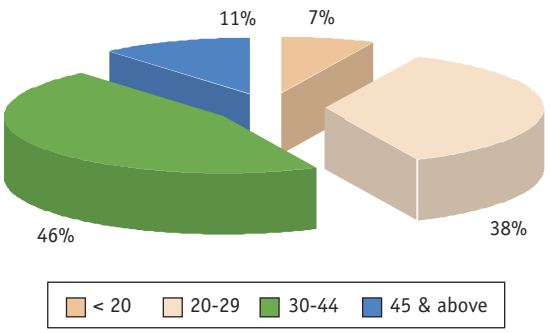


Fig 5: **Age wise percentage distribution of the tested ANC mothers in Punjab**

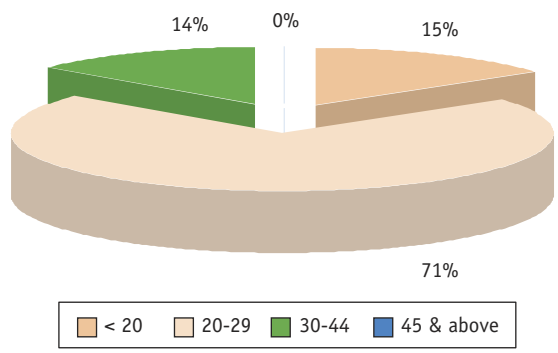
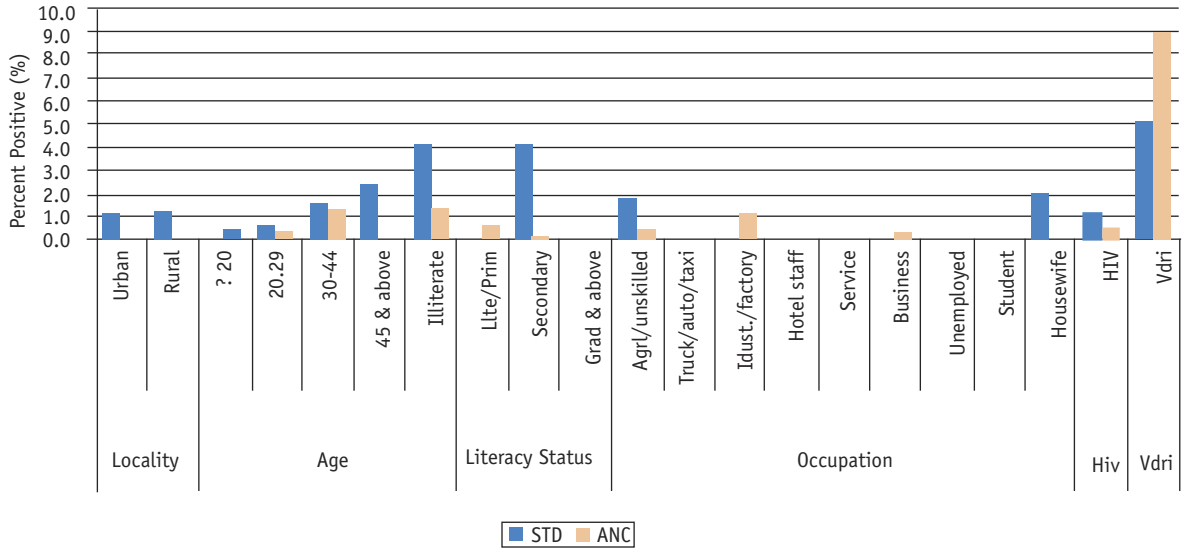


Fig 6: HIV Prevalence by Socio-demographic characteristics in Punjab



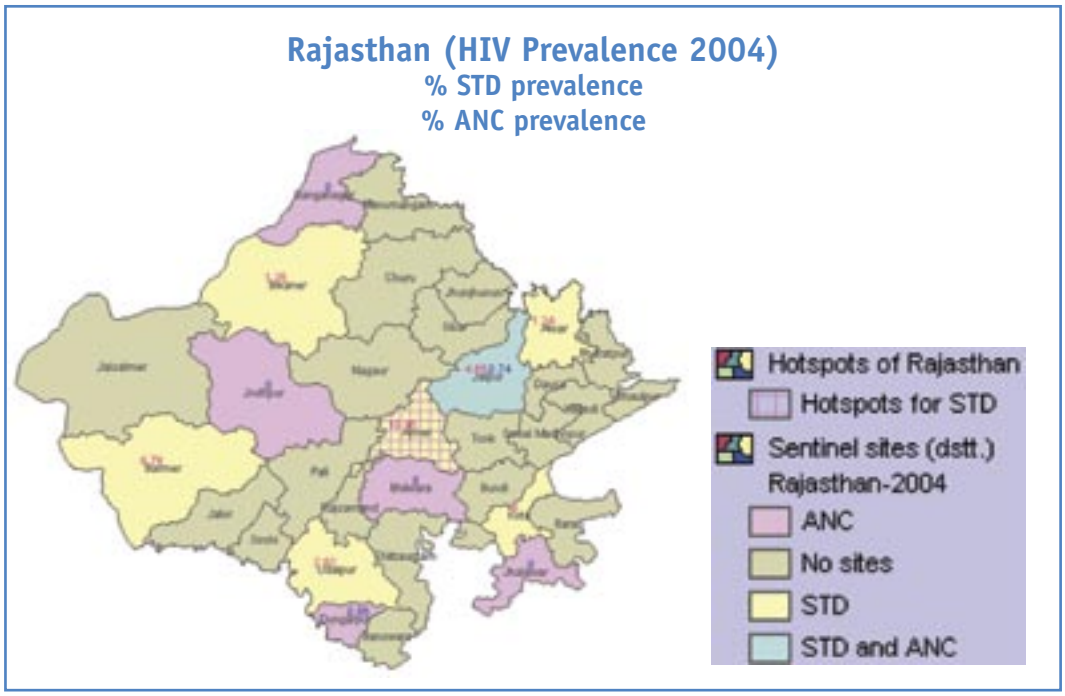
amongst wives of Indus/factory workers (1.15%). VDRL positivity was 8.88% and none were found positive for both HIV & VDRL.

Conclusions and Recommendations

Punjab is still a low prevalence state. During this round of surveillance, in the female bridge population, 9 were found positive and among them, 6 positives were housewives, which indicates that the infection has invariably spread into the general population. However, only seven were found positive among the ANC mothers and none of them were wives of truck drivers/cleaners, although three were migrants and occupation wise, 3 were wives of agricultural/ unskilled workers. The percent positivity among attendees of VCTC has increased from 8.2% in 2003 to 9.4% in 2004. Higher levels of VDRL positivity than males amongst the females indicate infection from husbands who themselves are not accessing the clinics.

Punjab is a state with an influx of labourers from other states like Bihar and Uttar Pradesh. Therefore, HIV surveillance activities coupled with IEC campaigns could help prevent the spread of the disease and support those who are already HIV positive. Specific emphasis on HIV prevention should be placed for workers employed in agriculture, factories, industries, and those who constitute the unskilled group in the state.

Rajasthan



Introduction

Rajasthan is currently a low HIV prevalence state. Surveillance was carried out in 14 sentinel sites- 7 STDs, 6 ANCs, and 1 FSW -during the 2004 round of surveillance (State map). Three STD, 1 ANC and one FSW site could not complete the required sample size.

Magnitude of problem

While there has been no appreciable change in the ANC status, an increase in infection has been observed in the case of STD patients in the last 5 years except for a fall in the current year. The figure shows trends in the state, among STD patients and ANC mothers, since 1998. The mean prevalence among ANCs was 0.23% (5 positive out of 2151 tested)

Fig 1: HIV trend in Rajasthan

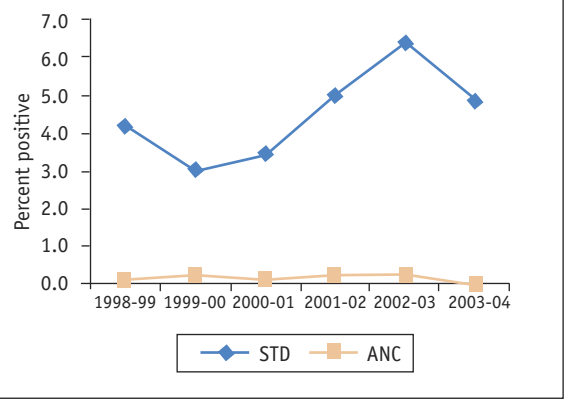
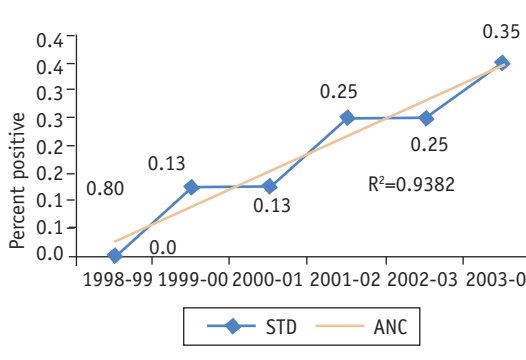


Fig 2: HIV trend in Jaipur



though the median was 0%. The median prevalence among STDs was 2.92%.

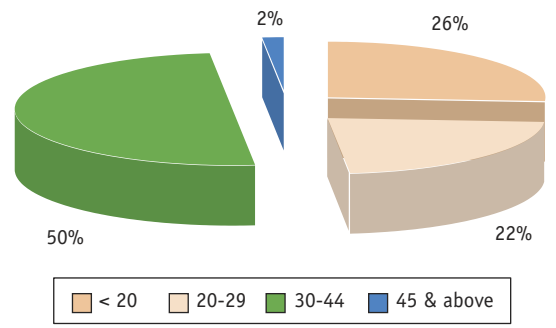
Ajmer 10.5) continued to be the "hotspot" with high HIV prevalence in STD patients. The variation in HIV prevalences among STD patients can be seen in the state map. Ajmer, Udaipur and Jaipur were the STD hotspots. Barmer and Ajmer recorded an increase of 0.7% in HIV prevalence among STD patients. In the round of 2004, ANC women were found HIV positive at Dungarpur and Jaipur while there had been no such cases in 2003.

Sociodemographic profile of HIV positives

The core risk groups (FSWs)

During this round of surveillance, 130 FSWs were tested and figure 1 depicts the age wise distribution of this population. Three out of the 130 tested were found positive and thus the HIV positivity was 2.31%.

Fig 3: **Age wise percentage distribution of the tested FSW mothres in Rajasthan**



All three FSWs who tested positive were non-migrants and were educated up to primary level (4.70%). Fifty percent of the tested FSWs were in the 30-44 year age group and had highest positivity at 1.54%

STD Patients

A total of 1381 patients were tested and figs. 2 and 3 represent the age wise distribution of this population.

More males were infected (5.54%) than females (2.87%). It is interesting to note that the rural population was more infected (5.19%) than the urban (2.91%). The age group of 20-29 years had the maximum infection (5.75%), and was followed by those below 20 years (3.97%). Education had a positive effect on HIV prevalence and the illiterates had highest positivity at 5.20%. Occupation wise, the highest positivity was found amongst drivers class at 5.55%. The hotel staff had very high infection rate though less in number. The HIV positivity amongst housewives was 4.09%. As regards syndromic presentation, the highest positivity was in sufferers of genital ulcer (6.0%). The VDRL positivity was 8.0% and 0.72% were positive for both.

Antenatal mothers

During the 2004 round of surveillance, 2151 ANC mothers were tested for HIV in Rajasthan and overall positivity was 0.23%. Though the ratio of tested migrant: nonmigrants was 1: 33, however, it was reverse for percent positivity, with former having a positivity of 1.60% compared to the latter at (0.20%). Education had a positive role and hence illiterates had highest positivity at 0.61%. Figure 4 represents the age wise

Fig 4: **Age wise percentage distribution of the tested male STD patients in Rajasthan**

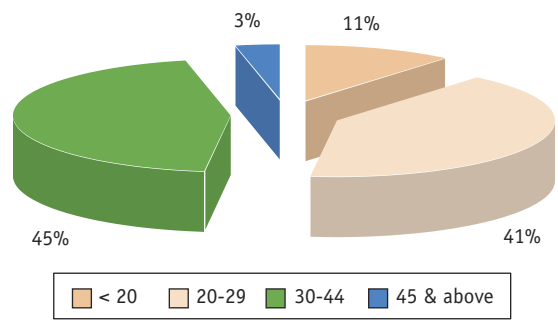


Fig 5: **Age wise percentage distribution of the tested female STD patients in Rajasthan**

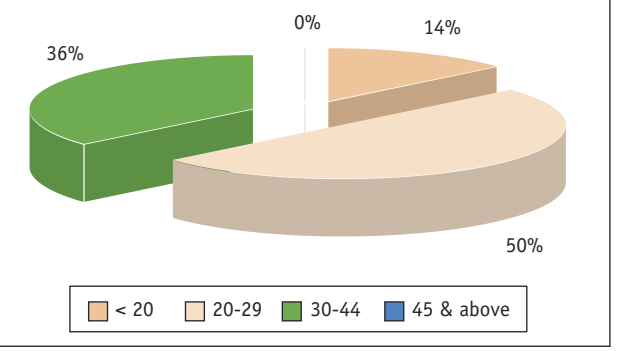
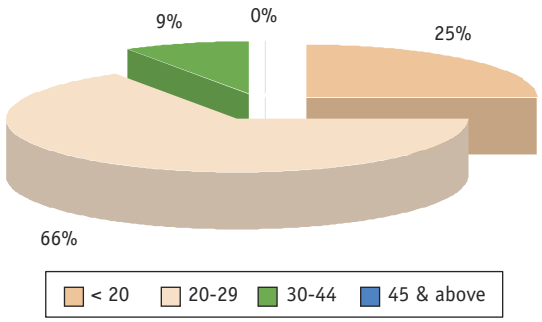


Fig 6: **Age wise percentage distribution of the tested ANC mothers in Rajasthan**



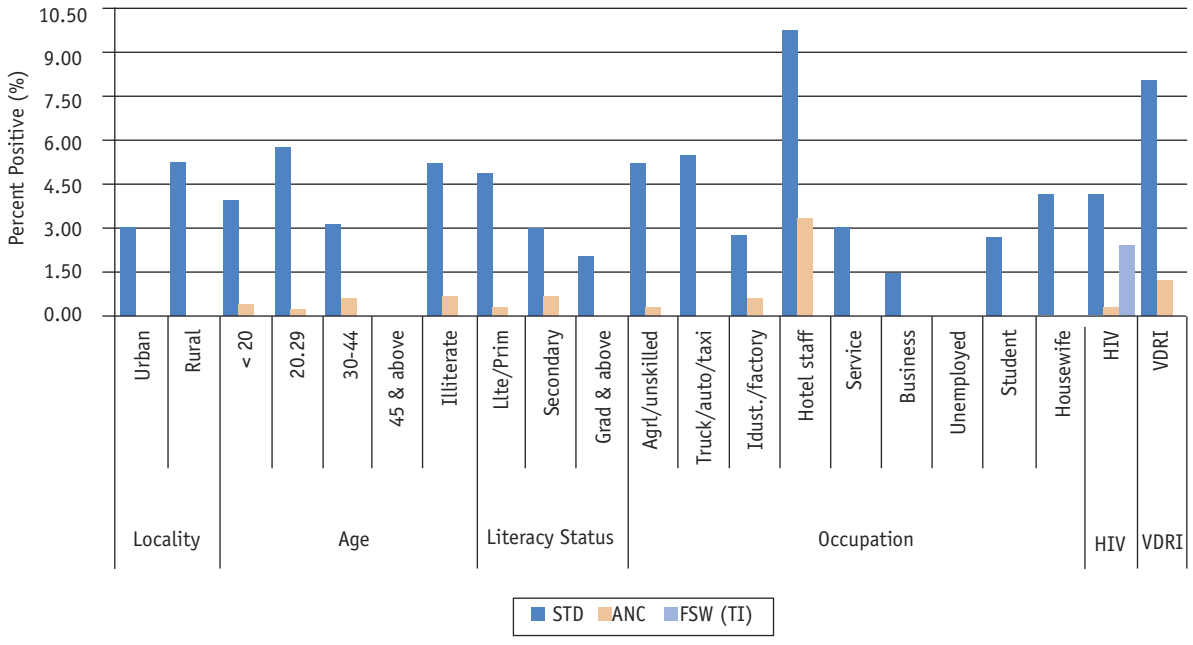
distribution of the tested mothers. Occupation wise, more than 1/3 were wives of agricultural/unskilled workers, but highest positivity was amongst wives of industrial/factory workers (0.52%). Out of the five positives, 3 were urban and 2 were rural residents.

Conclusion and Recommendations

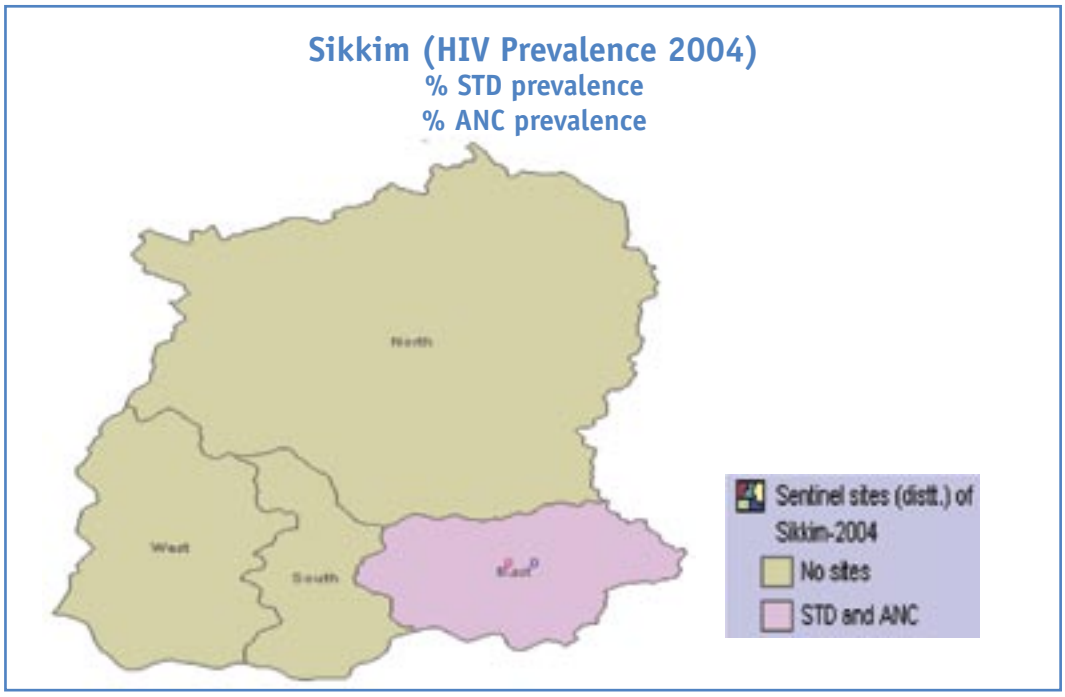
Sufficient numbers of people were not screened at 5 out of the 14 sites. Although the overall HIV prevalence was low, at 2 STD sites (Ajmer and Barmer), prevalence was almost 10%. Surveillance in the state needs to be strengthened and close monitoring is necessary for the areas with high infection and particularly border district of Barmer. Rajasthan has a lot of tourist inflow Ajmer being major one, and is also a major transport route for goods between the northern and western parts of the country. Targeted interventions need to focus on specific risk groups, viz., hotel staff, and truckers. Considering the higher prevalence in agriculture/ unskilled workers and industrial workers, the IEC campaign for the general population should be strengthened specifically in rural areas and among the urban poor. HIV positivity was high among VCTC attendees. HIV positives also included very young and educated people indicating the lack of awareness about HIV infection, which may, in turn, be leading to risk behaviour. Hence, the need for timely BCC interventions so as to increase general awareness should be emphasised.

Among the VCTC attendees, the percent positivity has increased to 10.67% in 2004, as compared to 8.69% in 2003, while among those tested in the blood banks, positivity was 0.2% for both the years. The low prevalence amongst STD patients indicates that patients with high risk may not be attending the STD clinics adequately. The major factors for HIV infection in the State of Rajasthan are tourism and the sexual behaviour of drivers. There is thus the need to educate people through IEC activities and target intervention to control further spread of the HIV infection.

Fig 7: HIV Prevalence by Socio-demographic characteristics in Rajasthan



Sikkim



Introduction

Sikkim is a tiny hill state with a low HIV prevalence and only 2 sentinel sites (1 ANC and 1 STD) involved in surveillance activities in 2004 as shown in the map. The overall quality of surveillance activities was good.

Magnitude of HIV\AIDS

The antenatal HIV prevalence in the state has shown a declining trend from 2003 to 2004, while STD prevalence has been stationary at zero, as can be seen from the state trend figure.

Profile of HIV positives

STD Clinic Attendees

Only 160 patients were tested and the majority were women (male: female ratio of tested was 1:3.44). None tested positive for HIV. About 2.5% were VDRL positive. Almost 90% of those tested were non-migrants and 80% were urban dwellers.

Fig 1: HIV Trends in Sikkim

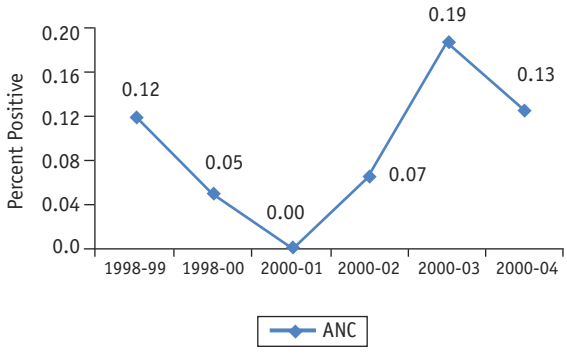


Fig 2: **HIV Trends in Gangtok (ANC)**

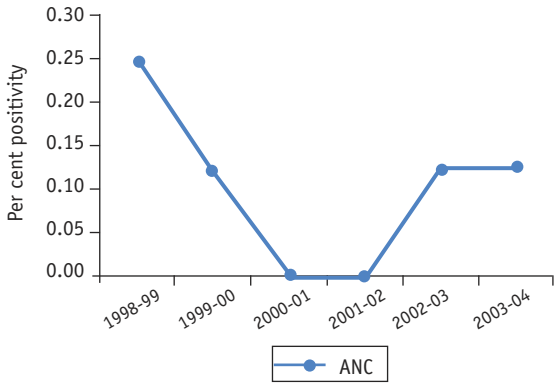
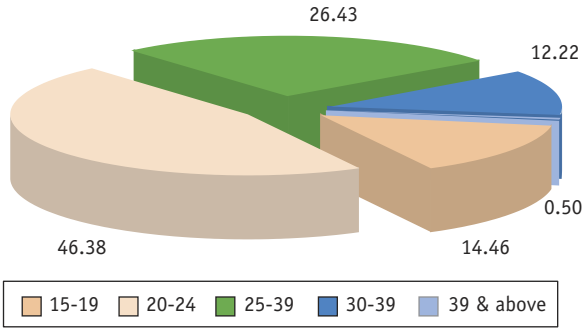


Fig 3: **Age wise percentage distribution of attendees attending ANC clinics in Sikkim**



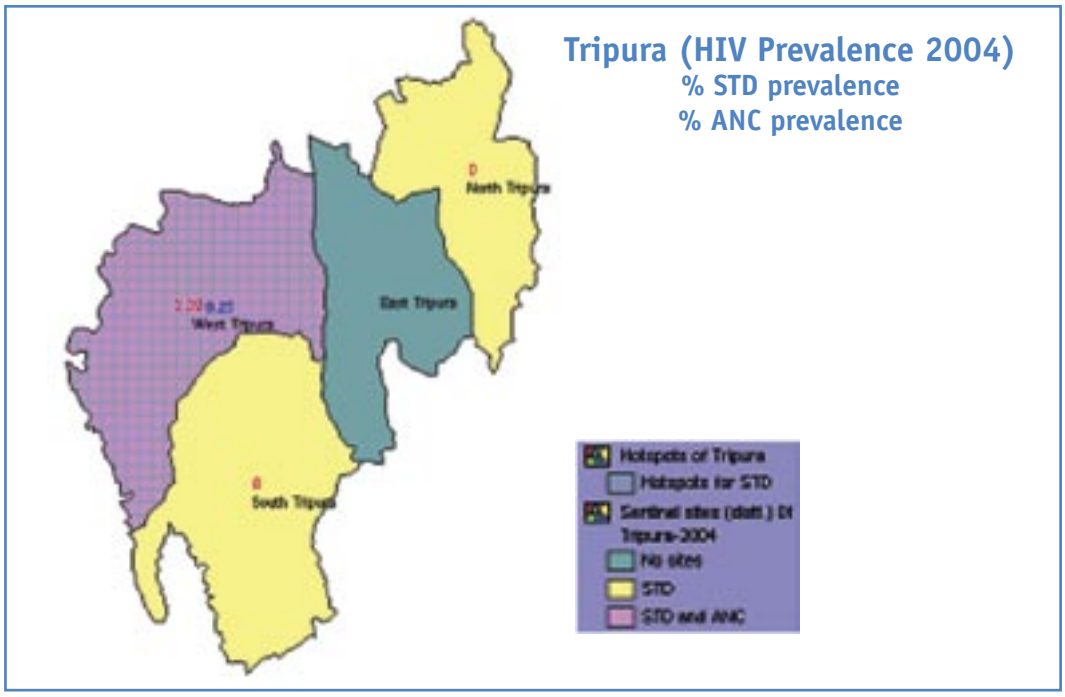
Antenatal mothers

Out of the 401 ANC mothers tested, 95% were urban residents. 64% women were in the 20-29 years age bracket. More than 55% of those tested were literate up to secondary level. The age wise distribution of the ANC clinic attendees is shown in the following pie diagram. None of the tested ANC mothers were HIV positive. Three women were found positive for VDRL. with a positivity of 0.75%.

Conclusion & Recommendations

In 2004, the percent positivity among the VCTC attendees was 1.02%, as compared to 1.47% in 2003. The percent positivity in the blood banks was 0.1% in both 2004 and 2003. Males from this state were apparently not utilising the STD services. Hence, IEC activities need to be strengthened so as to motivate males to access the STD clinics. The HIV infection is existent within the population though the prevalence is very low, and the situation demands more vigilance in the future.

Tripura



Introduction

Tripura is a low HIV prevalence state. Three STD and 1 ANC sites participated in the sentinel surveillance in 2004 (as shown in map). Data collection activities were performed satisfactorily.

Magnitude of problem

The median HIV prevalence in 2004 was 0.25% in antenatal women and 0.73% in STD patients. There has been no significant change in HIV prevalence from the last year. Both, ANC women and STD patients, showed a stable trend. Agartala with 2% positivity was the hotspot for STD.

Fig 1: **Age wise percentage distribution of male attendees attending STD clinics in Tripura**

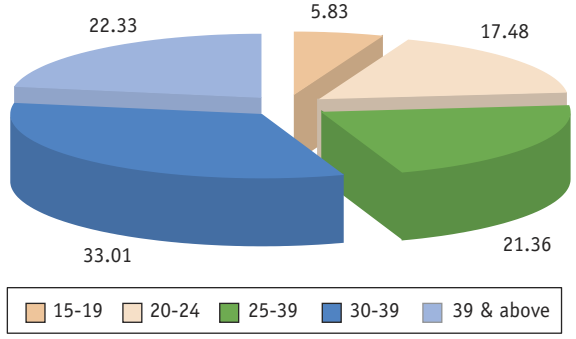


Fig 2: **HIV Trends in Tripura**

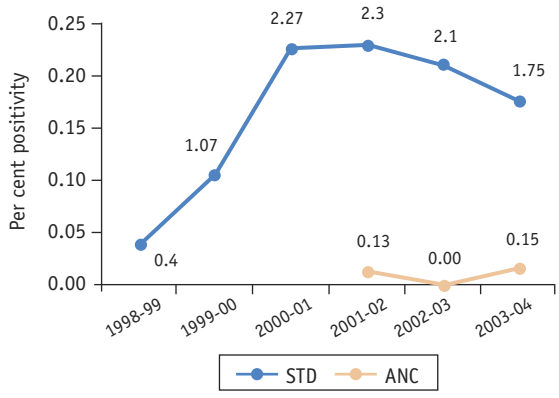


Fig 3: **HIV Trends in Agartalla**

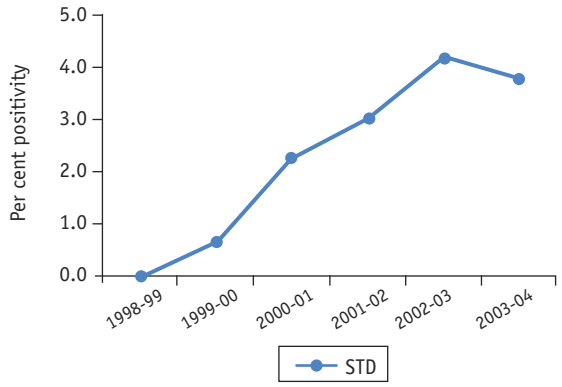
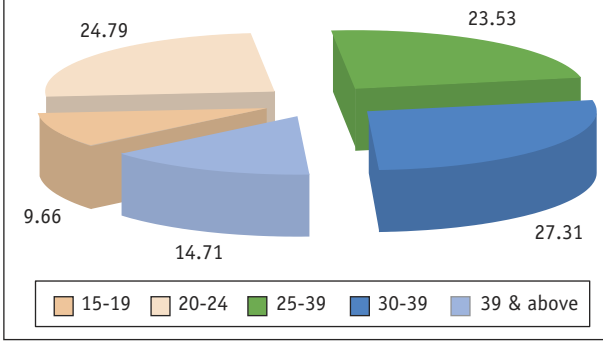


Fig 4: **Age wise percentage distribution of female attendees attending STD clinics in Tripura**



The map of Tripura shows that the maximum prevalence was in West Tripura.

Profile of HIV Positives

STD patients

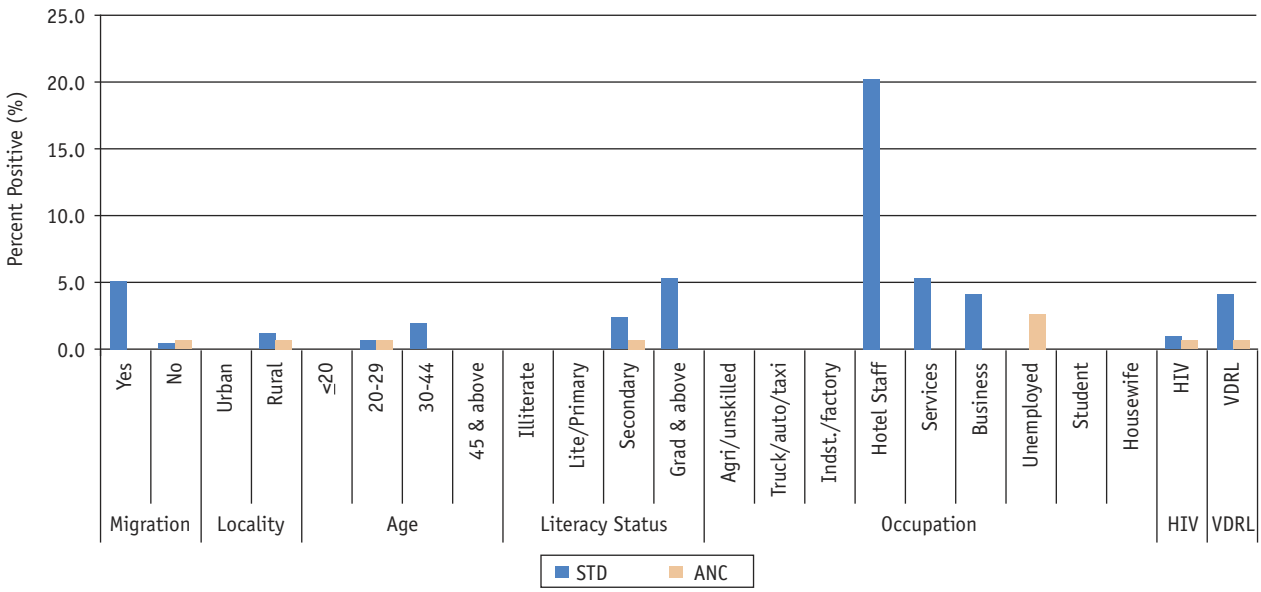
The overall HIV prevalence was 0.73% among the 682 STD patients tested. Most of those tested were rural (nearly 83%) and women out-numbered men among those tested. The positivity among urban residents was found to be zero, while it was 0.91% for rural residents. Migrants were more likely to be positive than non-migrants with positivity at 4.7% and 0.2% respectively. Though the number of women tested was more than that of men, positivity was higher in men 0.21% and 1.94% respectively.

The highest positivity was found in those in 30-44 years age group (at 1.5%) and in secondary level literates at 2.09%. Occupation wise, positivity was highest among those in service at 5.085 positivity. And all the five positives were sufferers of genital ulcers with positivity at 2.3%. 7.28% males and 2.31% females were found VDRL positive. None were found positive for both HIV and VDRL.

Antenatal mothers

The HIV prevalence amongst ANC mothers was 0.25%. More than 65% of the mothers tested were rural residents and more than half were in the age group of 20-29 years and were secondary level educated. The solitary female found positive was a rural woman in the age group of 20-29 years, educated up to

Fig 6: **HIV Prevalence by Socio-demographic characteristics in Tripura**

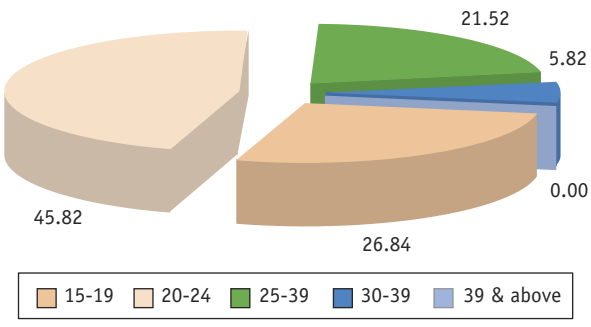


secondary level and her husband was unemployed. None of the migrant ANC mothers were tested during this round of surveillance.

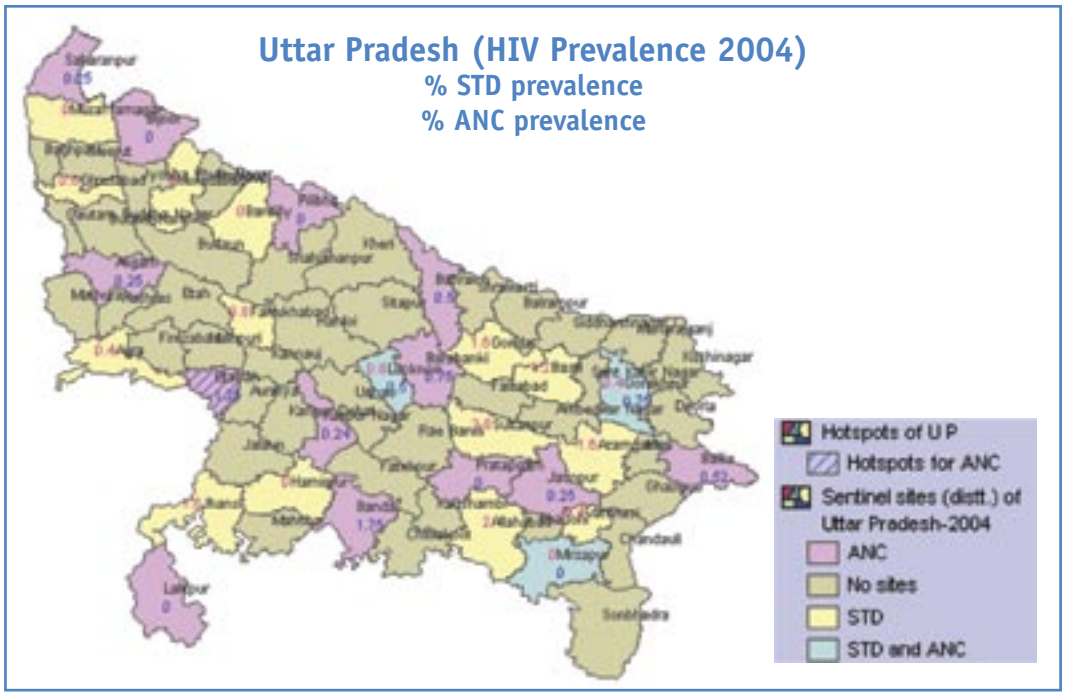
Conclusion & Recommendations

Widespread awareness about HIV should be created in all sections of the society. Large-scale IEC activities for the general population and behaviour change communication for high-risk groups are needed to prevent the spread of the epidemic in Tripura. Male participation in STD clinics needs to be enhanced. Among the VCTC attendees of Tripura, the percent positivity was 4.64% in 2004 though zero in 2003. The corresponding figures in the blood banks were 0.1% and 0%. The sudden rise in HIV positivity in VCTCs indicates the presence of HIV in the population. The rural population in Tripura needs focused intervention measures, especially for the agricultural/unskilled workers and the industrial/ factory workers and migrants.

Fig 6: **Age wise percentage distribution of female attendees attending STD clinics in Tripura**



Uttar Pradesh



Introduction

Uttar Pradesh is a low prevalence state. There were 36 sentinel sites in the state. 17 STD, 16 ANC and 3 FSW (TI) sites participated in the 2004 round of sentinel surveillance (state map). The median HIV percent prevalence for STD was 0.80%, which is less than the figure for the last year. While the median HIV percent prevalence for ANC has shown an increase from 0% in 2003 to 0.25% this year. The mean HIV percent prevalence for FSW (TI) sites has shown a significant decrease from the last year (2.42% in 2004, as compared to 6.48% in 2003).

Fig 1: St 29. **HIV Trends in Uttar Pradesh**

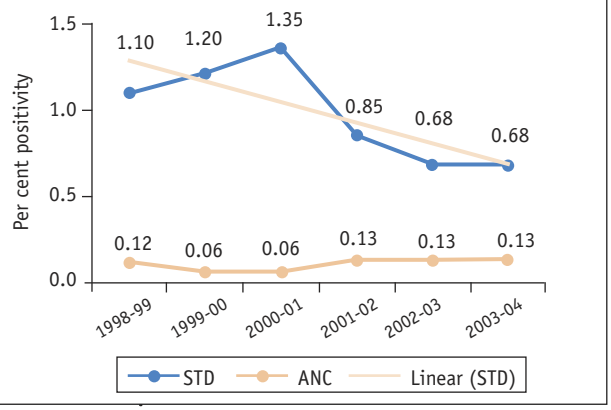
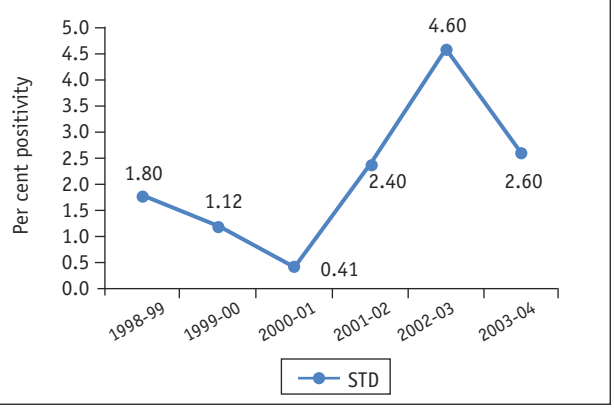


Fig 2: **HIV Trends in Varanasi**



Magnitude of problem

Etawah (1.3%) was the ANC "hotspot." Both Lalitpur and Mirzapur showed a significant decrease from the last year, and the STD site of Varanasi showed a decreasing trend compared to last year.

Profile of HIV positives

The core risk groups (FSWs)

The FSWs in Uttar Pradesh were included in this round of surveillance and 700 were tested. The age wise distribution is shown in figure 1. 97% of the tested FSWs were urban residents with HIV percent positivity at 8.25%. None of the rural residents was found positive. Moreover, amongst the urban residents, the migrants had around 2 ½ times higher positivity as compared to non-migrants (12.0% and 5.1% respectively) Age wise, the highest positivity was found in the age group of 20-29 years (7.6%). Positivity was highest among the illiterates (10.2%) during this round of surveillance.

STD Patients

2328 males and 1904 females were tested and the age wise distributions of these two populations have been depicted in figures 2and 3.

The aggregate percent positivity was 0.85%. HIV positivity was much higher in male STD patients (1.33%) as compared to female STD patients (0.26%). Positivity for male STD patients was higher in the rural areas (1.79%). For female patients, positivity was equally distributed in urban and rural areas at 0.27% and 0.25% respectively. It was interesting to note that

Fig 3: **Age wise percentage distribution of the tested FSWs in Uttar Pradesh**

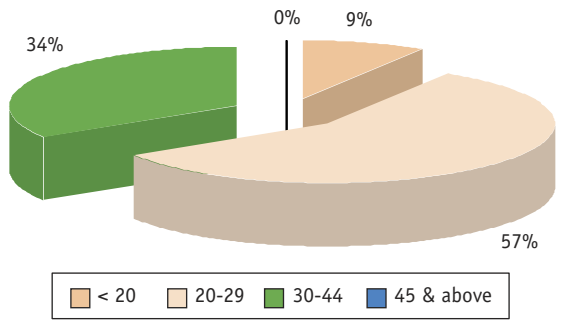


Fig 4: **Age wise percentage distribution of the tested male STD patients in Uttar Pradesh**

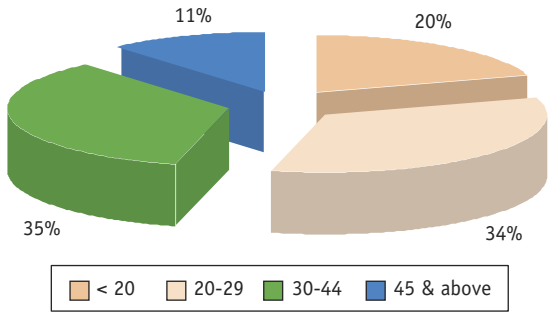


Fig 5: **HIV Prevalence by Socio-demographic characteristics in Uttar Pradesh**

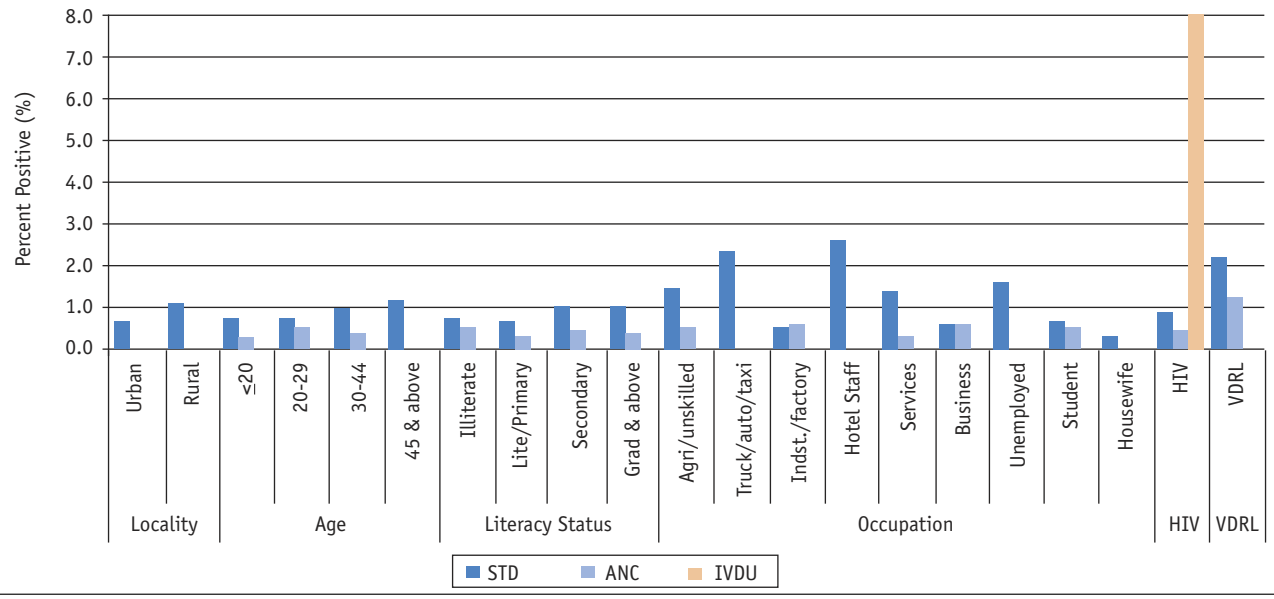
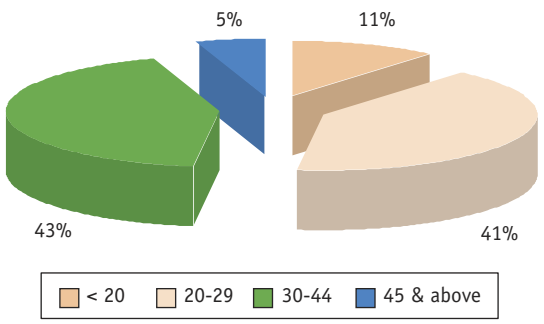
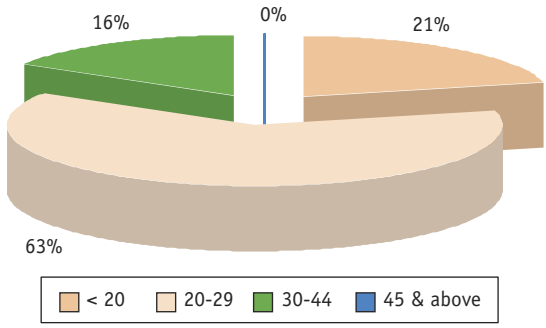


Fig 6: **Age wise percentage distribution of the tested female STD patients in Uttar Pradesh**



the HIV percent positivity increased with increase in age and it was highest amongst the 45 yrs and above age group at 1.18%.Educaton had no positive role as all the classes had HIV positivity though it was highest amongst secondary level literates. Occupation wise, it was found that among the males though the maximum 631 attendees were agricultural/unskilled workers,yet the highest positivity was amongst the hotel staff(2.63%). Among the female patients, 1704 housewives had highest positivity at 0.29% during this round of surveillanceFemale STD patients with genital ulcers showed the positivity at 2.76%. VDRL positivity was 2.13% and 0.02% was positive for both HIV and VDRL.

Fig 7: **Age wise percentage distribution of the tested ANC mothers in Uttar Pradesh**



Antenatal mothers

Figure 4 depicts the age wise distribution. A total of 6359 ANC mothers were tested and these included wives of 2621 agricultural/unskilled workers, besides other categories of occupation.

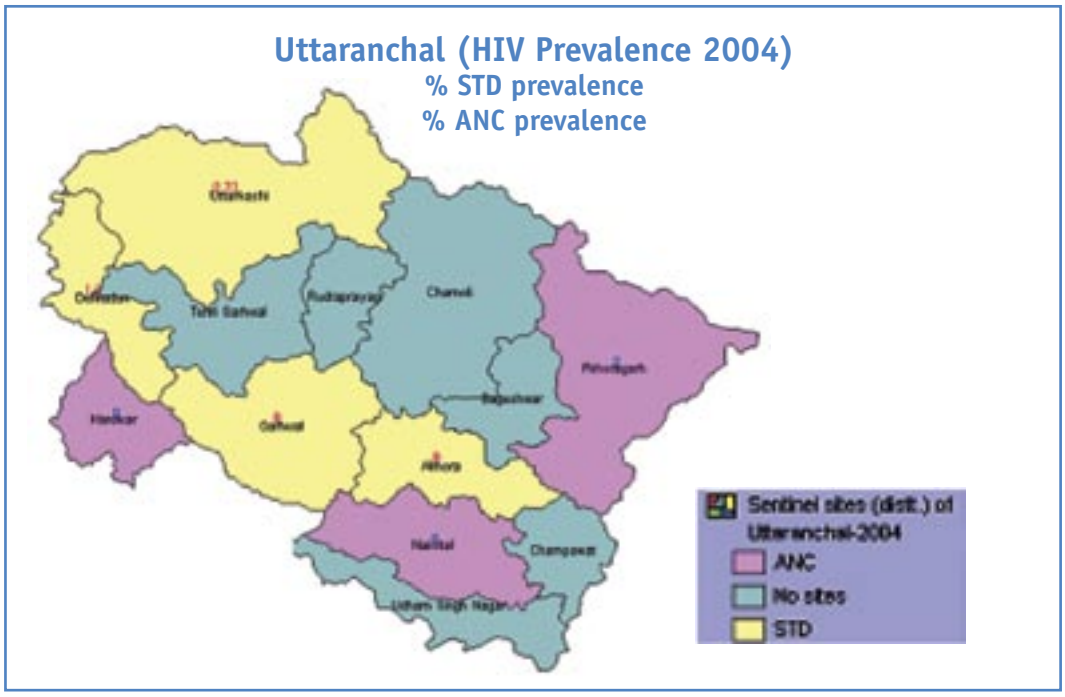
The aggregate percent positivity was 0.44% amongst antenatal women. The urban and rural positivity was almost the same. Migratory urban antenatal women showed the maximum positivity (0.66%). In urban areas, the maximum positivity was shown by the age group of 30-44 years (0.81%). Whereas in rural areas, the maximum positivity was in the age group of 20-29 years (0.57%). In urban areas, illiterate ANC mothers showed the maximum positivity (0.70%, while in rural areas, clinic attendees with secondary level education showed the maximum positivity (0.60%). In urban areas, agricultural/unskilled workers showed the maximum positivity (0.86%), while in rural areas, industrial/factory workers had the maximum positivity (0.92%). Overall VDRL positivity was 1.2% and HIV & VDRL positivity was 0.03%.

Conclusion & Recommendations:

Uttar Pradesh is still rated as a low prevalence state. Though this low prevalence presents a comforting picture, yet there are areas, which need to be treated with caution.

The percent positivity among the VCTC attendees was 8.0% in 2004 and 9.36% in 2003. Among those tested in the blood banks, the positivity was 0.1 % (2004) and 0.2% (2003).The migrant population in eastern UP should have Targetted intervention. Anti-HIV campaigns need to be stepped up so that HIV does not move out of the hotspots into other areas. More emphasis should be given to awareness generation, IEC activities, condom usage Behavioural surveiys are desirable to understand the sexual networks in this big state. Since Uttar Pradesh has a high illiterate population base, this also needs intervention from the social and education sector.

Uttaranchal



Introduction

Uttaranchal is one of the many **low prevalence states** in India. Four STD and three ANC sites were involved in surveillance activities in 2004 (map).

Magnitude of problem

The median HIV prevalence in the STD patients was 0.37% awas zero in antenatal clinic attendees. A very slight increase was seen for the STD patients at the state level.

The prevalence in STD patientshad been decreasing since 2001, but increased from zero to 0.4% in 2004 (see graph).Dehradun became the Hotspot for STD with 1.2% prevalence.

Socio-demographic profile of HIV positives

STD Patients

The male: female ratio amongst HIV positive STD patients was 1:3. HIV positivity was more in migrants (0.62%) than in non-migrants (0.47%). Four STD patients were found positive out of the 798 tested and all of them were urban residences (1.05%

Fig 1: St 33. **HIV Trends in Uttaranchal**

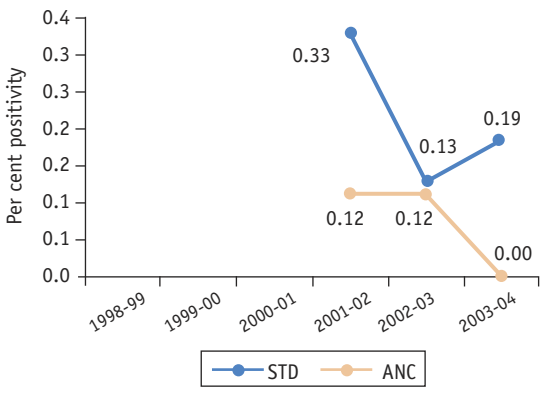
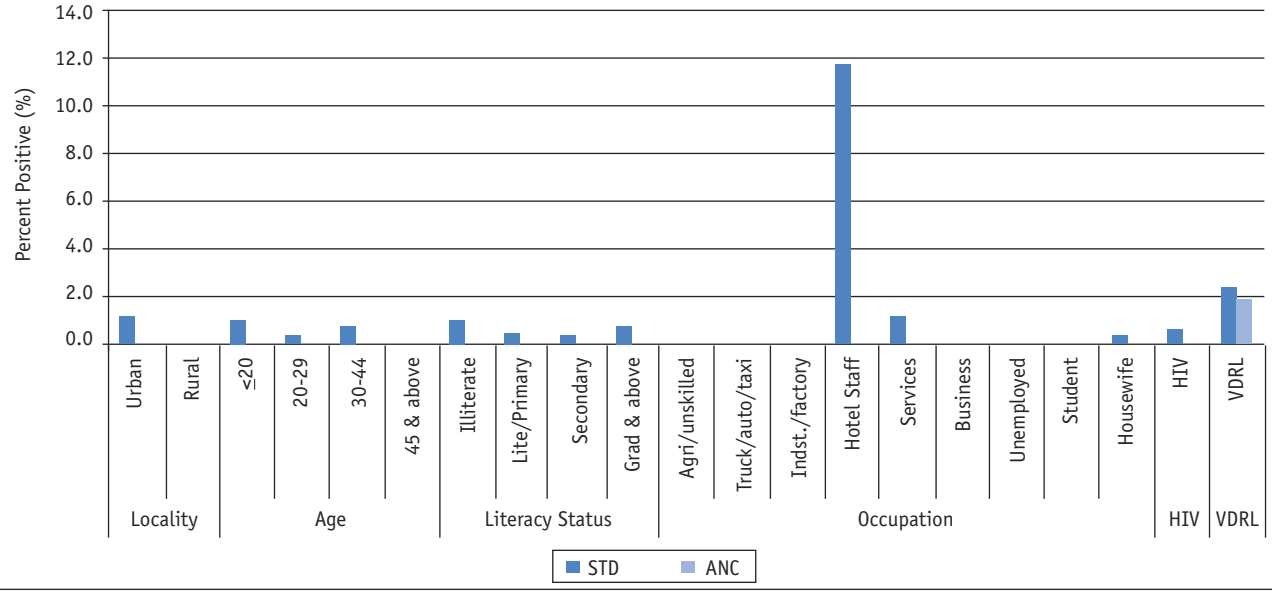


Fig 2: **HIV Prevalence by Socio-demographic characteristics in Uttaranchal**



positivity). Women were more likely to be positive than men in each age group though the highest positivity was in less than 20 year age group at 0.92%. The HIV positivity rate for illiterate STD patients was highest at 0.9%. Those working as hotel staff, from either sex, had the highest positivity (11.76%).Those with genital ulcer had highest positivity at 0.5% though. females had higher VDRL positivity (3.79%) as compared to males (0.93%).

Antenatal Mothers

The urban: rural ratio of HIV tested antenatal mothers was 1:0.46. No HIV positive case was found among antenatal clinic attendees. More than two third of antenatal mothers tested were in between 20-24 years of age and around 40% of tested were illiterate. VDRL positivity among urban mothers (1.73%) was more than that among rural mothers (1.60%).

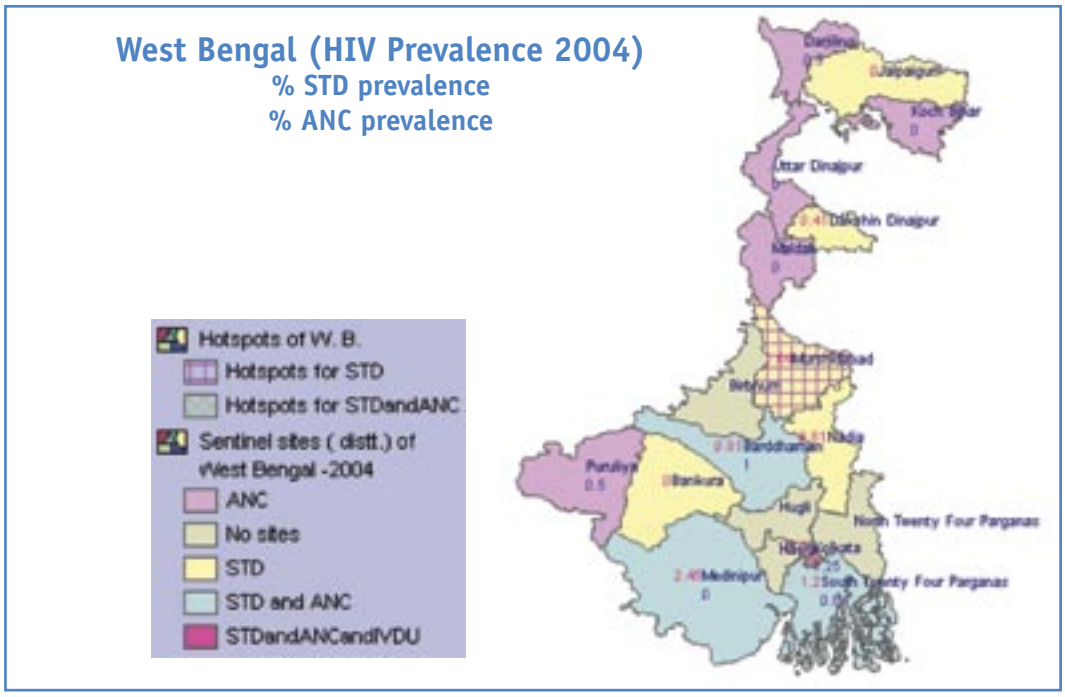
Conclusion & Recommendations

The males were apparently not attending STD clinics, as the majority tested in the clinics were women. In 2004, the percent positivity among the VCTC attendees was 3.14%, representing a sharp declined from 10.33% in 2002. The corresponding figure among those tested in the blood banks was 0.1% for the last three years. The low prevalence amongst male STD patients, as compared to the prevalence at VCTCs indicates underutilisation of STD clinics by males.

HIV prevalence being comparatively higher in illiterate STD patients, as compared to those who have some level of education, implies that impetus should be given to augment educational activities in the state, especially for girls. Although there is higher positivity among women, STD services should be improved so as to draw more male patients to STD clinics.

In nutshell, the sate needs to strengthen IEC activities, literacy campaigns and vigilant surveillance. besides focus on condom usage and health care utilisation amongst the masses.

West Bengal



Introduction

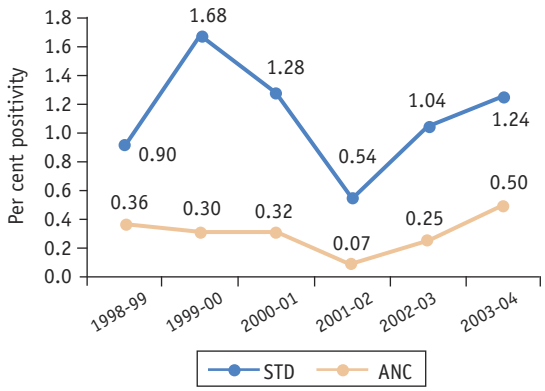
West Bengal is a low prevalence state. There were 29 sentinel sites in the 2004 round of sentinel surveillance, including 9 ANC, 10 STD, 1 IDU, 1 IDU (TI), 7 FSW (TI) & 1 MSM (TI) sites (state map). The overall quality of the data was satisfactory.

The median percent positivity was 0.50% for ANC, 0.88% for STD, and 3.60% for FSW (TI), while the mean percent positivity was 5.5% for IDU(T1) and 1.3% for MSM (TI).

Magnitude of problem

There has been a significant change in the HIV trend for STD in West Bengal from the last year: though for ANCs it has been a slightly upward trend. Kolkata had a high prevalence amongst STD patients (19.7%), and was also an **ANC hotspot** (1.3%) in 2004. A rising trend is now seen in the ANC and STD sites in the state. When consistent sites with more than 75% samples were considered, both STD patients and ANC women showed a rising trend.

Fig 1: **HIV Trends in West Bengal**



Profile of HIV Positives

STD Patients

A total of 976 male and 1392 female STD patients were screened for HIV during this round of surveillance. The aggregate percent positivity was 2.79%. The highest positivity was amongst the migratory population, males with 7.37% and females with 10.84%. Urban male and female patients outnumbered their rural counterparts, with the highest positivity seen in urban males (5.37%). Further, in male STD patients, the 30-44 years age group showed the highest positivity (5.61%),while in female STD patients, the 45 years and above age group showed the maximum positivity (4.08%). Significantly HIV prevalence was found highest in males (5.19%) as well as females (2.94%) in the graduation and above education bracket. Service class male patients showed the highest positivity (8.97%), and were closely followed by truck/auto/taxi/drivers/cleaners (8.79%). Females working as agricultural/unskilled workers workers showed the highest positivity (2.19%).(, moreover, housewives had a percent positivity of 2.13%. Genital ulcers were the most common syndromic presentation in male (5.26%) as well as female patients (2.63%). HIV positivity for male patients was 3.69%was higher than females (2.16%),.VDRL positivity was 6.25%, and HIV & VDRL positivity was 0.82% in males, while it was lower in females at 4.45% and 0.43% respective VDRL positivity was 4.45%, and HIV & VDRL positivity was 0.43%.

Antenatal Women

The age wise percentage distribution of ANC mothers tested has been represented in the adjoining figure. The aggregate percent positivity was 0.43% for antenatal mothers. In urban migrants, it was highest (1.45%), as compared to rural non-migrants (0.13%), where it was lowest. While analysing the age wise distribution of the urban population, the highest HIV positivity was seen in the age group of less than 20 yrs (0.74%). In rural areas, positivity was prominent in women aged between 20-29 years (0.27%). As regards the literacy status, the highest positivity was amongst literate females with secondary education in urban areas (0.78%), while in rural areas, the positive women were mostly illiterate (0.34%). In urban areas, antenatal mothers whose husbands were working in hotels showed the highest positivity (2.94%), followed by those who were unemployed (2.22%). In rural areas, antenatal mothers whose husbands were unemployed showed the maximum positivity (1.08%). HIV positivity was higher in urban as compared to rural residents at 4.3% and 1.9% respectively. This emphasises the importance of universalisation of

Fig 2: **HIV Trends in Kolkata**

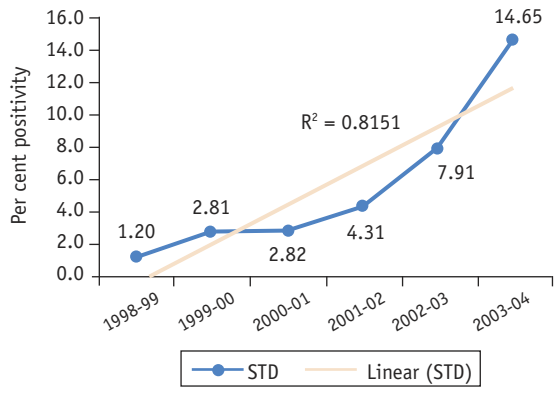


Fig 3: **Age wise percentage distribution of attendees attending ANC clinics in West Bengal**

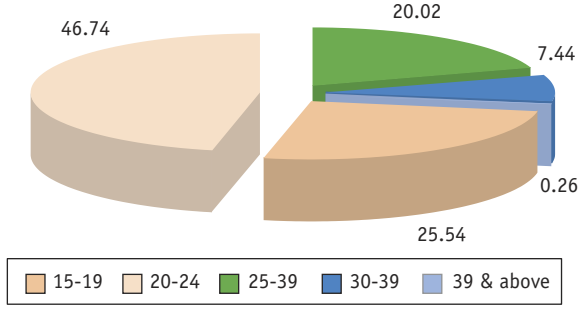


Fig 4: **HIV Trends in Kolkata**

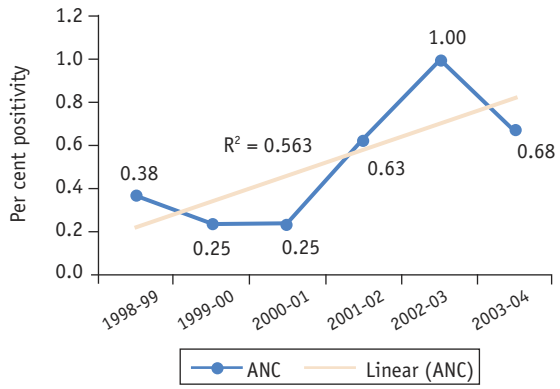
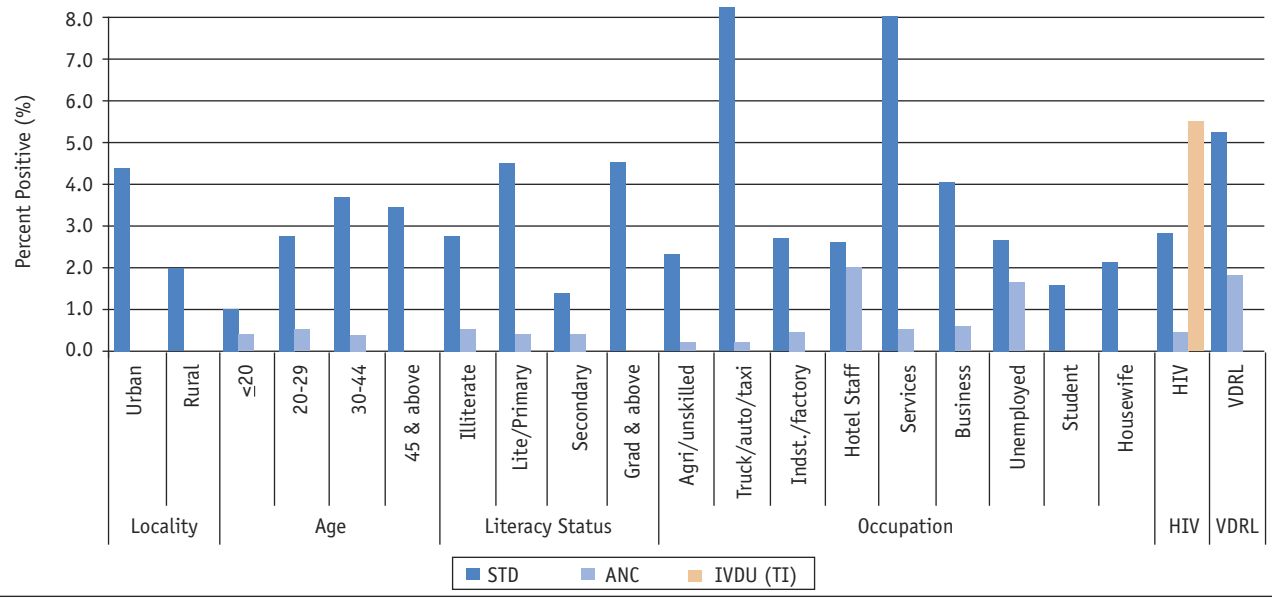


Fig 5: **HIV Prevalence by Socio-demographic characteristics in West Bengal**



condom use, especially in those groups, which are most vulnerable.

The Core risk groups (FSWs, IVDUs and MSMs)

A total of 1750 FSWs were tested. The maximum attendees were from the age group of 30-44 years though the highest positivity was at 45 years and above age group at 6.7%. The aggregate HIV percent positivity for FSW sites was (4.11%). The maximum positivity was seen amongst urban migrants (5.86%). Rural migrants showed a positivity of 5.22%. According to the literacy status, in urban and rural areas, the highest positivity was seen in those who had received up to secondary level education- 6.67% and 5.88%, respectively.

Intravenous drug users

A total of 225 IVDUs were tested during this round of surveillance. Only 5 of them tested positive, giving an aggregate percent positivity of 2.22%. 4 of them were illiterate (4.3%) and 3 of were agricultural/unskilled workers (3.0%).

In the IDU TI site a total of 219 IVDU patients were tested, out of whom, 12 were found positive. The aggregate percent positivity was 5.48% for the IVDU (TI) site. All the positives were nonmigrant males and were urban residents. This is compatible with the patterns seen in the regular IDU site. They were in the age group of 20-40 years with the maximum HIV positivity found in the age group of 20-29 years (8.33%). The maximum positivity was seen amongst primary level literates at 8.06%. moreover, occupation wise agricultural/unskilled worker (6.32%) had highest positivity.

MSMs

A total of 150 MSM patients were tested and 2 were found positive.the overall percent positivity was 1.3%. the rural resident MSMs had much higher positivity as compared to their urban counterparts (3.03% and 0.85% respectively).Moreover, both positives were truck drivers/cleaners, occupation wise. Out of the 2 who tested positive, one was urban and a migrant and the second was a rural non-migrant. Both positive MSMs were educated up to the primary level (2.56%).

Conclusion & Recommendations

In West Bengal, among the high-risk groups of FSWs, 32 out of the 72 who tested positive were migrants, and 2 of the MSM positives were truck drivers. Again, in the bridge population of STD patients, 16 of the 66 positives were migrants and 8 of them were truck drivers. Thus, even though the state has a low prevalent status, the above figures suggest that the potentiality of spread of the disease is quite high.

Migrants in all sectors and the truck drivers/cleaners are populations that need focused attention and action in the state.

In 2004, the rising trend in the STD and ANC groups with the percent positivity among the VCTC attendees at 10.62%, as compared to the STD positivity of 2.79%. indicates that the STD clinics are underutilised and more interventions should be started to prevent the state from being Low to concentrated HIV prevalence states. Again, among those tested in blood banks, the percent positivity was 0.3% in 2004 and 0.4% in 2003. demands constant vigilance. and intensive BCC campaigns.

Annexures

High-1 Prevalence States : (Andhra Pradesh, Maharashtra, Mumbai, Karnataka, Tamil Nadu)									
Table A1: HIV Status of STD Patients by sex & sociodemographic features.									
	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	778	161	20.69	513	81	15.79	1291	242	18.75
No	4740	769	16.22	3930	523	13.31	8670	1292	**14.90**
Total	5518	930	16.85	4443	604	13.59	9961	1534	15.40
Locality									
Urban	3027	485	16.02	2349	277	11.79	5376	762	14.17
Rural	2491	445	17.86	2094	327	15.62	4585	772	16.84
Total	**5518**	**930**	**16.85**	**4443**	**604**	**13.59**	**9961**	**1534**	**15.40**
Age									
≤ 20	466	31	6.65	507	55	10.85	973	86	8.84
20-29	1984	288	14.52	1743	248	14.23	3727	536	14.38
30-44	2329	493	21.17	1898	267	14.07	4227	760	17.98
45 & above	739	118	15.97	295	34	11.53	1034	152	14.70
Total	**5518**	**930**	**16.85**	**4443**	**604**	**13.59**	**9961**	**1534**	**15.40**
Literacy Status									
Illiterate	1124	235	20.91	1636	297	18.15	2760	532	19.28
Lit/Primary	1298	244	18.80	1331	154	11.57	2629	398	15.14
Secondary	2558	389	15.21	1337	144	10.77	3895	533	13.68
Graduation & aabove	538	62	11.52	139	9	6.47	677	71	10.49
Total	**5518**	**930**	**16.85**	**4443**	**604**	**13.59**	**9961**	**1534**	**15.40**
Occupation									
Agri/unskilled workers	2561	465	18.16	1335	245	18.35	3896	710	18.22
Truck/auto/taxi drivers/cleaners	659	152	23.07	68	11	16.18	727	163	22.42
Idust./factory workers	700	98	14.00	175	16	9.14	875	114	13.03
Hotel staff	245	50	20.41	28	3	10.71	273	53	19.41
Service	469	63	13.43	116	20	17.24	585	83	14.19
Business	397	61	15.37	61	11	18.03	458	72	15.72
Unemployed	193	31	16.06	68	12	17.65	261	43	16.48
Student	294	10	3.40	38	0	0.00	332	10	3.01
Housewife (N.A. for ANC)	0	0	0.00	2554	286	11.20	2554	286	11.20
Total	**5518**	**930**	**16.85**	**4443**	**604**	**13.59**	**9961**	**1534**	**15.40**
Syndromic Diagnosis									
Genital ulcer	3102	527	16.99	754	130	17.24	3856	657	17.04
Urethral-cervical discharge	1840	261	14.18	3120	375	12.02	4960	636	12.82
Both(genital-urethral discharge)	245	59	24.08	407	67	16.46	652	126	19.33
Genital warts	331	83	25.08	162	32	19.75	493	115	23.33
Total	**5518**	**930**	**16.85**	**4443**	**604**	**13.59**	**9961**	**1534**	**15.40**
HIV	5518	930	16.85	4443	604	13.59	9961	1534	15.40
VDRL	5518	290	5.26	4443	133	2.99	9961	423	4.25
HIV & VDRL	5518	108	1.96	4443	52	1.17	9961	160	1.61

High-1 Prevalence States : (Andhra Pradesh, Maharashtra, Mumbai, Karnataka, Tamil Nadu)									
Table A2: HIV Status of ANC Mothers by Place of Residence & sociodemographic features.									
		Urban			Rural			Total	
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	2862	43	1.50	3981	54	1.36	6843	97	1.42
No	20100	261	1.30	22658	294	1.30	42758	555	1.30
Total	**22962**	**304**	**1.32**	**26639**	**348**	**1.31**	**49601**	**652**	**1.31**
Age									
≤ 20	6517	61	0.94	8025	95	1.18	14542	156	1.07
20-29	14569	207	1.42	16567	217	1.31	31136	424	1.36
30-44	1873	35	1.87	2039	36	1.77	3912	71	1.82
45 & above	3	1	33.33	8	0	0.00	11	1	9.09
Total	**22962**	**304**	**1.32**	**26639**	**348**	**1.31**	**49601**	**652**	**1.31**
Literacy Status									
Illiterate	5762	115	2.00	7873	123	1.56	13635	238	1.75
Lit/Primary	5422	54	1.00	6570	71	1.08	11992	125	1.04
Secondary	10222	121	1.18	11383	146	1.28	21605	267	1.24
Graduation & aabove	1556	14	0.90	813	8	0.98	2369	22	0.93
Total	**22962**	**304**	**1.32**	**26639**	**348**	**1.31**	**49601**	**652**	**1.31**
Occupation									
Agri/unskilled workers	10587	133	1.26	18093	225	1.24	28680	358	1.25
Truck/auto/taxi drivers/cleaners	3300	73	2.21	2428	57	2.35	5728	130	2.27
Idust./factory workers	2480	26	1.05	2033	15	0.74	4513	41	0.91
Hotel staff	709	12	1.69	601	11	1.83	1310	23	1.76
Service	2458	23	0.94	1452	15	1.03	3910	38	0.97
Business	3165	33	1.04	1773	21	1.18	4938	54	1.09
Unemployed	225	3	1.33	215	2	0.93	440	5	1.14
Student	38	1	2.63	44	2	4.55	82	3	3.66
Total	**22962**	**304**	**1.32**	**26639**	**348**	**1.31**	**49601**	**652**	**1.31**
HIV	22962	304	1.32	26639	348	1.31	49601	652	1.31
VDRL	22962	213	0.93	26639	200	0.75	49601	413	0.83
HIV & VDRL	22962	34	0.15	26639	36	0.14	49601	70	0.14

High-1 Prevalence States : (Andhra Pradesh, Maharashtra, Mumbai, Karnataka, Tamil Nadu)

Table A3: HIV Status of ANC Rural Mothers by Place of Residence & sociodemographic features.

		Urban			Rural			Total	
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	2162	24	1.11	3902	37	0.95	6064	61	1.01
No	12212	144	1.18	25218	252	1.00	37430	396	1.06
Total	**14374**	**168**	**1.17**	**29120**	**289**	**0.99**	**43494**	**457**	**1.05**
Age									
≤ 20	4636	52	1.12	9140	92	1.01	13776	144	1.05
20-29	8952	107	1.20	18294	177	0.97	27246	284	1.04
30-44	781	9	1.15	1674	20	1.19	2455	29	1.18
45 & above	5	0	0.00	12	0	0.00	17	0	0.00
Total	**14374**	**168**	**1.17**	**29120**	**289**	**0.99**	**43494**	**457**	**1.05**
Literacy Status									
Illiterate	4467	58	1.30	9371	123	1.31	13838	181	1.31
Lit/Primary	3360	42	1.25	6950	66	0.95	10310	108	1.05
Secondary	5945	62	1.04	12139	98	0.81	18084	160	0.88
Graduation & aabove	602	6	1.00	660	2	0.30	1262	8	0.63
Total	**14374**	**168**	**1.17**	**29120**	**289**	**0.99**	**43494**	**457**	**1.05**
Occupation									
Agri/unskilled workers	7541	85	1.13	20550	188	0.91	28091	273	0.97
Truck/auto/taxi drivers/cleaners	1922	30	1.56	2268	31	1.37	4190	61	1.46
Idust./factory workers	1434	13	0.91	1912	21	1.10	3346	34	1.02
Hotel staff	351	6	1.71	480	6	1.25	831	12	1.44
Service	942	9	0.96	1483	15	1.01	2425	24	0.99
Business	1922	22	1.14	2102	27	1.28	4024	49	1.22
Unemployed	245	2	0.82	287	1	0.35	532	3	0.56
Student	17	1	5.88	38	0	0.00	55	1	1.82
Total	**14374**	**168**	**1.17**	**29120**	**289**	**0.99**	**43494**	**457**	**1.05**
HIV	14374	168	1.17	29120	289	0.99	43494	457	1.05
VDRL	14374	156	1.09	29120	262	0.90	43494	418	0.96
HIV & VDRL	14374	32	0.22	29120	35	0.12	43494	67	0.15

High-1 Prevalence States : (Andhra Pradesh, Maharashtra, Mumbai, Karnataka, Tamil Nadu)

Table A4: HIV Status of MSM Patients by Place of Residence & sociodemographic features.

		Urban			Rural			Total	
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	218	17	7.80	32	2	6.25	250	19	7.60
No	609	62	10.18	141	9	6.38	750	71	9.47
Total	**827**	**79**	**9.55**	**173**	**11**	**6.36**	**1000**	**90**	**9.00**
Age									
≤ 20	148	6	4.05	21	0	0.00	169	6	3.55
20-29	492	47	9.55	93	5	5.38	585	52	8.89
30-44	169	23	13.61	54	6	11.11	223	29	13.00
45 & above	18	3	16.67	5	0	0.00	23	3	13.04
Total	**827**	**79**	**9.55**	**173**	**11**	**6.36**	**1000**	**90**	**9.00**
Literacy Status									
Illiterate	54	13	24.07	31	2	6.45	85	15	17.65
Lit/Primary	158	21	13.29	58	7	12.07	216	28	12.96
Secondary	475	37	7.79	65	2	3.08	540	39	7.22
Graduation & aabove	140	8	5.71	19	0	0.00	159	8	5.03
Total	**827**	**79**	**9.55**	**173**	**11**	**6.36**	**1000**	**90**	**9.00**
Occupation									
Agri/unskilled workers	78	9	11.54	51	5	9.80	129	14	10.85
Truck/auto/taxi drivers/cleaners	53	2	3.77	12	1	8.33	65	3	4.62
Idust./factory workers	81	4	4.94	22	1	4.55	103	5	4.85
Hotel staff	78	9	11.54	22	1	4.55	100	10	10.00
Service	198	20	10.10	6	1	16.67	204	21	10.29
Business	94	7	7.45	16	0	0.00	110	7	6.36
Unemployed	184	26	14.13	24	0	0.00	208	26	12.50
Student	61	2	3.28	20	2	10.00	81	4	4.94
Total	**827**	**79**	**9.55**	**173**	**11**	**6.36**	**1000**	**90**	**9.00**
HIV	827	79	9.55	173	11	6.36	1000	90	9.00
VDRL	827	43	5.20	173	8	4.62	1000	51	5.10
HIV & VDRL	827	14	1.69	173	3	1.73	1000	17	1.70

High-1 Prevalence States : (Andhra Pradesh, Maharashtra, Mumbai, Karnataka, Tamil Nadu)

Table A5: HIV Status of MSM TI Patients by Place of Residence & sociodemographic features.

		Urban			Rural			Total	
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	123	10	8.13	8	2	25.00	131	12	9.16
No	237	37	15.61	132	16	12.12	369	53	14.36
Total	**360**	**47**	**13.06**	**140**	**18**	**12.86**	**500**	**65**	**13.00**
Age									
≤ 20	81	1	1.23	10	0	0.00	91	1	1.10
20-29	147	25	17.01	58	12	20.69	205	37	18.05
30-44	114	18	15.79	57	5	8.77	171	23	13.45
45 & above	18	3	16.67	15	1	6.67	33	4	12.12
Total	**360**	**47**	**13.06**	**140**	**18**	**12.86**	**500**	**65**	**13.00**
Literacy Status									
Illiterate	95	13	13.68	57	5	8.77	152	18	11.84
Lit/Primary	138	14	10.15	34	2	5.88	172	16	9.30
Secondary	111	16	14.41	45	10	22.22	156	26	16.67
Graduation & aabove	16	4	25.00	4	1	25.00	20	5	25.00
Total	**360**	**47**	**13.06**	**140**	**18**	**12.86**	**500**	**65**	**13.00**
Occupation									
Agri/unskilled workers	130	20	15.38	61	6	9.84	191	26	13.61
Truck/auto/taxi drivers/cleaners	27	8	29.63	6	2	33.33	33	10	30.30
Idust./factory workers	31	3	9.68	4	0	0.00	35	3	8.57
Hotel staff	45	5	11.11	25	4	16.00	70	9	12.86
Service	25	2	8.00	15	2	13.33	40	4	10.00
Business	75	6	8.00	19	1	5.26	94	7	7.45
Unemployed	18	3	16.67	7	3	42.86	25	6	24.00
Student	9	0	0.00	3	0	0.00	12	0	0.00
Total	**360**	**47**	**13.06**	**140**	**18**	**12.86**	**500**	**65**	**13.00**
HIV	360	47	13.06	140	18	12.86	500	65	13.00
VDRL	360	17	4.72	140	8	5.71	500	25	5.00
HIV & VDRL	360	9	2.50	140	2	1.43	500	11	2.20

High-1 Prevalence States : (Andhra Pradesh, Maharashtra, Mumbai, Karnataka, Tamil Nadu)

Table A6: HIV Status of FSW Mothers by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	595	142	23.87	4	0	0.00	599	142	23.71
No	360	163	45.28	1	1	100.00	361	164	45.43
Total	**955**	**305**	**31.94**	**5**	**1**	**20.00**	**960**	**306**	**31.88**
Age									
≤ 20	65	21	32.31	1	0	0.00	66	21	31.82
20-29	420	149	35.48	0	0	0.00	420	149	35.48
30-44	443	122	27.54	4	1	25.00	447	123	27.52
45 & above	27	13	48.15	0	0	0.00	27	13	48.15
Total	**955**	**305**	**31.94**	**5**	**1**	**20.00**	**960**	**306**	**31.88**
Literacy Status									
Illiterate	713	269	37.73	4	1	25.00	717	270	37.66
Lit/Primary	135	24	17.78	1	0	0.00	136	24	17.65
Secondary	105	12	11.43	0	0	0.00	105	12	11.43
Graduation & aabove	2	0	0.00	0	0	0.00	2	0	0.00
Total	**955**	**305**	**31.94**	**5**	**1**	**20.00**	**960**	**306**	**31.88**
Occupation									
Female sex workers occu.	500	202	40.40	1	0	0.00	501	202	40.32
Agri/unskilled workers	454	103	22.69	4	1	25.00	458	104	22.71
House wife(na & anc)	1	0	0.00	0	0	0.00	1	0	0.00
Total	**955**	**305**	**31.94**	**5**	**1**	**20.00**	**960**	**306**	**31.88**
HIV	955	305	31.94	5	1	20.00	960	306	31.88
VDRL	955	170	17.80	5	3	60.00	960	173	18.02
HIV & VDRL	955	86	9.01	5	1	20.00	960	87	9.06

High-1 Prevalence States : (Andhra Pradesh, Maharashtra, Mumbai, Karnataka, Tamil Nadu)

Table A7: HIV Status of FSW TI Mothers by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	374	67	17.91	236	66	27.97	610	133	21.80
No	1062	151	14.22	328	67	20.43	1390	218	15.68
Total	1436	218	15.18	564	133	23.58	2000	351	17.55
Age									
≤ 20	162	20	12.35	126	35	27.78	288	55	19.10
20-29	484	79	16.32	250	49	19.60	734	128	17.44
30-44	732	114	15.57	176	47	26.70	908	161	17.73
45 & above	58	5	8.62	12	2	16.67	70	7	10.00
Total	**1436**	**218**	**15.18**	**564**	**133**	**23.58**	**2000**	**351**	**17.55**
Literacy Status									
Illiterate	1106	171	15.46	453	101	22.30	1559	272	17.45
Lit/Primary	188	24	12.77	80	22	27.50	268	46	17.16
Secondary	138	23	16.67	30	10	33.33	168	33	19.64
Graduation & aabove	4	0	0.00	1	0	0.00	5	0	0.00
Total	**1436**	**218**	**15.18**	**564**	**133**	**23.58**	**2000**	**351**	**17.55**
Occupation									
Female sex workers occu.	1432	217	15.15	564	133	23.58	1996	350	17.54
Agri/unskilled workers	3	1	33.33	0	0	0.00	3	1	33.33
Truck/auto/taxi drivers etc.	1	0	0.00	0	0	0.00	1	0	0.00
Total	**1436**	**218**	**15.18**	**564**	**133**	**23.58**	**2000**	**351**	**17.55**
HIV	1436	218	15.18	564	133	23.58	2000	351	17.55
VDRL	1436	127	8.84	564	57	10.11	2000	184	9.20
HIV & VDRL	1436	53	3.69	564	32	5.67	2000	85	4.25

High-1 Prevalence States : (Andhra Pradesh, Maharashtra, Mumbai, Karnataka, Tamil Nadu)

Table A8: HIV Status of IVDU Patients by Sex & sociodemographic features.

	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	175	58	33.14	6	0	0.00	181	58	32.04
No	343	116	33.82	3	0	0.00	346	116	33.53
Total	**518**	**174**	**33.59**	**9**	**0**	**0.00**	**527**	**174**	**33.02**
Locality									
Urban	515	174	33.79	9	0	0.00	524	174	33.21
Rural	3	0	0.00	0	0	0.00	3	0	0.00
Total	**518**	**174**	**33.59**	**9**	**0**	**0.00**	**527**	**174**	**33.02**
Age									
≤ 20	42	9	21.43	3	0	0.00	45	9	20.00
20-29	171	61	35.67	2	0	0.00	173	61	35.26
30-44	278	98	35.25	4	0	0.00	282	98	34.75
45 & above	27	6	22.22	0	0	0.00	27	6	22.22
Total	**518**	**174**	**33.59**	**9**	**0**	**0.00**	**527**	**174**	**33.02**
Literacy Status									
Illiterate	187	69	36.90	6	0	0.00	193	69	35.75
Lit/Primary	181	69	38.12	1	0	0.00	182	69	37.91
Secondary	131	35	26.72	1	0	0.00	132	35	26.52
Graduation & aabove	19	1	5.26	1	0	0.00	20	1	5.00
Total	**518**	**174**	**33.59**	**9**	**0**	**0.00**	**527**	**174**	**33.02**
Occupation									
Agri/unskilled workers	318	117	36.79	1	0	0.00	319	117	36.68
Truck/auto/taxi drivers/cleaners	57	17	29.82	0	0	0.00	57	17	29.82
Idust./factory workers	42	15	35.71	0	0	0.00	42	15	35.71
Hotel staff	3	2	66.67	0	0	0.00	3	2	66.67
Service	20	3	15.00	0	0	0.00	20	3	15.00
Business	37	9	24.32	6	0	0.00	43	9	20.93
Unemployed	41	11	26.83	0	0	0.00	41	11	26.83
Student	0	0	0.00	1	0	0.00	1	0	0.00
Housewife (N.A. for ANC)	0	0	0.00	1	0	0.00	1	0	0.00
Total	**518**	**174**	**33.59**	**9**	**0**	**0.00**	**527**	**174**	**33.02**
HIV	518	174	33.59	9	0	0.00	527	174	33.02
VDRL	518	32	6.18	9	3	33.33	527	35	6.64
HIV & VDRL	518	10	1.93	9	0	0.00	527	10	1.90

High-1 Prevalence States : (Andhra Pradesh, Maharashtra, Mumbai, Karnataka, Tamil Nadu)

Table A9: HIV Status of TB Patients by Sex & sociodemographic features.

	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	81	17	20.99	32	3	9.38	113	20	17.70
No	1077	114	10.59	584	39	6.68	1661	153	9.21
Total	**1158**	**131**	**11.31**	**616**	**42**	**6.82**	**1774**	**173**	**9.75**
Locality									
Urban	638	78	12.23	347	24	6.92	985	102	10.36
Rural	520	53	10.19	269	18	6.69	789	71	9.00
Total	**1158**	**131**	**11.31**	**616**	**42**	**6.82**	**1774**	**173**	**9.75**
Age									
≤ 20	131	5	3.82	136	4	2.94	267	9	3.37
20-29	276	30	10.87	217	17	7.83	493	47	9.53
30-44	542	78	14.39	214	18	8.41	756	96	12.70
45 & above	209	18	8.61	49	3	6.12	258	21	8.14
Total	**1158**	**131**	**11.31**	**616**	**42**	**6.82**	**1774**	**173**	**9.75**
Literacy Status									
Illiterate	470	56	11.91	267	23	8.61	737	79	10.72
Lit/Primary	337	39	11.57	163	13	7.98	500	52	10.40
Secondary	308	35	11.36	168	5	2.98	476	40	8.40
Graduation & above	43	1	2.33	18	1	5.56	61	2	3.28
Total	**1158**	**131**	**11.31**	**616**	**42**	**6.82**	**1774**	**173**	**9.75**
Occupation									
Agri/unskilled workers	666	76	11.41	209	16	7.66	875	92	10.51
Truck/auto/taxi drivers/cleaners	64	8	12.50	3	1	33.33	67	9	13.43
Idust./factory workers	89	11	12.36	10	2	20.00	99	13	13.13
Hotel staff	22	5	22.73	0	0	0.00	22	5	22.73
Service	81	14	17.28	15	1	6.67	96	15	15.63
Business	80	11	13.75	7	2	28.57	87	13	14.94
Unemployed	109	6	5.50	67	4	5.97	176	10	5.68
Student	47	0	0.00	44	2	4.55	91	2	2.20
Housewife (N.A. for ANC)	0	0	0.00	261	14	5.36	261	14	5.36
Total	**1158**	**131**	**11.31**	**616**	**42**	**6.82**	**1774**	**173**	**9.75**
HIV	1158	131	11.31	616	42	6.82	1774	173	9.75
VDRL	1158	0	0.00	616	0	0.00	1774	0	0.00
HIV & VDRL	1158	0	0.00	616	0	0.00	1774	0	0.00

High-2 Prevalence States : (Manipur, Nagaland)

Table B1: HIV Status of STD Patients by sex & sociodemographic features.

	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	37	2	5.41	8	1	12.50	45	3	6.67
No	186	9	4.84	502	28	5.58	688	37	5.38
Total	223	11	4.93	510	29	5.69	733	40	5.46
Locality									
Urban	127	3	2.36	278	22	7.91	405	25	6.17
Rural	96	8	8.33	232	7	3.02	328	15	4.57
Total	**223**	**11**	**4.93**	**510**	**29**	**5.69**	**733**	**40**	**5.46**
Age									
≤ 20	23	2	8.70	61	5	8.20	84	7	8.33
20-29	94	2	2.13	178	10	5.62	272	12	4.41
30-44	87	7	8.05	240	13	5.42	327	20	6.12
45 & above	19	0	0.00	31	1	3.23	50	1	2.00
Total	**223**	**11**	**4.93**	**510**	**29**	**5.69**	**733**	**40**	**5.46**
Literacy Status									
Illiterate	19	2	10.53	108	7	6.48	127	9	7.09
Lit/Primary	65	3	4.62	135	6	4.44	200	9	4.50
Secondary	105	4	3.81	242	15	6.20	347	19	5.48
Graduation & aabove	34	2	5.88	25	1	4.00	59	3	5.08
Total	**223**	**11**	**4.93**	**510**	**29**	**5.69**	**733**	**40**	**5.46**
Occupation									
Agri/unskilled workers	56	6	10.71	33	1	3.03	89	7	7.87
Truck/auto/taxi drivers/cleaners	12	0	0.00	5	0	0.00	17	0	0.00
Idust./factory workers	11	0	0.00	6	0	0.00	17	0	0.00
Hotel staff	3	0	0.00	0	0	0.00	3	0	0.00
Service	43	1	2.33	16	1	6.25	59	2	3.39
Business	42	0	0.00	12	2	16.67	54	2	3.70
Unemployed	31	2	6.45	10	1	10.00	41	3	7.32
Student	25	2	8.00	33	2	6.06	58	4	6.90
Housewife (N.A. for ANC)	0	0	0.00	395	22	5.57	395	22	5.57
Total	**223**	**11**	**4.93**	**510**	**29**	**5.69**	**733**	**40**	**5.46**
Syndromic Diagnosis									
Genital ulcer	79	5	6.33	46	4	8.70	125	9	7.20
Urethral-cervical discharge	76	4	5.26	406	18	4.43	482	22	4.56
Both(genital-urethral discharge)	18	0	0.00	32	3	9.38	50	3	6.00
Genital warts	50	2	4.00	26	4	15.38	76	6	7.89
Total	**223**	**11**	**4.93**	**510**	**29**	**5.69**	**733**	**40**	**5.46**
HIV	223	11	4.93	510	29	5.69	733	40	5.46
VDRL	223	14	6.28	510	21	4.12	733	35	4.77
HIV & VDRL	223	0	0.00	510	3	0.59	733	3	0.41

High-2 Prevalence States : (Manipur, Nagaland)

Table B2: HIV Status of ANC Mothers by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	812	16	1.97	165	8	4.85	977	24	2.46
No	2766	47	1.70	2926	53	1.81	5692	100	1.76
Total	**3578**	**63**	**1.76**	**3091**	**61**	**1.97**	**6669**	**124**	**1.86**
Age									
≤ 20	676	7	1.04	532	14	2.63	1208	21	1.74
20-29	1854	39	2.10	1584	24	1.52	3438	63	1.83
30-44	1027	17	1.66	963	23	2.39	1990	40	2.01
45 & above	21	0	0.00	12	0	0.00	33	0	0.00
Total	**3578**	**63**	**1.76**	**3091**	**61**	**1.97**	**6669**	**124**	**1.86**
Literacy Status									
Illiterate	933	19	2.04	914	14	1.53	1847	33	1.79
Lit/Primary	633	11	1.74	674	14	2.08	1307	25	1.91
Secondary	1694	29	1.71	1320	25	1.89	3014	54	1.79
Graduation & aabove	318	4	1.26	183	8	4.37	501	12	2.40
Total	**3578**	**63**	**1.76**	**3091**	**61**	**1.97**	**6669**	**124**	**1.86**
Occupation									
Agri/unskilled workers	810	15	1.85	1319	26	1.97	2129	41	1.93
Truck/auto/taxi drivers/cleaners	272	5	1.84	160	2	1.25	432	7	1.62
Idust./factory workers	150	2	1.33	109	0	0.00	259	2	0.77
Hotel staff	16	0	0.00	12	0	0.00	28	0	0.00
Service	1186	25	2.11	654	17	2.60	1840	42	2.28
Business	668	7	1.05	341	5	1.47	1009	12	1.19
Unemployed	400	8	2.00	448	9	2.01	848	17	2.00
Student	76	1	1.32	48	2	4.17	124	3	2.42
Total	**3578**	**63**	**1.76**	**3091**	**61**	**1.97**	**6669**	**124**	**1.86**
HIV	3578	63	1.76	3091	61	1.97	6669	124	1.86
VDRL	3578	187	5.23	3091	98	3.17	6669	285	4.27
HIV & VDRL	3578	11	0.31	3091	4	0.13	6669	15	0.23

High-2 Prevalence States : (Manipur, Nagaland)

Table B3: HIV Status of ANC Rural Mothers by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	17	0	0.00	125	3	2.40	142	3	2.11
No	256	5	1.95	2860	41	1.43	3116	46	1.48
Total	**273**	**5**	**1.83**	**2985**	**44**	**1.47**	**3258**	**49**	**1.50**
Age									
≤ 20	38	2	5.26	446	17	3.81	484	19	3.93
20-29	140	0	0.00	1539	20	1.30	1679	20	1.19
30-44	95	3	3.16	974	7	0.72	1069	10	0.94
45 & above	0	0	0.00	26	0	0.00	26	0	0.00
Total	**273**	**5**	**1.83**	**2985**	**44**	**1.47**	**3258**	**49**	**1.50**
Literacy Status									
Illiterate	33	1	3.03	1070	15	1.40	1103	16	1.45
Lit/Primary	57	1	1.75	670	13	1.94	727	14	1.93
Secondary	133	2	1.50	1059	13	1.23	1192	15	1.26
Graduation & aabove	50	1	2.00	186	3	1.61	236	4	1.70
Total	**273**	**5**	**1.83**	**2985**	**44**	**1.47**	**3258**	**49**	**1.50**
Occupation									
Agri/unskilled workers	122	3	2.46	1901	34	1.79	2023	37	1.83
Truck/auto/taxi drivers/cleaners	13	1	7.69	145	0	0.00	158	1	0.63
Idust./factory workers	19	0	0.00	108	1	0.93	127	1	0.79
Hotel staff	1	1	100.00	23	0	0.00	24	1	4.17
Service	74	0	0.00	380	5	1.32	454	5	1.10
Business	31	0	0.00	226	1	0.44	257	1	0.39
Unemployed	13	0	0.00	186	3	1.61	199	3	1.51
Student	0	0	0.00	16	0	0.00	16	0	0.00
Total	**273**	**5**	**1.83**	**2985**	**44**	**1.47**	**3258**	**49**	**1.50**
HIV	273	5	1.83	2985	44	1.47	3258	49	1.50
VDRL	273	18	6.59	2985	195	6.53	3258	213	6.54
HIV & VDRL	273	0	0.00	2985	9	0.30	3258	9	0.28

High-2 Prevalence States : (Manipur, Nagaland)

Table B4: HIV Status of MSM Patients by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	26	6	23.08	8	2	25.00	34	8	23.53
No	122	20	16.39	94	7	7.45	216	27	12.50
Total	**148**	**26**	**17.57**	**102**	**9**	**8.82**	**250**	**35**	**14.00**
Age									
≤ 20	29	0	0.00	22	1	4.55	51	1	1.96
20-29	75	9	12.00	59	6	10.17	134	15	11.19
30-44	42	16	38.10	20	2	10.00	62	18	29.03
45 & above	2	1	50.00	1	0	0.00	3	1	33.33
Total	**148**	**26**	**17.57**	**102**	**9**	**8.82**	**250**	**35**	**14.00**
Literacy Status									
Illiterate	4	1	25.00	6	0	0.00	10	1	10.00
Lit/Primary	7	1	14.29	10	4	40.00	17	5	29.41
Secondary	89	12	13.48	60	5	8.33	149	17	11.41
Graduation & aabove	48	12	25.00	26	0	0.00	74	12	16.22
Total	**148**	**26**	**17.57**	**102**	**9**	**8.82**	**250**	**35**	**14.00**
Occupation									
Agri/unskilled workers	4	0	0.00	10	1	10.00	14	1	7.14
Truck/auto/taxi drivers/cleaners	7	0	0.00	3	3	100.00	10	3	30.00
Idust./factory workers	15	1	6.67	8	0	0.00	23	1	4.35
Hotel staff	2	1	50.00	6	0	0.00	8	1	12.50
Service	17	8	47.06	5	0	0.00	22	8	36.36
Business	31	11	35.48	20	2	10.00	51	13	25.49
Unemployed	14	3	21.43	11	1	9.09	25	4	16.00
Student	58	2	3.45	39	2	5.13	97	4	4.12
Total	**148**	**26**	**17.57**	**102**	**9**	**8.82**	**250**	**35**	**14.00**
HIV	148	26	17.57	102	9	8.82	250	35	14.00
VDRL	148	2	1.35	102	6	5.88	250	8	3.20
HIV & VDRL	148	0	0.00	102	3	2.94	250	3	1.20

High-2 Prevalence States : (Manipur, Nagaland)

Table B5: HIV Status of FSW Mothers by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	27	8	29.63	21	8	38.10	48	16	33.33
No	58	6	10.34	144	9	6.25	202	15	7.43
Total	85	14	16.47	165	17	10.30	250	31	12.40
Age									
≤ 20	16	0	0.00	45	2	4.44	61	2	3.28
20-29	31	5	16.13	59	6	10.17	90	11	12.22
30-44	37	8	21.62	58	9	15.52	95	17	17.89
45 & above	1	1	100.00	3	0	0.00	4	1	25.00
Total	85	14	16.47	165	17	10.30	250	31	12.40
Literacy Status									
Illiterate	28	5	17.86	40	1	2.50	68	6	8.82
Lit/Primary	17	6	35.29	41	5	12.20	58	11	18.97
Secondary	34	2	5.88	74	11	14.86	108	13	12.04
Graduation & aabove	6	1	16.67	10	0	0.00	16	1	6.25
Total	85	14	16.47	165	17	10.30	250	31	12.40
Occupation									
Female sex workers occu.	85	14	16.47	165	17	10.30	250	31	12.40
Total	85	14	16.47	165	17	10.30	250	31	12.40
HIV	85	14	16.47	165	17	10.30	250	31	12.40
VDRL	85	8	9.41	165	12	7.27	250	20	8.00
HIV & VDRL	85	4	4.71	165	3	1.82	250	7	2.80

High-2 Prevalence States : (Manipur, Nagaland)

Table B6: HIV Status of FSW TI Mothers by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	229	9	3.93	5	0	0.00	234	9	3.85
No	13	2	15.38	1	0	0.00	14	2	14.29
Total	**242**	**11**	**4.55**	**6**	**0**	**0.00**	**248**	**11**	**4.44**
Age									
≤ 20	83	1	1.20	0	0	0.00	83	1	1.20
20-29	83	9	10.84	1	0	0.00	84	9	10.71
30-44	66	0	0.00	5	0	0.00	71	0	0.00
45 & above	10	1	10.00	0	0	0.00	10	1	10.00
Total	**242**	**11**	**4.55**	**6**	**0**	**0.00**	**248**	**11**	**4.44**
Literacy Status									
Illiterate	189	6	3.17	6	0	0.00	195	6	3.08
Lit/Primary	47	3	6.38	0	0	0.00	47	3	6.38
Secondary	5	2	40.00	0	0	0.00	5	2	40.00
Graduation & aabove	1	0	0.00	0	0	0.00	1	0	0.00
Total	**242**	**11**	**4.55**	**6**	**0**	**0.00**	**248**	**11**	**4.44**
Occupation									
Agri/unskilled workers	3	0	0.00	1	0	0.00	4	0	0.00
Truck/auto/taxi drivers etc.	20	0	0.00	0	0	0.00	20	0	0.00
House wife(na & anc)	219	11	5.02	5	0	0.00	224	11	4.91
Total	**242**	**11**	**4.55**	**6**	**0**	**0.00**	**248**	**11**	**4.44**
HIV	242	11	4.55	6	0	0.00	248	11	4.44
VDRL	242	29	11.98	6	2	33.33	248	31	12.50
HIV & VDRL	242	6	2.48	6	0	0.00	248	6	2.42

High-2 Prevalence States : (Manipur, Nagaland)

Table B7: HIV Status of IVDU Patients by Sex & sociodemographic features.

	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	182	22	12.09	27	3	11.11	209	25	11.96
No	1440	210	14.58	92	9	9.78	1532	219	14.30
Total	**1622**	**232**	**14.30**	**119**	**12**	**10.08**	**1741**	**244**	**14.02**
Locality									
Urban	1025	152	14.83	81	8	9.88	1106	160	14.47
Rural	597	80	13.40	38	4	10.53	635	84	13.23
Total	**1622**	**232**	**14.30**	**119**	**12**	**10.08**	**1741**	**244**	**14.02**
Age									
≤ 20	199	13	6.53	25	1	4.00	224	14	6.25
20-29	890	133	14.94	48	8	16.67	938	141	15.03
30-44	504	81	16.07	41	3	7.32	545	84	15.41
45 & above	29	5	17.24	5	0	0.00	34	5	14.71
Total	**1622**	**232**	**14.30**	**119**	**12**	**10.08**	**1741**	**244**	**14.02**
Literacy Status									
Illiterate	123	7	5.69	31	0	0.00	154	7	4.55
Lit/Primary	476	68	14.29	57	7	12.28	533	75	14.07
Secondary	859	135	15.72	29	4	13.79	888	139	15.65
Graduation & aabove	164	22	13.41	2	1	50.00	166	23	13.86
Total	**1622**	**232**	**14.30**	**119**	**12**	**10.08**	**1741**	**244**	**14.02**
Occupation									
Agri/unskilled workers	371	71	19.14	22	0	0.00	393	71	18.07
Truck/auto/taxi drivers/cleaners	94	13	13.83	8	0	0.00	102	13	12.75
Idust./factory workers	32	3	9.38	1	0	0.00	33	3	9.09
Hotel staff	8	2	25.00	0	0	0.00	8	2	25.00
Service	85	12	14.12	12	1	8.33	97	13	13.40
Business	185	15	8.11	11	0	0.00	196	15	7.65
Unemployed	592	97	16.39	40	10	25.00	632	107	16.93
Student	255	19	7.45	16	0	0.00	271	19	7.01
Housewife (N.A. for ANC)	0	0	0.00	9	1	11.11	9	1	11.11
Total	**1622**	**232**	**14.30**	**119**	**12**	**10.08**	**1741**	**244**	**14.02**
HIV	1622	232	14.30	119	12	10.08	1741	244	14.02
VDRL	1622	129	7.95	119	24	20.17	1741	153	8.79
HIV & VDRL	1622	12	0.74	119	1	0.84	1741	13	0.75

High-2 Prevalence States : (Manipur, Nagaland)

Table B8: HIV Status of IVDU TI Patients by Sex & sociodemographic features.

	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	90	2	2.22	11	0	0.00	101	2	1.98
No	667	15	2.25	170	3	1.76	837	18	2.15
Total	757	17	2.25	181	3	1.66	938	20	2.13
Locality									
Urban	528	11	2.08	79	2	2.53	607	13	2.14
Rural	229	6	2.62	102	1	0.98	331	7	2.11
Total	757	17	2.25	181	3	1.66	938	20	2.13
Age									
≤ 20	130	1	0.77	74	1	1.35	204	2	0.98
20-29	461	11	2.39	77	2	2.60	538	13	2.42
30-44	165	5	3.03	29	0	0.00	194	5	2.58
45 & above	1	0	0.00	1	0	0.00	2	0	0.00
Total	757	17	2.25	181	3	1.66	938	20	2.13
Literacy Status									
Illiterate	23	0	0.00	3	0	0.00	26	0	0.00
Lit/Primary	351	5	1.42	81	1	1.23	432	6	1.39
Secondary	335	11	3.28	91	2	2.20	426	13	3.05
Graduation & aabove	48	1	2.08	6	0	0.00	54	1	1.85
Total	757	17	2.25	181	3	1.66	938	20	2.13
Occupation									
Agri/unskilled workers	44	1	2.27	6	0	0.00	50	1	2.00
Truck/auto/taxi drivers/cleaners	23	2	8.70	1	0	0.00	24	2	8.33
Idust./factory workers	12	0	0.00	9	0	0.00	21	0	0.00
Hotel staff	5	0	0.00	10	0	0.00	15	0	0.00
Service	69	2	2.90	10	0	0.00	79	2	2.53
Business	89	5	5.62	15	0	0.00	104	5	4.81
Unemployed	373	7	1.88	47	1	2.13	420	8	1.90
Student	142	0	0.00	41	0	0.00	183	0	0.00
Housewife (N.A. for ANC)	0	0	0.00	42	2	4.76	42	2	4.76
Total	757	17	2.25	181	3	1.66	938	20	2.13
HIV	757	17	2.25	181	3	1.66	938	20	2.13
VDRL	757	57	7.53	181	11	6.08	938	68	7.25
HIV & VDRL	757	2	0.26	181	1	0.55	938	3	0.32

High-2 Prevalence States : (Manipur, Nagaland)

Table B9: HIV Status of TB Patients by Sex & sociodemographic features.

	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	34	8	3	19	3	15.79	53	11	20.75
No	317	52	22	169	22	13.02	486	74	15.23
Total	**351**	**60**	**25**	**188**	**25**	**13.30**	**539**	**85**	**15.77**
Locality									
Urban	159	26	11	79	11	13.92	238	37	15.55
Rural	192	34	14	109	14	12.84	301	48	15.95
Total	**351**	**60**	**25**	**188**	**25**	**13.30**	**539**	**85**	**15.77**
Age									
≤ 20	33	2	1	30	1	3.33	63	3	4.76
20-29	92	13	7	52	7	13.46	144	20	13.89
30-44	137	38	16	79	16	20.25	216	54	25.00
45 & above	89	7	1	27	1	3.70	116	8	6.90
Total	**351**	**60**	**25**	**188**	**25**	**13.30**	**539**	**85**	**15.77**
Literacy Status									
Illiterate	49	5	8	68	8	11.76	117	13	11.11
Lit/Primary	140	24	5	65	5	7.69	205	29	14.15
Secondary	128	26	9	42	9	21.43	170	35	20.59
Graduation & aabove	34	5	3	13	3	23.08	47	8	17.02
Total	**351**	**60**	**25**	**188**	**25**	**13.30**	**539**	**85**	**15.77**
Occupation									
Agri/unskilled workers	81	15	0	14	0	0.00	95	15	15.79
Truck/auto/taxi drivers/cleaners	22	1	0	0	0	0.00	22	1	4.55
Idust./factory workers	6	0	1	2	1	50.00	8	1	12.50
Hotel staff	1	0	0	2	0	0.00	3	0	0.00
Service	52	7	1	5	1	20.00	57	8	14.04
Business	93	22	0	4	0	0.00	97	22	22.68
Unemployed	50	10	0	12	0	0.00	62	10	16.13
Student	46	5	1	26	1	3.85	72	6	8.33
Housewife (N.A. for ANC)	0	0	22	123	22	17.89	123	22	17.89
Total	**351**	**60**	**25**	**188**	**25**	**13.30**	**539**	**85**	**15.77**
HIV	351	60	17.09	188	25	13.30	539	85	15.77
VDRL	351	12	3.42	188	7	3.72	539	19	3.53
HIV & VDRL	351	0	0.00	188	1	0.53	539	1	0.19

Concentrated Prevalence States : (Gujrat, Goa, Pondicherry)

Table C1: HIV Status of STD Patients by Sex & sociodemographic features.

	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	318	28	8.81	241	7	2.90	559	35	6.26
No	947	73	7.71	1309	38	2.90	2256	111	4.92
Total	**1265**	**101**	**7.98**	**1550**	**45**	**2.90**	**2815**	**146**	**5.19**
Locality									
Urban	682	47	6.89	781	25	3.20	1463	72	4.92
Rural	583	54	9.26	769	20	2.60	1352	74	5.47
Total	**1265**	**101**	**7.98**	**1550**	**45**	**2.90**	**2815**	**146**	**5.19**
Age									
≤ 20	165	4	2.42	117	3	2.56	282	7	2.48
20-29	455	29	6.37	591	17	2.88	1046	46	4.40
30-44	516	57	11.05	752	24	3.19	1268	81	6.39
45 & above	129	11	8.53	90	1	1.11	219	12	5.48
Total	**1265**	**101**	**7.98**	**1550**	**45**	**2.90**	**2815**	**146**	**5.19**
Literacy Status									
Illiterate	264	27	10.23	599	22	3.67	863	49	5.68
Lit/Primary	417	38	9.11	501	14	2.79	918	52	5.66
Secondary	480	35	7.29	397	8	2.02	877	43	4.90
Graduation & aabove	104	1	0.96	53	1	1.89	157	2	1.27
Total	**1265**	**101**	**7.98**	**1550**	**45**	**2.90**	**2815**	**146**	**5.19**
Occupation									
Agri/unskilled workers	494	48	9.72	410	10	2.44	904	58	6.42
Truck/auto/taxi drivers/cleaners	165	15	9.09	8	0	0.00	173	15	8.67
Idust./factory workers	236	23	9.75	40	1	2.50	276	24	8.70
Hotel staff	61	3	4.92	23	2	8.70	84	5	5.95
Service	113	4	3.54	38	0	0.00	151	4	2.65
Business	75	3	4.00	10	1	10.00	85	4	4.71
Unemployed	71	4	5.63	26	1	3.85	97	5	5.15
Student	50	1	2.00	27	0	0.00	77	1	1.30
Housewife (N.A. for ANC)	0	0	0.00	968	30	3.10	968	30	3.10
Total	**1265**	**101**	**7.98**	**1550**	**45**	**2.90**	**2815**	**146**	**5.19**
Syndromic Diagnosis									
Genital ulcer	598	53	8.86	201	10	4.98	799	63	7.88
Urethral-cervical discharge	482	36	7.47	1213	28	2.31	1695	64	3.78
Both(genital-urethral discharge)	83	5	6.02	96	3	3.13	179	8	4.47
Genital warts	102	7	6.86	40	4	10.00	142	11	7.75
Total	**1265**	**101**	**7.98**	**1550**	**45**	**2.90**	**2815**	**146**	**5.19**
HIV	1265	101	7.98	1550	45	2.90	2815	146	5.19
VDRL	1265	91	7.19	1550	54	3.48	2815	145	5.15
HIV & VDRL	1265	11	0.87	1550	2	0.13	2815	13	0.46

Concentrated Prevalence States : (Gujrat, Goa, Pondicherry)

Table C2: HIV Status of ANC Mothers by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	146	1	0.69	148	1	0.68	294	2	0.68
No	2607	6	0.23	1899	9	0.47	4506	15	0.33
Total	**2753**	**7**	**0.25**	**2047**	**10**	**0.49**	**4800**	**17**	**0.35**
Age									
≤ 20	623	2	0.32	373	2	0.54	996	4	0.40
20-29	1770	3	0.17	1380	6	0.43	3150	9	0.29
30-44	358	2	0.56	294	2	0.68	652	4	0.61
45 & above	2	0	0.00	0	0	0.00	2	0	0.00
Total	**2753**	**7**	**0.25**	**2047**	**10**	**0.49**	**4800**	**17**	**0.35**
Literacy Status									
Illiterate	1044	1	0.10	694	5	0.72	1738	6	0.35
Lit/Primary	685	5	0.73	444	3	0.68	1129	8	0.71
Secondary	929	1	0.11	850	2	0.24	1779	3	0.17
Graduation & aabove	95	0	0.00	59	0	0.00	154	0	0.00
Total	**2753**	**7**	**0.25**	**2047**	**10**	**0.49**	**4800**	**17**	**0.35**
Occupation									
Agri/unskilled workers	1136	2	0.18	1224	4	0.33	2360	6	0.25
Truck/auto/taxi drivers/cleaners	403	1	0.25	191	5	2.62	594	6	1.01
Idust./factory workers	410	2	0.49	269	0	0.00	679	2	0.29
Hotel staff	29	0	0.00	27	0	0.00	56	0	0.00
Service	333	2	0.60	169	1	0.59	502	3	0.60
Business	253	0	0.00	123	0	0.00	376	0	0.00
Unemployed	183	0	0.00	43	0	0.00	226	0	0.00
Student	6	0	0.00	1	0	0.00	7	0	0.00
Total	**2753**	**7**	**0.25**	**2047**	**10**	**0.49**	**4800**	**17**	**0.35**
HIV	2753	7	0.25	2047	10	0.49	4800	17	0.35
VDRL	2753	19	0.69	2047	10	0.49	4800	29	0.60
HIV & VDRL	2753	2	0.07	2047	0	0.00	4800	2	0.04

Table C3: HIV Status of MSM TI Patients by Place of Residence & sociodemographic features.									
	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	87	5	5.75	59	3	5.08	146	8	5.48
No	424	23	5.42	29	0	0.00	453	23	5.08
Total	**511**	**28**	**5.48**	**88**	**3**	**3.41**	**599**	**31**	**5.18**
Age									
≤ 20	111	1	0.90	14	0	0.00	125	1	0.80
20-29	266	8	3.01	57	2	3.51	323	10	3.10
30-44	114	17	14.91	12	1	8.33	126	18	14.29
45 & above	20	2	10.00	5	0	0.00	25	2	8.00
Total	**511**	**28**	**5.48**	**88**	**3**	**3.41**	**599**	**31**	**5.18**
Literacy Status									
Illiterate	29	3	10.34	5	1	20.00	34	4	11.76
Lit/Primary	155	8	5.16	46	2	4.35	201	10	4.98
Secondary	255	13	5.10	21	0	0.00	276	13	4.71
Graduation & aabove	72	4	5.56	16	0	0.00	88	4	4.55
Total	**511**	**28**	**5.48**	**88**	**3**	**3.41**	**599**	**31**	**5.18**
Occupation									
Agri/unskilled workers	65	6	9.23	16	0	0.00	81	6	7.41
Truck/auto/taxi drivers/cleaners	31	2	6.45	5	0	0.00	36	2	5.56
Idust./factory workers	30	0	0.00	20	0	0.00	50	0	0.00
Hotel staff	40	1	2.50	8	1	12.50	48	2	4.17
Service	165	8	4.85	3	0	0.00	168	8	4.76
Business	84	7	8.33	11	1	9.09	95	8	8.42
Unemployed	52	4	7.69	17	1	5.88	69	5	7.25
Student	44	0	0.00	8	0	0.00	52	0	0.00
Total	**511**	**28**	**5.48**	**88**	**3**	**3.41**	**599**	**31**	**5.18**
HIV	511	28	5.48	88	3	3.41	599	31	5.18
VDRL	511	36	7.05	88	4	4.55	599	40	6.68
HIV & VDRL	511	9	1.76	88	0	0.00	599	9	1.50

Table C4: HIV Status of FSW TI Mothers by Place of Residence & sociodemographic features.									
	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	104	10	9.62	46	1	2.17	150	11	7.33
No	210	12	5.71	96	4	4.17	306	16	5.23
Total	**314**	**22**	**7.01**	**142**	**5**	**3.52**	**456**	**27**	**5.92**
Age									
≤ 20	17	0	0.00	4	0	0.00	21	0	0.00
20-29	88	6	6.82	64	1	1.56	152	7	4.61
30-44	180	15	8.33	64	1	1.56	244	16	6.56
45 & above	29	1	3.45	10	3	30.00	39	4	10.26
Total	**314**	**22**	**7.01**	**142**	**5**	**3.52**	**456**	**27**	**5.92**
Literacy Status									
Illiterate	124	15	12.10	57	3	5.26	181	18	9.94
Lit/Primary	105	4	3.81	60	2	3.33	165	6	3.64
Secondary	72	3	4.17	24	0	0.00	96	3	3.13
Graduation & aabove	13	0	0.00	1	0	0.00	14	0	0.00
Total	**314**	**22**	**7.01**	**142**	**5**	**3.52**	**456**	**27**	**5.92**
Occupation									
Female sex workers occu.	312	22	7.05	142	5	3.52	454	27	5.95
Truck/auto/taxi drivers etc.	2	0	0.00	0	0	0.00	2	0	0.00
Total	**314**	**22**	**7.01**	**142**	**5**	**3.52**	**456**	**27**	**5.92**
HIV	314	22	7.01	142	5	3.52	456	27	5.92
VDRL	314	30	9.55	142	5	3.52	456	35	7.68
HIV & VDRL	314	5	1.59	142	0	0.00	456	5	1.10

Low Prevalence States : (Rest of the States)

Table D1: HIV Status of STD Patients by sex & sociodemographic features.

	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	2476	56	2.26	1479	32	2.16	3955	88	2.23
No	9490	235	2.48	12663	154	1.22	22153	389	1.76
Total	**11966**	**291**	**2.43**	**14142**	**186**	**1.32**	**26108**	**477**	**1.83**
Locality									
Urban	6785	166	2.45	6758	99	1.47	13543	265	1.96
Rural	5181	125	2.41	7384	87	1.18	12565	212	1.69
Total	**11966**	**291**	**2.43**	**14142**	**186**	**1.32**	**26108**	**477**	**1.83**
Age									
≤ 20	1689	21	1.24	1826	21	1.15	3515	42	1.19
20-29	4623	96	2.08	5980	82	1.37	10603	178	1.68
30-44	4579	152	3.32	5568	70	1.26	10147	222	2.19
45 & above	1075	22	2.05	768	13	1.69	1843	35	1.90
Total	**11966**	**291**	**2.43**	**14142**	**186**	**1.32**	**26108**	**477**	**1.83**
Literacy Status									
Illiterate	2010	56	2.79	4584	63	1.37	6594	119	1.80
Lit/Primary	2777	87	3.13	4064	49	1.21	6841	136	1.99
Secondary	5245	119	2.27	4612	68	1.47	9857	187	1.90
Graduation & aabove	1934	29	1.50	882	6	0.68	2816	35	1.24
Total	**11966**	**291**	**2.43**	**14142**	**186**	**1.32**	**26108**	**477**	**1.83**
Occupation									
Agri/unskilled workers	3696	82	2.22	1207	18	1.49	4903	100	2.04
Truck/auto/taxi drivers/cleaners	999	49	4.91	122	0	0.00	1121	49	4.37
Idust./factory workers	1219	45	3.69	262	3	1.15	1481	48	3.24
Hotel staff	327	14	4.28	67	2	2.99	394	16	4.06
Service	1918	43	2.24	654	9	1.38	2572	52	2.02
Business	1645	31	1.88	348	4	1.15	1993	35	1.76
Unemployed	804	17	2.11	253	5	1.98	1057	22	2.08
Student	1358	10	0.74	397	1	0.25	1755	11	0.63
Housewife (N.A. for ANC)	0	0	0.00	10832	144	1.33	10832	144	1.33
Total	**11966**	**291**	**2.43**	**14142**	**186**	**1.32**	**26108**	**477**	**1.83**
Syndromic Diagnosis									
Genital ulcer	5683	156	2.75	2133	55	2.58	7816	211	2.70
Urethral-cervical discharge	4613	85	1.84	9948	99	1.00	14561	184	1.26
Both(genital-urethral discharge)	689	20	2.90	1596	25	1.57	2285	45	1.97
Genital warts	981	30	3.06	465	7	1.51	1446	37	2.56
Total	**11966**	**291**	**2.43**	**14142**	**186**	**1.32**	**26108**	**477**	**1.83**
HIV	11966	291	2.43	14142	186	1.32	26108	477	1.83
VDRL	11966	506	4.23	14142	460	3.25	26108	966	3.70
HIV & VDRL	11966	39	0.33	14142	22	0.16	26108	61	0.23

Low Prevalence States : (Rest of the States)

Table D2: HIV Status of ANC Mothers by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	2599	13	0.50	2844	12	0.42	5443	25	0.46
No	19331	60	0.31	18986	52	0.27	38317	112	0.29
Total	**21930**	**73**	**0.33**	**21830**	**64**	**0.29**	**43760**	**137**	**0.31**
Age									
≤ 20	5394	20	0.37	5464	9	0.16	10858	29	0.27
20-29	13633	38	0.28	13633	46	0.34	27266	84	0.31
30-44	2855	15	0.53	2698	9	0.33	5553	24	0.43
45 & above	48	0	0.00	35	0	0.00	83	0	0.00
Total	**21930**	**73**	**0.33**	**21830**	**64**	**0.29**	**43760**	**137**	**0.31**
Literacy Status									
Illiterate	5983	25	0.42	6982	23	0.33	12965	48	0.37
Lit/Primary	4480	23	0.51	4766	15	0.31	9246	38	0.41
Secondary	9349	23	0.25	8877	25	0.28	18226	48	0.26
Graduation & aabove	2118	2	0.09	1205	1	0.08	3323	3	0.09
Total	**21930**	**73**	**0.33**	**21830**	**64**	**0.29**	**43760**	**137**	**0.31**
Occupation									
Agri/unskilled workers	7235	25	0.35	10886	28	0.26	18121	53	0.29
Truck/auto/taxi drivers/cleaners	1878	11	0.59	1573	5	0.32	3451	16	0.46
Idust./factory workers	2301	6	0.26	1694	5	0.30	3995	11	0.28
Hotel staff	285	2	0.70	252	0	0.00	537	2	0.37
Service	3897	9	0.23	2845	4	0.14	6742	13	0.19
Business	5267	16	0.30	3415	15	0.44	8682	31	0.36
Unemployed	806	4	0.50	847	6	0.71	1653	10	0.61
Student	261	0	0.00	318	1	0.31	579	1	0.17
Total	**21930**	**73**	**0.33**	**21830**	**64**	**0.29**	**43760**	**137**	**0.31**
HIV	21930	73	0.33	21830	64	0.29	43760	137	0.31
VDRL	21930	467	2.13	21830	260	1.19	43760	727	1.66
HIV & VDRL	21930	5	0.02	21830	9	0.04	43760	14	0.03

Low Prevalence States : (Rest of the States)

Table D3: HIV Status of MSM TI Patients by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	162	2	1.23	138	9	6.52	300	11	3.67
No	412	5	1.21	125	1	0.80	537	6	1.12
Total	**574**	**7**	**1.22**	**263**	**10**	**3.80**	**837**	**17**	**2.03**
Age									
≤ 20	167	0	0.00	78	2	2.56	245	2	0.82
20-29	263	4	1.52	106	5	4.72	369	9	2.44
30-44	116	3	2.59	69	3	4.35	185	6	3.24
45 & above	28	0	0.00	10	0	0.00	38	0	0.00
Total	**574**	**7**	**1.22**	**263**	**10**	**3.80**	**837**	**17**	**2.03**
Literacy Status									
Illiterate	80	0	0.00	67	5	7.46	147	5	3.40
Lit/Primary	201	6	2.99	80	3	3.75	281	9	3.20
Secondary	231	1	0.43	100	2	2.00	331	3	0.91
Graduation & aabove	62	0	0.00	16	0	0.00	78	0	0.00
Total	**574**	**7**	**1.22**	**263**	**10**	**3.80**	**837**	**17**	**2.03**
Occupation									
Agri/unskilled workers	97	1	1.03	32	0	0.00	129	1	0.78
Truck/auto/taxi drivers/cleaners	58	3	5.17	79	2	2.53	137	5	3.65
Idust./factory workers	56	0	0.00	25	2	8.00	81	2	2.47
Hotel staff	44	0	0.00	23	0	0.00	67	0	0.00
Service	65	2	3.08	20	2	10.00	85	4	4.71
Business	118	1	0.85	29	2	6.90	147	3	2.04
Unemployed	76	0	0.00	41	2	4.88	117	2	1.71
Student	60	0	0.00	14	0	0.00	74	0	0.00
Total	**574**	**7**	**1.22**	**263**	**10**	**3.80**	**837**	**17**	**2.03**
HIV	574	7	1.22	263	10	3.80	837	17	2.03
VDRL	574	17	2.96	263	8	3.04	837	25	2.99
HIV & VDRL	574	1	0.17	263	4	1.52	837	5	0.60

Low Prevalence States : (Rest of the States)

Table D4: HIV Status of FSW Mothers by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	9	0	0.00	8	0	0.00	17	0	0.00
No	45	0	0.00	188	0	0.00	233	0	0.00
Total	**54**	**0**	**0.00**	**196**	**0**	**0.00**	**250**	**0**	**0.00**
Age									
≤ 20	1	0	0.00	13	0	0.00	14	0	0.00
20-29	6	0	0.00	47	0	0.00	53	0	0.00
30-44	46	0	0.00	135	0	0.00	181	0	0.00
45 & above	1	0	0.00	1	0	0.00	2	0	0.00
Total	**54**	**0**	**0.00**	**196**	**0**	**0.00**	**250**	**0**	**0.00**
Literacy Status									
Illiterate	38	0	0.00	112	0	0.00	150	0	0.00
Lit/Primary	10	0	0.00	74	0	0.00	84	0	0.00
Secondary	6	0	0.00	6	0	0.00	12	0	0.00
Graduation & aabove	0	0	0.00	4	0	0.00	4	0	0.00
Total	**54**	**0**	**0.00**	**196**	**0**	**0.00**	**250**	**0**	**0.00**
Occupation									
Female sex workers occu.	53	0	0.00	191	0	0.00	244	0	0.00
Agri/unskilled workers	0	0	0.00	1	0	0.00	1	0	0.00
Truck/auto/taxi drivers etc.	1	0	0.00	4	0	0.00	5	0	0.00
Total	**54**	**0**	**0.00**	**196**	**0**	**0.00**	**250**	**0**	**0.00**
HIV	54	0	0.00	196	0	0.00	250	0	0.00
VDRL	54	0	0.00	196	5	2.55	250	5	2.00
HIV & VDRL	54	0	0.00	196	0	0.00	250	0	0.00

Low Prevalence States : (Rest of the States)

Table D5: HIV Status of FSW TI Mothers by Place of Residence & sociodemographic features.

	Urban			Rural			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	1636	81	4.95	436	20	4.59	2072	101	4.87
No	2863	98	3.42	854	14	1.64	3717	112	3.01
Total	**4499**	**179**	**3.98**	**1290**	**34**	**2.64**	**5789**	**213**	**3.68**
Age									
≤ 20	500	16	3.20	247	10	4.05	747	26	3.48
20-29	2007	98	4.88	388	13	3.35	2395	111	4.63
30-44	1860	60	3.23	599	11	1.84	2459	71	2.89
45 & above	132	5	3.79	56	0	0.00	188	5	2.66
Total	**4499**	**179**	**3.98**	**1290**	**34**	**2.64**	**5789**	**213**	**3.68**
Literacy Status									
Illiterate	2773	126	4.54	679	10	1.47	3452	136	3.94
Lit/Primary	1042	30	2.88	436	16	3.67	1478	46	3.11
Secondary	640	23	3.59	171	8	4.68	811	31	3.82
Graduation & aabove	44	0	0.00	4	0	0.00	48	0	0.00
Total	**4499**	**179**	**3.98**	**1290**	**34**	**2.64**	**5789**	**213**	**3.68**
Occupation									
Female sex workers occu.	4333	155	3.58	1258	33	2.62	5591	188	3.36
Agri/unskilled workers	9	1	11.11	2	0	0.00	11	1	9.09
Truck/auto/taxi drivers etc.	9	1	11.11	3	0	0.00	12	1	8.33
Idust./factory workers	1	0	0.00	0	0	0.00	1	0	0.00
House wife(na & anc)	5	0	0.00	1	0	0.00	6	0	0.00
Total	**4357**	**157**	**3.60**	**1264**	**33**	**2.61**	**5621**	**190**	**3.38**
HIV	4357	157	3.60	1264	33	2.61	5621	190	3.38
VDRL	4357	262	6.01	1264	118	9.34	5621	380	6.76
HIV & VDRL	4357	24	0.55	1264	8	0.63	5621	32	0.57

Low Prevalence States : (Rest of the States)

Table D6: HIV Status of IVDU Patients by sex & sociodemographic features.

	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	32	2	6.25	1	0	0.00	33	2	6.06
No	371	7	1.89	6	0	0.00	377	7	1.86
Total	403	9	2.23	7	0	0.00	410	9	2.20
Locality									
Urban	366	8	2.19	7	0	0.00	373	8	2.14
Rural	37	1	2.70	0	0	0.00	37	1	2.70
Total	**403**	**9**	**2.23**	**7**	**0**	**0.00**	**410**	**9**	**2.20**
Age									
≤ 20	10	0	0.00	0	0	0.00	10	0	0.00
20-29	120	2	1.67	1	0	0.00	121	2	1.65
30-44	224	7	3.13	6	0	0.00	230	7	3.04
45 & above	49	0	0.00	0	0	0.00	49	0	0.00
Total	**403**	**9**	**2.23**	**7**	**0**	**0.00**	**410**	**9**	**2.20**
Literacy Status									
Illiterate	98	4	4.08	2	0	0.00	100	4	4.00
Lit/Primary	139	2	1.44	1	0	0.00	140	2	1.43
Secondary	147	3	2.04	3	0	0.00	150	3	2.00
Graduation & aabove	19	0	0.00	1	0	0.00	20	0	0.00
Total	**403**	**9**	**2.23**	**7**	**0**	**0.00**	**410**	**9**	**2.20**
Occupation									
Agri/unskilled workers	189	6	3.17	1	0	0.00	190	6	3.16
Truck/auto/taxi drivers/cleaners	34	1	2.94	0	0	0.00	34	1	2.94
Idust./factory workers	10	0	0.00	0	0	0.00	10	0	0.00
Hotel staff	7	0	0.00	0	0	0.00	7	0	0.00
Service	44	1	2.27	3	0	0.00	47	1	2.13
Business	46	1	2.17	0	0	0.00	46	1	2.17
Unemployed	70	0	0.00	2	0	0.00	72	0	0.00
Student	3	0	0.00	0	0	0.00	3	0	0.00
Housewife (N.A. for ANC)	0	0	0.00	1	0	0.00	1	0	0.00
Total	**403**	**9**	**2.23**	**7**	**0**	**0.00**	**410**	**9**	**2.20**
HIV	403	9	2.23	7	0	0.00	410	9	2.20
VDRL	403	8	1.99	7	0	0.00	410	8	1.95
HIV & VDRL	403	0	0.00	7	0	0.00	410	0	0.00

Low Prevalence States : (Rest of the States)

Table D7: HIV Status of IVDU TI Patients by sex & sociodemographic features.

	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	337	21	6.23	40	4	10.00	377	25	6.63
No	913	77	8.43	72	6	8.33	985	83	8.43
Total	**1250**	**98**	**7.84**	**112**	**10**	**8.93**	**1362**	**108**	**7.93**
Locality									
Urban	902	79	8.76	37	6	16.22	939	85	9.05
Rural	348	19	5.46	75	4	5.33	423	23	5.44
Total	**1250**	**98**	**7.84**	**112**	**10**	**8.93**	**1362**	**108**	**7.93**
Age									
≤ 20	236	8	3.39	40	1	2.50	276	9	3.26
20-29	533	40	7.50	43	3	6.98	576	43	7.47
30-44	421	46	10.93	28	6	21.43	449	52	11.58
45 & above	60	4	6.67	1	0	0.00	61	4	6.56
Total	**1250**	**98**	**7.84**	**112**	**10**	**8.93**	**1362**	**108**	**7.93**
Literacy Status									
Illiterate	327	37	11.32	7	0	0.00	334	37	11.08
Lit/Primary	367	28	7.63	51	4	7.84	418	32	7.66
Secondary	513	29	5.65	54	6	11.11	567	35	6.17
Graduation & aabove	43	4	9.30	0	0	0.00	43	4	9.30
Total	**1250**	**98**	**7.84**	**112**	**10**	**8.93**	**1362**	**108**	**7.93**
Occupation									
Agri/unskilled workers	459	52	11.33	4	1	25.00	463	53	11.45
Truck/auto/taxi drivers/cleaners	117	4	3.42	0	0	0.00	117	4	3.42
Idust./factory workers	55	6	10.91	1	0	0.00	56	6	10.71
Hotel staff	20	2	10.00	3	0	0.00	23	2	8.70
Service	69	3	4.35	1	0	0.00	70	3	4.29
Business	101	7	6.93	16	3	18.75	117	10	8.55
Unemployed	376	21	5.59	50	3	6.00	426	24	5.63
Student	52	3	5.77	16	0	0.00	68	3	4.41
Housewife (N.A. for ANC)	1	0	0.00	21	3	14.29	22	3	13.64
Total	**1250**	**98**	**7.84**	**112**	**10**	**8.93**	**1362**	**108**	**7.93**
HIV	1250	98	7.84	112	10	8.93	1362	108	7.93
VDRL	1250	69	5.52	112	11	9.82	1362	80	5.87
HIV & VDRL	1250	14	1.12	112	0	0.00	1362	14	1.03

IVDU Low Prevalence States									
(Assam,Chandigarh,Delhi,J&K,Karnataka,Mumbai,Meghalya,Mizoram,T.N.,West Bengal,Kerala)									
Table E1: HIV Status of IVDU Patients by sex & sociodemographic features.									
	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	544	81	14.89	47	4	8.51	591	85	14.38
No	1627	200	12.29	81	6	7.41	1708	206	12.06
Total	**2171**	**281**	**12.94**	**128**	**10**	**7.81**	**2299**	**291**	**12.66**
Locality									
Urban	1783	261	14.64	53	6	11.32	1836	267	14.54
Rural	388	20	5.15	75	4	5.33	463	24	5.18
Total	**2171**	**281**	**12.94**	**128**	**10**	**7.81**	**2299**	**291**	**12.66**
Age									
≤ 20	288	17	5.90	43	1	2.33	331	18	5.44
20-29	824	103	12.50	46	3	6.52	870	106	12.18
30-44	923	151	16.36	38	6	15.79	961	157	16.34
45 & above	136	10	7.35	1	0	0.00	137	10	7.30
Total	**2171**	**281**	**12.94**	**128**	**10**	**7.81**	**2299**	**291**	**12.66**
Literacy Status									
Illiterate	612	110	17.97	15	0	0.00	627	110	17.54
Lit/Primary	687	99	14.41	53	4	7.55	740	103	13.92
Secondary	791	67	8.47	58	6	10.34	849	73	8.60
Graduation & aabove	81	5	6.17	2	0	0.00	83	5	6.02
Total	**2171**	**281**	**12.94**	**128**	**10**	**7.81**	**2299**	**291**	**12.66**
Occupation									
Agri/unskilled workers	966	175	18.12	6	1	16.67	972	176	18.11
Truck/auto/taxi drivers/cleaners	208	22	10.58	0	0	0.00	208	22	10.58
Idust./factory workers	107	21	19.63	1	0	0.00	108	21	19.44
Hotel staff	30	4	13.33	3	0	0.00	33	4	12.12
Service	133	7	5.26	4	0	0.00	137	7	5.11
Business	184	17	9.24	22	3	13.64	206	20	9.71
Unemployed	487	32	6.57	52	3	5.77	539	35	6.49
Student	56	3	5.36	17	0	0.00	73	3	4.11
Housewife (N.A. for ANC)	0	0	0.00	23	3	13.04	23	3	13.04
Total	**2171**	**281**	**12.94**	**128**	**10**	**7.81**	**2299**	**291**	**12.66**
HIV	2171	281	12.94	128	10	7.81	2299	291	12.66
VDRL	2171	109	5.02	128	14	10.94	2299	123	5.35
HIV & VDRL	2171	24	1.11	128	0	0.00	2299	24	1.04

All IVDU Prevalence States :

(Manipur,Nagaland,Assam,Chandigarh,Delhi,J&K,Karnataka,Mumbai,Meghalya,Mizoram,T.N.,West Bengal,Kerala)

Table E2: HIV Status of IVDU Patients by sex & sociodemographic features.

	Male			Female			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive
Migration									
Yes	816	105	12.87	85	7	8.24	901	112	12.43
No	3734	425	11.38	343	18	5.25	4077	443	10.87
Total	4550	530	11.65	428	25	5.84	4978	555	11.15
Locality									
Urban	3336	424	12.71	213	16	7.51	3549	440	12.40
Rural	1214	106	8.73	215	9	4.19	1429	115	8.05
Total	4550	530	11.65	428	25	5.84	4978	555	11.15
Age									
≤ 20	617	31	5.02	142	3	2.11	759	34	4.48
20-29	2175	247	11.36	171	13	7.60	2346	260	11.08
30-44	1592	237	14.89	108	9	8.33	1700	246	14.47
45 & above	166	15	9.04	7	0	0.00	173	15	8.67
Total	4550	530	11.65	428	25	5.84	4978	555	11.15
Literacy Status									
Illiterate	758	117	15.44	49	0	0.00	807	117	14.50
Lit/Primary	1514	172	11.36	191	12	6.28	1705	184	10.79
Secondary	1985	213	10.73	178	12	6.74	2163	225	10.40
Graduation & aabove	293	28	9.56	10	1	10.00	303	29	9.57
Total	4550	530	11.65	428	25	5.84	4978	555	11.15
Occupation									
Agri/unskilled workers	1381	247	17.89	34	1	2.94	1415	248	17.53
Truck/auto/taxi drivers/cleaners	325	37	11.38	9	0	0.00	334	37	11.08
Idust./factory workers	151	24	15.89	11	0	0.00	162	24	14.81
Hotel staff	43	6	13.95	13	0	0.00	56	6	10.71
Service	287	21	7.32	26	1	3.85	313	22	7.03
Business	458	37	8.08	48	3	6.25	506	40	7.91
Unemployed	1452	136	9.37	139	14	10.07	1591	150	9.43
Student	453	22	4.86	74	0	0.00	527	22	4.17
Housewife (N.A. for ANC)	0	0	0.00	74	6	8.11	74	6	8.11
Total	4550	530	11.65	428	25	5.84	4978	555	11.15
HIV	4550	530	11.65	428	25	5.84	4978	555	11.15
VDRL	4550	295	6.48	428	49	11.45	4978	344	6.91
HIV & VDRL	4550	38	0.84	428	2	0.47	4978	40	0.80

ANNUAL SENTINEL SURVEILLANCE ROUND - 2004

Table No 1.a : HIV Prevalence and Confidence Interval for 2003 - 2004

				2004										2003					
States	District Name	Sites Name	Type	Number Tested	Number Positive	Percent Positive	Median Percent		hotspot 2004			90%Confidence Interval LL	90%Confidence Interval UL	Number Tested	Number Positive	Percent Positive	Median Percent	90%Confidence Interval LL	90%Confidence Interval UL
Andaman & Nicobar Islands	Andanmans	Port Blair_GB Pant Hospital	STD	250	3	1.2			1.2	2.964		0.07	2.33	250	0	0.00		0.00	0.00
	Andamans	Port Blair_District Jail	STD	250	5	2.0			2.0	4.9		0.54	3.46	250	9	3.60		1.66	5.54
		Sites Total		500	8	1.6	1.60	1.8	2.0	7.864	0.006	0.68	2.52	500	9	1.80	1.80	0.83	2.77
	Nicobars	Car Nicobar_BJR Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	3	0.75		0.04	1.46
	Andamans	Port Blair_GB Pant Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	2	0.50		-0.08	1.08
														400	2	0.50		-0.08	1.08
		Sites Total		800	0	0.0	0.00	0.0	0.0	0	0.000	0.00	0.00	1200	7	0.58	0.50	0.22	0.95
Andhra Pradesh	Hyderabad	Hyderabad_Osmania Medical College & Hospital	STD	250	90	36			36	57.6		31.01	40.99	250	86	34.40		29.46	39.34
	Khammam	Khammam_Distt. HQ. Hospital	STD	250	40	16			16	33.6		12.19	19.81	250	25	10.00		6.88	13.12
	East Godavari	Rajahmundry_Distt. Hospital	STD	250	41	16.4			16.4	34.276		12.55	20.25	250	63	25.20		20.68	29.72
	Karimnagar	Area Hospital_Ramagundam	STD	250	14	5.6			5.6	13.216		3.21	7.99	250	12	4.80		2.58	7.02
	Medak	Sangareddy_District Hospital	STD	250	15	6			6	14.1		3.53	8.47	250	5	2.00		0.54	3.46
	Chittoor	Tirupati_S.V. Medical College & Hospital	STD	250	78	31.2			31.2	53.664		26.38	36.02	246	93	37.80		32.72	42.89
	Prakasam	Ongole_Distt. Hospital	STD	250	36	14.4			14.4	30.816		10.75	18.05	248	44	17.74		13.75	21.73
	Visakhapatnam	Vishakhapatnam_Andhra Medical College & Hospital	STD	250	89	35.6			35.6	57.316		30.62	40.58	249	74	29.72		24.95	34.48
	Krishna	Vijayawada_GGH	STD	250	72	28.8			28.8	51.264		24.09	33.51						
	Kurnool	Kurnool_GGH	STD	250	18	7.2			7.2	16.704		4.51	9.89						
	Warangal	Warangal_MGM Hospital	STD	250	78	31.2			31.2	53.664		26.38	36.02						
		Sites Total		2750	571	20.76	16.40	31.2	20.763	416.22	0.007	14.87	17.93	1993	402	20.17	21.47	19.71	23.23
	Adilabad	Adilabad_Distt. HQ. Hospital	ANC	400	3	0.75			0.75	2.977		0.04	1.46	400	3	0.75		0.04	1.46
	Anantapur	Ananthapur_Medical College	ANC	400	7	1.75			1.75	6.877		0.67	2.83	400	5	1.25		0.34	2.16
	Visakhapatnam	Ankapalli_Distt. Hospital	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	4	1.00		0.18	1.82
	Chittoor	Chittor_District HQ. Hospital	ANC	400	5	1.25			1.25	4.937		0.34	2.16	400	0	0.00		0.00	0.00
	Cuddapah	Cuddapah_Distt. Hospital	ANC	400	11	2.75			2.75	10.697		1.41	4.10	400	10	2.50		1.22	3.78
	Guntur	Guntur_Guntur Medical College	ANC	400	14	3.5			3.5	13.51		1.99	5.01	400	15	3.75		2.19	5.31
	Hyderabad	Hyderabad_Gandhi Medical College	ANC	400	3	0.75			0.75	2.977		0.04	1.46	400	4	1.00		0.18	1.82
	East Godavari	Kakinada_Rangaraya Medical College	ANC	400	12	3			3	11.64		1.60	4.40	400	10	2.50		1.22	3.78
	Karimnagar	Karimnagar_Distt. Hospital	ANC	400	14	3.5			3.5	13.51		1.99	5.01	400	8	2.00		0.85	3.15
	Khammam	Area Hospital, Kothagudem	ANC	400	8	2			2	7.84		0.85	3.15	400	6	1.50		0.50	2.50

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
	Kurnool	Kurnool_Kurnool Medical College	ANC	400	3	0.75			0.75	2.977		0.04	1.46	400	2	0.50		-0.08	1.08
	Krishna	Machilipatnam_District Hospital	ANC	400	9	2.25			2.25	8.797		1.03	3.47	399	7	1.75		0.67	2.84
	Medak	Sangareddy_Distt. Hospital	ANC	400	4	1			1	3.96		0.18	1.82	398	2	0.50		-0.08	1.09
	Mahbubnagar	Mehboobnagar_Distt. Hospital	ANC	400	3	0.75			0.75	2.977		0.04	1.46	400	1	0.25		-0.16	0.66
	Nalgonda	Nalgonda_Distt. Hospital	ANC	400	9	2.25			2.25	8.797		1.03	3.47	400	6	1.50		0.50	2.50
	Nellore	Nellore_GMH Hospital	ANC	400	11	2.75			2.75	10.697		1.41	4.10	400	10	2.50		1.22	3.78
	Nizamabad	Nizamabad_Distt. Hospital	ANC	400	9	2.25			2.25	8.797		1.03	3.47	400	4	1.00		0.18	1.82
	Prakasam	Ongole_Maternal & child Health Hospital	ANC	400	16	4			4	15.36		2.39	5.61	400	12	3.00		1.60	4.40
	Rangareddi	Rangareddy_Distt. Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	399	2	0.50		-0.08	1.08
	Srikakulam	Srikakulam_Distt. Hospital	ANC	400	16	4			4	15.36		2.39	5.61	400	4	1.00		0.18	1.82
	Vizianagaram	Vizianagaram_Distt. Hospital	ANC	400	7	1.75			1.75	6.877		0.67	2.83	400	5	1.25		0.34	2.16
	Warangal	GMH, Hanumakonda	ANC	400	10	2.5			2.5	9.75		1.22	3.78	400	6	1.50		0.50	2.50
	West Godavari	Eluru_Distt. Hospital	ANC	400	11	2.75			2.75	10.697		1.41	4.10	400	8	2.00		0.85	3.15
		Sites Total		9200	193	2.10	2.25	2.75	2.097	187.917	0.001	1.94	2.56	9196	134	1.46	1.25	0.99	1.51
	Guntur	Guntur_Distt. TB Centre	TUB	400	44	11			11			8.43	13.57						
				400	44	11			12			8.43	13.57						
Arunachal Pradesh	WestSiang	Along_District Hospital	STD	102	0	0.0			0.0	0		0.00	0.00	98	1	1.02		-0.65	2.69
	Papum Pare	Naharlagun_General Government Hospital	STD	161	2	1.2			1.2	1.975		-0.19	2.68	158	1	0.63		-0.41	1.67
	East Siang	Pasighat_General Hospital	STD	125	0	0.0			0.0	0		0.00	0.00	188	0	0.00		0.00	0.00
	Tawang	Tawang_District Hospital	STD	191	0	0.0			0.0	0		0.00	0.00						
		Sites Total		579	2	0.3	0.00	0.3	0.3	1.975	0.002	-0.50	0.50	444	2	0.45	0.63	-0.07	0.97
	West Kameng	Bomdila_District Hospital	ANC	204	0	0.0			0.0	0		0.00	0.00	140	0	0.00		0.00	0.00
	Lohit	Tezu_District Hospital	ANC	291	1	0.3			0.3	0.996		-0.22	0.91						
		Sites Total		495	1	0.2	0.17	0.3	0.2	0.996	0.002	-0.13	0.53	140	0	0.00	0.00	0.00	0.00
Assam	Dhubri	Dhubri_Civil Hospital	STD	224	0	0.0			0.0	0		0.00	0.00	250	3	1.20		0.07	2.33
	Dibrugarh	Dibrugarh_Assam Medical College	STD	250	2	0.8			0.8	1.984		-0.13	1.73	250	2	0.80		-0.13	1.73
	Kamrup	Guwahati_Medical College (A.P.S)	STD	224	3	1.3			1.3	2.959		0.08	2.60	233	4	1.72		0.32	3.12
	Cachar	Silchar_Medical College	STD	226	6	2.7			2.7	5.840		0.90	4.41	110	0	0.00		0.00	0.00
	Sonitpur	Tezpur_Civil Hospital, Sonitpur	STD	146	0	0.0			0.0	0		0.00	0.00	249	3	1.20		0.07	2.34
		Sites Total		1070	11	1.0	0.80	1.3	1.0	10.784	0.003	0.17	1.43	1092	12	1.10	1.20	0.55	1.85
	Bongaigaon	Bongaigaon_Civil Hospital	ANC	284	0	0.0			0.0	0		0.00	0.00	266	0	0.00		0.00	0.00
	Jorhat	Jorhat_Civil Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Lakhimpur	Lakhimpur_Civil Hospital	ANC	399	0	0.0			0.0	0		0.00	0.00	399	0	0.00		0.00	0.00
	Nagaon	Nagaon_Civil Hospital	ANC	325	2	0.6			0.6	1.987		-0.10	1.33	399	0	0.00		0.00	0.00

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
		Sites Total		1408	2	0.1	0.00	0.2	0.1	1.987	0.001	-0.21	0.21	1464	0	0.00	0.00	0.00	0.00
Bihar	Bhojpur	Ara_Sadar Hospital	STD	250	0	0.0			0.0	0		0.00	0.00	250	0	0.00		0.00	0.00
	Bhagalpur	Bhagalpur_Jawhar Lal Nehru Med. College Hospital	STD	250	1	0.4			0.4	0.996		-0.26	1.06	250	1	0.40		-0.26	1.06
	Darbhanga	Darbhanga_Darbanga Medical College Hospital	STD	250	5	2.0			2.0	4.9		0.54	3.46	250	1	0.40		-0.26	1.06
	Gaya	Gaya_ANMMC Hospital	STD	250	7	2.8			2.8	6.804		1.08	4.52	250	1	0.40		-0.26	1.06
	Katihar	Katihar_Sadar Hospital	STD	250	6	2.4			2.4	5.856		0.81	3.99	250	23	9.20		6.19	12.21
	Muzaffarpur	Muzaffarpur_Sri Krishna Medical College Hospital	STD	250	1	0.4			0.4	0.996		-0.26	1.06	250	0	0.00		0.00	0.00
	Patna	Patna_Patna Medical College Hospital	STD	250	1	0.4			0.4	0.996		-0.26	1.06	250	4	1.60		0.29	2.91
	Purba Champaran	Raxaul_Duncan Hospital	STD	235	5	2.1			2.1	4.893		0.58	3.68	250	18	7.20		4.51	9.89
		Sites Total		1985	26	1.31	1.20	2.2	1.31	25.441	0.003	0.68	1.72	2000	48	2.40	0.40	-0.29	1.09
	Araria	Araria_Sadar Hospital	ANC	375	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Begusarai	Begusarai_Sadar Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	1	0.25		-0.16	0.66
	Bhagalpur	Bhagalpur_Jawhar Lal Nehru Med. College Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	0	0.00		0.00	0.00
	Muzaffarpur	Muzaffarpur_Sri Krishna Medical College Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Patna	Patna_Patna Medical College Hospital	ANC	400	3	0.8			0.8	2.977		0.04	1.46	400	2	0.50		-0.08	1.08
	Purba Champaran	Raxaul_Duncan Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Rohtas	Rohtas_Sadar Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
		Sites Total		2775	6	0.22	0.00	0.4	0.22	5.965	0.001	-0.18	0.18	2800	3	0.11	0.00	-0.13	0.13
Chandigarh	Chandigarh	Sector-16_General Hospital	STD	250	5	2			2	4.9		0.54	3.46	250	0	0.00		0.00	0.00
		PGIMER	STD	250	4	1.6			1.6	3.936		0.29	2.91	247	4	1.62		0.30	2.94
		Sites Total		500	9	1.8	1.80	1.9	1.8	8.836	0.005	0.82	2.78	497	4	0.80	0.81	0.15	1.46
	Chandigarh	Sector-16_General Hospital	ANC	400	2	0.5			0.5			-0.08	1.08	400	2	0.50		-0.08	1.08
		Sites Total		400	2	0.5			0.5					400	2	0.50	0.50	-0.08	1.08
Chhattisgarh	Durg	Durg_District Hospital	STD	250	10	4			0.4	9.6		1.96	6.04	250	9	3.60		1.66	5.54
	Korba	Korba_District Hospital	STD	250	3	1.2			1.4	2.964		0.07	2.33	250	2	0.80		-0.13	1.73
	Raipur	Raipur_Pandit JNM Medical College	STD	250	8	3.2			2.4	7.744		1.37	5.03	250	5	2.00		0.54	3.46
		Sites Total		750	21	2.8	3.20	3.6	0.8	20.308	0.006	1.81	3.79	750	16	2.13	2.00	1.27	3.00
	Dantewara													250	1	0.40		-0.26	1.06
	Raigarh	Raigarh_District Hospital	ANC	400	0	0			0.4	0		0.00	0.00	400	9	2.25		1.03	3.47
	Bilaspur	Bilaspur_District Hospital	ANC	400	0	0			1.4	0		0.00	0.00	400	0	0.00		0.00	0.00
	Baster	Jagdalpur_District Hospital	ANC	335	0	0			2.4	0		0.00	0.00	396	5	1.26		0.34	2.19

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
	Rajnandgaon	Rajnandgaon_District Hospital	ANC	435	0	0			3.4	0		0.00	0.00	400	3	0.75		0.04	1.46
		Sites Total		1570	0	0.00	0.00	0.0	7.44	0	0.000	0.00	0.00	1846	18	0.98	0.75	0.28	1.22
Daman & Diu	Daman	Daman_Civil Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	1	0.25		-0.16	0.66
	Diu	Diu_Civil Hospital	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	217	1	0.46		-0.30	1.22
		Sites Total		800	3	0.375	0.38	0.4	0.375	2.987	0.002	0.02	0.73	617	2	0.32	0.36	-0.05	0.70
Dadar & Nagar Haveli	Dadar &Nagar Haveli	Silvasa_Civil Hospital	ANC	400	0	0			0	0		0.00	0.00	398	1	0.25		-0.16	0.66
		Sites Total		400	0	0			0			0.00	0.00	398	1	0.25	0.25	-0.16	0.66
Delhi	South	Sardarjung Hospital	STD	250	12	4.8			4.8	11.424		2.58	7.02	250	6	2.40		0.81	3.99
	North East	GBT Hospital	STD	200	15	7.5			7.5	13.875		4.44	10.56	171	10	5.85		2.90	8.80
	Central	LNJP Hospital	STD	250	23	9.2			9.2	20.884		6.19	12.21	250	18	7.20		4.51	9.89
	East	ESI Hospital	STD	201	17	8.5			8.5	15.562		5.23	11.69	193	15	7.77		4.60	10.94
		Sites Total		901	67	7.44	7.98	8.6	7.44	61.745	0.009	6.18	9.78	864	49	5.67	6.52	4.91	8.14
	North East	GTB Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	South	Safdarjung Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	0	0.00		0.00	0.00
	North	Delhi_Kasturba Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	1	0.25		-0.16	0.66
	North West	New delhi_Sanjay Gandhi Memorial Hospital,Mongolp	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	1	0.25		-0.16	0.66
		Sites Total		1600	5	0.31	0.38	0.5	0.31	4.977	0.001	0.09	0.66	1600	2	0.13	0.13	-0.06	0.31
Goa	South Goa	Margao_Hospicio Hospital	STD	123	24	19.5			19.5	19.317		13.63	25.39	189	27	14.29		10.10	18.47
	Panaji	Hospicio Hospital	STD											112	17	15.18		9.60	20.76
	NorthGoa	Bambolim_Goa Medical College	STD	108	13	12.0			12.0	11.435		6.89	17.19						
		Sites Total		231	37	16.0	15.77		16.0	30.752	0.024	12.07	19.97	301	44	14.62	14.73	11.27	17.97
	NorthGoa	Mapusa_Asilo Hospital	ANC	400	4	1.0			1.0	3.96		0.18	1.82	400	1	0.25		-0.16	0.66
		Ponda_Community Health Centre	ANC	400	5	1.3			1.3	4.937		0.34	2.16	400	3	0.75		0.04	1.46
		Sites Total		800	9	1.1	1.13	1.2	1.1	8.897	0.004	0.51	1.74	800	4	0.50	0.50	0.09	0.91
Gujarat	Ahmadabad	Ahmedabad_Civil Hospital	STD	250	12	4.8			4.8	11.424		2.58	7.02	243	14	5.76		3.30	8.22
	Bhavanagar	Sir T Hospital/Bhavnagar_District	STD	220	11	5.0			5.0	10.45		2.58	7.42	223	15	6.73		3.97	9.49
	Panch Mahals	Godhara_District Hospital	STD	250	6	2.4			2.4	5.856		0.81	3.99	250	6	2.40		0.81	3.99
	Jamnagar	Jamnagar_GG Hospital	STD	250	9	3.6			3.6	8.676		1.66	5.54	250	11	4.40		2.27	6.53
	Banas Kantha	General Hospital Palanpur/Banaskantha_District	STD	250	2	0.8			0.8	1.984		-0.13	1.73	246	2	0.81		-0.13	1.75
	Surat	Surat_New Civil Hospital	STD	185	15	8.1			8.1	13.783		4.81	11.41	223	14	6.28		3.61	8.95
	Surendranagar	Surendranagar_C. U. Shah Medical College	STD	250	6	2.4			2.4	5.856		0.81	3.99	216	5	2.31		0.63	4.00
	Vadodara	Vadodara_SSG Hospital	STD	250	9	3.6			3.6	8.676		1.66	5.54	220	10	4.55		2.24	6.86
		Sites Total		1905	70	3.67	3.60	4.9	3.67	66.705	0.004	2.72	4.48	1871	77	4.12	4.47	3.53	5.41

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
	Ahmadabad	Ahmedabad_VS Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	3	0.75		0.04	1.46
	Kachchh	Bhuj_District Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	2	0.50		-0.08	1.08
	Sabar Kantha	Himmatnagar_District Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	1	0.25		-0.16	0.66
	Junagadh	Junagadh_District Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	1	0.25		-0.16	0.66
	Mahesana	Mehsana_District Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	4	1.00		0.18	1.82
	Rajkot	Rajkot_Civil Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Surat	Old Civil Hospital, Surat	ANC	400	3	0.8			0.8	2.977		0.04	1.46	400	4	1.00		0.18	1.82
	Vadodara	Vadodara_Jamnabai Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
		Sites Total		3200	6	0.19	0.13	0.3	0.19	5.97	0.001	-0.03	0.28	3200	15	0.47	0.38	0.13	0.62
Haryana	Ambala	Ambala_General Hospital	STD	240	0	0.0			0.0	0		0.00	0.00	250	0	0.00		0.00	0.00
	Bhiwani	Bhiwani_General Hospital	STD	192	4	2.1			2.1	3.916		0.39	3.78	211	5	2.37		0.65	4.09
	Gurgaon	Gurgaon_General Hospital	STD	246	12	4.9			4.9	11.414		2.62	7.14	250	1	0.40		-0.26	1.06
	Rohtak	Rohtak_Medical College Hospital	STD	134	0	0.0			0.0	0		0.00	0.00	243	5	2.06		0.56	3.56
	Sirsa	Sirsa_General Hospital	STD	215	2	0.9			0.9	1.981		-0.15	2.01	249	3	1.20		0.07	2.34
		Sites Total		1027	18	1.8	0.93	2.1	1.8	17.312	0.004	0.10	1.77	1203	14	1.16	1.20	0.57	1.84
	Faridabad	Hissar_General Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Hisar	Jind_General Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	390	1	0.26		-0.16	0.68
	Jind	Karnal_General Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	1	0.25		-0.16	0.66
	Karnal	Palwal_General Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	2	0.50		-0.08	1.08
		Sites Total		1600	0	0.0	0.00	0.0	0.0	0	0.000	0.00	0.00	1590	4	0.25	0.25	-0.01	0.51
Himachal Pradesh	Bilaspur	Bilaspur_Zonal Hospital	STD	250	6	2.4			2.4	5.856		0.81	3.99	250	1	0.4		-0.26	1.06
	Chamba	Chamba_Zonal Hospital	STD	250	0	0			0	0		0.00	0.00	250	0	0		0.00	0.00
	Kullu	Kullu_Zonal Hospital	STD	201	0	0			0	0		0.00	0.00	217	3	1.38		0.08	2.69
	Sirmaur	Nahan_Zonal Hospital	STD	250	3	1.2			1.2	2.964		0.07	2.33	250	1	0.4		-0.26	1.06
	Shimla	Shimla_Zonal Hospital	STD	250	0	0			0	0		0.00	0.00	240	2	0.83		-0.13	1.80
		Sites Total		1201	9	0.75	0.00	1.2	0.75	8.82	0.002	-0.51	0.51	1207	7	0.58	0.4	-0.05	0.85
	Hamirpur	Hamirpur_Zonal Hospital	ANC	400	2	0.5			0.500	1.99		-0.08	1.08	400	4	1		0.18	1.82
	Kangra	Dharamshala_Zonal Hospital	ANC	400	0	0.0			0.000	0		0.00	0.00	390	3	0.769		0.04	1.50
	Kelong		ANC	800	2	0.3	0.25	0.4	0.375	1.99	0.001	-0.04	0.54	78	0	0		0.00	0.00
	Kinnaur	Kinnaur_Zonal Hospital	ANC	363	0	0.0			0.000	0		0.00	0.00	400	0	0		0.00	0.00
	Mandi	Mandi_Zonal Hospital	ANC	400	1	0.3			0.250	0.997		-0.16	0.66	400	0	0		0.00	0.00
	Solan	Solan_Zonal Hospital	ANC	400	0	0.0			0.000	0		0.00	0.00	400	0	0		0.00	0.00
	Una	Una_Zonal Hospital	ANC	400	3	0.8			0.750	2.977		0.04	1.46	400	0	0		0.00	0.00
		Sites Total		3163	8	0.25	0.25	0.4	0.254	7.955	0.000	0.07	0.43	2468	7	0.28	0	-0.22	0.22

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
Jammu & Kashmir	Jammu	Jammu_Gandhi Nagar Hospital	STD	250	0	0.0	0.000		0.800	0		0.00	0.00	250	13	5.20		2.89	7.51
	Srinagar	Srinagar_Shere Kashmir Institute	STD	367	1	0.3	0.000		1.800	0.997		-0.18	0.72	250	0	0.00		0.00	0.00
		Sites Total		617	1	0.16	0.14	0.2	0.375	0.997	0.001	-0.10	0.43	500	13	2.60	2.60	1.45	3.76
	Jammu	Jammu_General Hospital	ANC	400	0	0.0	0.000		0.800	0	0.800	0.00		390	0	0.00		0.00	0.00
	Leh (Ladakh)	Leh_District Hospital	ANC	400	0	0.0	0.000		1.800	0	1.800	0.00		390	0	0.00		0.00	0.00
	Srinagar	Srinagar_Lal Ded Hospital	ANC	400	1	0.3	0.000		2.800	0.997	2.800	35.63		400	0	0.00		0.00	0.00
		Sites Total		1200	1	0.08	0.00	0.1	0.8	0.997	0.000	-0.05	0.22	1180	0	0.00	0.00	0.00	0.00
Jharkhand	Dhanbad	Dhanbad_Patliputra Medical College & Hospital	STD	250	0	0.0			0.0	0		0.00	0.00	250	0	0.00		0.00	0.00
	Palamu	Palamu_Sadar Hospital	STD	251	0	0.0			0.0	0		0.00	0.00	250	0	0.00		0.00	0.00
	Ranchi	Ranchi_Ranchi Medical College & Hospital	STD	250	1	0.4			0.4	0.996		-0.26	1.06	250	1	0.40		-0.26	1.06
		Sites Total		751	1	0.1	0.00	0.2	0.1	0.996	0.001	-0.09	0.35	750	1	0.13	0.00	-0.09	0.35
	Deoghar	Deoghar_Sadar Hospital	ANC	374	0	0.0			0.0	0		0.00	0.00	341	0	0.00		0.00	0.00
	Singhbhum	E. Singhbhum_Sadar Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Kodarma	Kodarma_Sadar Hospital	ANC	259	0	0.0			0.0	0		0.00	0.00	145	0	0.00		0.00	0.00
	Sahibganj	Sambgavy_Sadar Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Ranchi	Ranchi_Ranchi Medical College & Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	1	0.25		-0.16	0.66
	Garhwa	Garhwa_Sadar Hospital	ANC	325	0	0.0			0.0	0		0.00	0.00	321	2	0.62		-0.10	1.35
		Sites Total		2158	1	0.0	0.00	0.0	0.0	0.997	0.000	-0.10	0.10	2007	3	0.15	0.00	-0.18	0.18
	Ranchi	Birsa Seva Sansthan & KGVK Ranchi	FSW	250	0	0.0			0.0	0		0.00	0.00						
		Sites Total		250	0	0.0			1.0	0		0.00	0.00						
Karnataka	Bangalore	Bangalore_Victoria Hospital	STD	250	30	12			12	26.4		8.62	15.38	250	26	10.40		7.22	13.58
	Belgaum	Belgaum_District Hospital	STD	250	74	29.6			29.6	52.096		24.85	34.35	250	68	27.20		22.57	31.83
	Bellary	Bellary_VIMS Hospital	STD	250	28	11.2			11.2	24.864		7.92	14.48	250	25	10.00		6.88	13.12
	Gulbarga	Gulburga_District Hospital	STD	250	61	24.4			24.4	46.116		19.93	28.87	250	43	17.20		13.27	21.13
	Dharwad	Hubli_KIMS	STD	250	38	15.2			15.2	32.224		11.46	18.94	250	40	16.00		12.19	19.81
	Dakshina Kannada	Mangalore_Kasturba Medial College	STD	250	10	4			4	9.6		1.96	6.04	250	8	3.20		1.37	5.03
	Mysore	Mysore_KR Hospital	STD	250	30	12			12	26.4		8.62	15.38	225	21	9.33		6.14	12.52
		Sites Total		1750	271	15.49	12.00	19.8	15.485	217.7	0.008	10.26	13.74	1725	231	13.39	10.40	8.75	12.05
	Bagalkot	Bagalkot_District Hospital	ANC	400	11	2.75			2.75	10.697		1.41	4.10	400	8	2.00		0.85	3.15
	Bangalore	Bangalore_Vani Vilas Hospital	ANC	400	5	1.25			1.25	4.937		0.34	2.16	800	8	1.00		0.42	1.58
	Bangalore Rural	General Hospital, Channapatna	ANC	400	11	2.75			2.75	10.697		1.41	4.10						
	Belgaum	Belgaum_District Hospital	ANC	400	15	3.75			3.75	14.437		2.19	5.31	400	15	3.75		2.19	5.31
	Bellary	Bellary_District Hospital	ANC	400	4	1			1	3.96		0.18	1.82	400	6	1.50		0.50	2.50

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
	Bidar	Bidar_District Hospital	ANC	400	3	0.75			0.75	2.977		0.04	1.46	400	5	1.25		0.34	2.16
	Bijapur	Bijapur_District Hospital	ANC	400	8	2			2	7.84		0.85	3.15	400	10	2.50		1.22	3.78
	Chamrajnagar	Chamarajnagar_District Hospital	ANC	400	3	0.75			0.75	2.977		0.04	1.46	400	2	0.50		-0.08	1.08
	Chikmagalur	Chikmagalur_District Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	1	0.25		-0.16	0.66
	Chitradurga	Chitradurga_District Hospital	ANC	400	3	0.75			0.75	2.977		0.04	1.46	400	2	0.50		-0.08	1.08
	Dakshina Kannada	Mangalore_Women & Children Hospital	ANC	400	10	2.5			2.5	9.75		1.22	3.78	400	5	1.25		0.34	2.16
	Davangere	Devangere_District Hospital	ANC	400	4	1			1	3.96		0.18	1.82	400	4	1.00		0.18	1.82
	Dharwad	Hubli_KIMS	ANC	400	7	1.75			1.75	6.877		0.67	2.83	400	12	3.00		1.60	4.40
	Gadag	Gadag_District Hospital	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	6	1.50		0.50	2.50
	Gulbarga	Gulburga_District Hospital	ANC	400	8	2			2	7.84		0.85	3.15	400	5	1.25		0.34	2.16
	Hassan	Hassan_District Hospital	ANC	400	3	0.75			0.75	2.977		0.04	1.46	400	2	0.50		-0.08	1.08
	Haveri	Haveri_District Hospital	ANC	400	3	0.75			0.75	2.977		0.04	1.46	389	4	1.03		0.19	1.87
	Kodagu	Madikeri_District Hospital	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	400	1	0.25		-0.16	0.66
	Kolar	Kolar_District Hospital	ANC	400	5	1.25			1.25	4.937		0.34	2.16	400	5	1.25		0.34	2.16
	Koppal	Koppal_District Hospital	ANC	400	7	1.75			1.75	6.877		0.67	2.83	400	11	2.75		1.41	4.10
	Mandya	Mandya_District Hospital	ANC	400	5	1.25			1.25	4.937		0.34	2.16	400	5	1.25		0.34	2.16
	Mysore	Mysore_Cheluvamba Hospital	ANC	400	15	3.75			3.75	14.437		2.19	5.31	400	3	0.75		0.04	1.46
	Raichur	Raichur_District Hospital	ANC	400	5	1.25			1.25	4.937		0.34	2.16	400	6	1.50		0.50	2.50
	Shimoga	Shimoga_District Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	1	0.25		-0.16	0.66
	Tumkur	Tumkur_District Hospital	ANC	400	5	1.25			1.25	4.937		0.34	2.16	400	5	1.25		0.34	2.16
	Udupi	Udupi_District Hospital	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	5	1.25		0.34	2.16
	Uttara Kannada	Karwar_District Hospital	ANC	400	5	1.25			1.25	4.937		0.34	2.16	400	7	1.75		0.67	2.83
		Sites Total		10800	162	1.5	1.25	1.9	1.5	158.685	0.001	1.01	1.49	10789	144	1.33	1.25	1.02	1.48
	Bangalore	Bangalore_NIMHANS	IVDU	24	0	0			0			0.00	0.00	250	7	2.80		1.08	4.52
		Sites Total		24	0	0			0			0.00	0.00	250	7	2.80	2.80	1.08	4.52
	Davangere	Davangere_Distt. T.B. Centre	TUB	400	50	12.5			12.5			9.78	15.22						
		Sites Total		400	50	12.5			13.5			9.78	15.22						
Kerala	Alappuzha	Allappuzha_Medical College	STD	205	4	2.0			2.0	3.921		0.36	3.54	151	1	0.66		-0.42	1.75
	Ernakulam	Ernakulam_General Hospital	STD	237	15	6.3			6.3	14.050		3.73	8.93	243	5	2.06		0.56	3.56
	Kozhikode	Kozikode_Medical Hospital	STD	162	3	1.9			1.9	2.944		0.11	3.59	117	2	1.71		-0.26	3.68
	Thiruvananthapuram	Trivandrum_Medical College	STD	249	9	3.6			3.6	8.674		1.67	5.56	224	13	5.80		3.23	8.37
		Sites Total		853	31	3.63	2.78	4.3	3.63	29.591	0.006	1.47	4.10	735	21	2.86	1.88	0.63	3.14
	Idukki	Kannur_Medical College Hospital	ANC	391	1	0.3			0.3	0.997		-0.16	0.68	281	0	0.00		0.00	0.00
	Kannur	Kottayam_Medical College Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	0	0.00		0.00	0.00
	Kottayam	Thodupuzha_Taluk Hospital	ANC	249	1	0.4			0.4	0.995		-0.26	1.06	284	0	0.00		0.00	0.00

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
	Thrissur	Thrissur_Medical College Hospital	ANC	400	3	0.8			0.8	2.977		0.04	1.46	400	2	0.50		-0.08	1.08
		Sites Total		1440	6	0.42	0.33	0.5	0.42	5.968	0.002	-0.02	0.68	1365	2	0.15	0.00	-0.21	0.21
	Kozhikode	kozhikode	IVDU	155	4	2.6			2.6	3.896		0.49	4.68						
		Sites Total		155	4	2.6			2.6	3.896		0.49	4.68						
Lakshadweep	Lakshadweep	Kavaratti_Civil Hospital	STD	5	0	0.0			0.0	0		0.00	0.00	6	0	0.00		0.00	0.00
		Sites Total		5	0	0.0			0.0	0		0.00	0.00	6	0	0.00	0.00	0.00	0.00
	Lakshadweep	Kavaratti_IG Hospital	ANC	276	0	0.0			0.0	0		0.00	0.00	296	0	0.00		0.00	0.00
		Minicoy_Government Hospital	ANC	100	0	0.0			0.0	0		0.00	0.00	78	0	0.00		0.00	0.00
		Sites Total		376	0	0.0		0.0	0.0	0		0.00	0.00	374	0	0.00	0.00	0.00	0.00
Madhya Pradesh	Bhopal	Bhopal_Gandhi Medical College & Hospital	STD	147	5	3.4			3.4	4.829		0.94	5.86	154	5	3.25		0.90	5.60
	Chhatarpur	Chattarpur_District Hospital	STD	250	0	0.0			0.0	0		0.00	0.00	278	5	1.80		0.49	3.11
	Gwalior	Gwalior_Gajra Raja Medical	STD	227	0	0.0			0.0	0		0.00	0.00	167	5	2.99		0.82	5.16
	Hoshangabad	Hoshangabad_Civil Hospital	STD	250	7	2.8			2.8	6.804		1.08	4.52	250	3	1.20		0.07	2.33
	Indore	Indore_MY Hospital	STD	143	6	4.2			4.2	5.748		1.44	6.95	250	22	8.80		5.85	11.75
	Jabalpur	Jabalpur_Victoria Hospital	STD	250	4	1.6			1.6	3.936		0.29	2.91	219	4	1.83		0.34	3.32
	Morena	Morena_District Hospital	STD	205	0	0.0			0.0	0		0.00	0.00	159	1	0.63		-0.40	1.66
	Satna	Satna_Civil Hospital	STD	250	4	1.6			1.6	3.936		0.29	2.91	165	3	1.82		0.11	3.53
	Seoni	Seoni_District Hospital	STD	250	5	2.0			2.0	4.9		0.54	3.46	250	2	0.80		-0.13	1.73
	Ujjain	Ujjain_District Hospital	STD	250	5	2.0			2.0	4.9		0.54	3.46	250	1	0.40		-0.26	1.06
		Sites Total		2222	36	1.6	1.80	2.6	1.6	35.054	0.003	1.25	2.35	2142	51	2.38	1.81	1.14	2.48
	Barwani	Barwani_District Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	0	0.00		0.00	0.00
	Betul	Betul_District Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	0	0.00		0.00	0.00
	Bhind	Bhind_Civil Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Chhindwara	Chhindwara_District Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	355	3	0.85		0.05	1.64
	Dewas	Dewas_District Hospital	ANC	403	1	0.2			0.2	0.997		-0.16	0.66	400	0	0.00		0.00	0.00
	Harda	Harda_District Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	0	0.00		0.00	0.00
	Katni	Katni_District Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	7	1.75		0.67	2.83
	Mandsaur	Mandsaur_district Hospital	ANC	401	4	1.0			1.0	3.960		0.18	1.81	400	13	3.25		1.79	4.71
	Ratlam	Ratlam_District Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	407	2	0.49		-0.08	1.06
	Rewa	Rewa_S.S. Medical College Hospital	ANC	400	4	1.0			1.0	3.96		0.18	1.82	400	0	0.00		0.00	0.00
	Sagar	Sagar_District Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	1	0.25		-0.16	0.66
	Shahdol	Shahdol_District Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	0	0.00		0.00	0.00
	Shivpuri	Shivpuri_District Hospial	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	1	0.25		-0.16	0.66

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
		Sites Total		5204	20	0.4	0.25	0.5	0.4	19.870	0.001	0.07	0.43	5162	27	0.52	0.00	-0.21	0.21
Maharashtra	Akola	Akola_Government Hospital	STD	250	22	8.8			8.8	20.064		5.85	11.75	250	22	8.80		5.85	11.75
	Aurangabad	Aurangabad_Government Medical College & Hospital	STD	250	14	5.6			5.6	13.216		3.21	7.99	250	35	14.00		10.39	17.61
	Chandrapur	Chandrapur_Government Hospital	STD	250	28	11.2			11.2	24.864		7.92	14.48	250	22	8.80		5.85	11.75
	Jalgaon	Jalgaon_Government Hospital	STD	250	26	10.4			10.4	23.296		7.22	13.58	250	19	7.60		4.84	10.36
	Latur	Latur_Government Hospital	STD	250	21	8.4			8.4	19.236		5.51	11.29	250	25	10.00		6.88	13.12
	Nagpur	Nagpur_Government Medical College	STD	250	47	18.8			18.8	38.164		14.74	22.87	250	55	22.00		17.69	26.31
	Pune	Pune_AF Medical College	STD	250	41	16.4			16.4	34.276		12.55	20.25	250	21	8.40		5.51	11.29
	Sangli	Sangli_Government Medical College	STD	250	82	32.8			32.8	55.104		27.92	37.68	250	39	15.60		11.82	19.38
	Thane	Thane_Government Hospital	STD	250	10	4			4	9.6		1.96	6.04	250	36	14.40		10.75	18.05
		Sites Total		2250	291	12.93	10.40	16.4	12.93	237.82	0.006	8.99	11.81	2250	274	12.18	10.00	8.59	11.41
	Ahmadnagar	Ahmadnagar_Civil Hospital	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	9	2.25		1.03	3.47
	Akola	Akola_Women Hospital	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	400	3	0.75		0.04	1.46
	Amravati	Amravati_Civil Hospital	ANC	400	3	0.75			0.75	2.977		0.04	1.46	400	3	0.75		0.04	1.46
	Aurangabad	Aurangabad_Government Medical College	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	400	1	0.25		-0.16	0.66
	Bhandara	Bhandara_Civil Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	5	1.25		0.34	2.16
	Bid	Bid_Civil Hospital	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	400	9	2.25		1.03	3.47
	Buldana	Buldhana_Civil Hospital	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	400	1	0.25		-0.16	0.66
	Chandrapur	Chandrapur_Civil Hospital	ANC	400	12	3			3	11.64		1.60	4.40	400	11	2.75		1.41	4.10
	Dhule	Dhule_Govt. Medical College	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	6	1.50		0.50	2.50
	Gadchiroli	Gadchiroli_Civil Hospital	ANC	400	4	1			1	3.96		0.18	1.82	400	2	0.50		-0.08	1.08
	Gondiya	Gondiya_Civil Hospital	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	400	3	0.75		0.04	1.46
	Hingoli	Hingoli_Civil Hospital	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	1	0.25		-0.16	0.66
	Jalgaon	Jalgaon_Civil Hospital	ANC	400	7	1.75			1.75	6.877		0.67	2.83	400	7	1.75		0.67	2.83
	Jalna	Jalna_Civil Hospital	ANC	400	4	1			1	3.96		0.18	1.82	400	1	0.25		-0.16	0.66
	Kolhapur	Kolhapur_Govt. Medical College	ANC	400	8	2			2	7.84		0.85	3.15	400	10	2.50		1.22	3.78
	Latur	Latur_Women Hospital	ANC	400	9	2.25			2.25	8.797		1.03	3.47	399	8	2.01		0.85	3.16
	Nagpur	Nagpur_IGMC	ANC	400	5	1.25			1.25	4.937		0.34	2.16	400	11	2.75		1.41	4.10
	Nanded	Nanded_Govt. Medical College	ANC	400	5	1.25			1.25	4.937		0.34	2.16	400	5	1.25		0.34	2.16
	Nandurbar	Nandurbar_Civil Hospital	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	400	9	2.25		1.03	3.47
	Nashik	Nasik_Government Hospital	ANC	400	9	2.25			2.25	8.797		1.03	3.47	400	5	1.25		0.34	2.16
	Osmanabad	Osmanabad_Civil Hospital	ANC	400	7	1.75			1.75	6.877		0.67	2.83	400	3	0.75		0.04	1.46
	Parbhani	Parbhani_Civil Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	5	1.25		0.34	2.16
	Pune	Pune_BJ Medical College	ANC	400	13	3.25			3.25	12.577		1.79	4.71	400	10	2.50		1.22	3.78

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
	Raigarh	Raigarh_Civil Hospital	ANC	400	4	1			1	3.96		0.18	1.82	400	2	0.50		-0.08	1.08
	Ratnagiri	Ratnagiri_Government Hospital	ANC	400	3	0.75			0.75	2.977		0.04	1.46	400	6	1.50		0.50	2.50
	Sangli	Sangli_Government Hospital	ANC	400	10	2.5			2.5	9.75		1.22	3.78	400	16	4.00		2.39	5.61
	Satara	Satara_Government Hospital	ANC	400	8	2			2	7.84		0.85	3.15	400	12	3.00		1.60	4.40
	Sindhudurg	Sindhudurg_Civil Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	1	0.25		-0.16	0.66
	Solapur	Solapur_Govt. Medical College	ANC	400	8	2			2	7.84		0.85	3.15	400	8	2.00		0.85	3.15
	Thane	Thane_Civil Hospital	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	17	4.25		2.59	5.91
	Wardha	Wardha_Civil Hospital	ANC	400	5	1.25			1.25	4.937		0.34	2.16	400	1	0.25		-0.16	0.66
	Washim	Washim_Civil Hospital	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	400	0	0.00		0.00	0.00
	Yavatmal	Yavatmal_Govt. Medical College	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	9	2.25		1.03	3.47
		Sites Total		13200	163	1.23	1.25	1.8	1.234	160.067	0.000	1.05	1.45	13199	200	1.52	1.25	1.03	1.47
	Pune	Pune_Saheli NGO	FSW	250	107	42.8			42.8	61.204		37.65	47.95						
	Thane	Thane_Sathi NGO	FSW	250	95	38			38	58.9		32.95	43.05						
		Sites Total		500	202	40.4	40.40	41.6	40.4	120.104	0.021	36.79	44.01						
	Pune	Pune_Samabhavana NGO	MSM	250	32	12.8			12.8	27.904		9.32	16.28						
		Sites Total		250	32	12.8			12.8	27.904		9.32	16.28						
	Nashik	Nashik_T.B. Site	TUB	400	23	5.75			5.75	21.677		3.84	7.66						
		Sites Total		400	23	5.75			5.75	21.677		3.84	7.66						
Manipur	Imphal east	Imphal_JN Hospital	STD	250	15	6.0			6.0	14.1		3.53	8.47	250	19	7.60		4.84	10.36
	Churachandpur	Churachandpur_District Hospital	STD	250	21	8.4			8.4	19.236		5.51	11.29	250	46	18.40		14.37	22.43
		Sites Total		500	36	7.2	7.20	7.8	7.2	33.336	0.011	5.30	9.10	500	65	13.00	13.00	10.56	15.44
	Bishnupur	Bishnupur_District Hospital	ANC	400	5	1.3			1.3	4.937		0.34	2.16	400	7	1.75		0.67	2.83
	Churachandpur	Churachandpur_District Hospital	ANC	400	11	2.8			2.8	10.697		1.41	4.10	400	20	5.00		3.21	6.79
	Imphal East	Imphal_District Hospital	ANC	400	10	2.5			2.5	9.75		1.22	3.78	400	4	1.00		0.18	1.82
	Imphal East	Jiribam_District Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	0	0.00		0.00	0.00
	Imphal West	Lamphelpat_RIMS	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	6	1.50		0.50	2.50
	Chandel	Moreh_CHC Hospital	ANC	400	6	1.5			1.5	5.91		0.50	2.50	399	7	1.75		0.67	2.84
	Senapati	Senapati_District Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	3	0.75		0.04	1.46
	Tamenglong	Tamenglong_District Hospital	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	3	0.75		0.04	1.46
	Thoubal	Thoubal_Government Hospital	ANC	400	16	4.0			4.0	15.36		2.39	5.61	400	4	1.00		0.18	1.82
	Ukhrul	Ukhrul_District Hospital	ANC	400	18	4.5			4.5	17.19		2.80	6.21	400	12	3.00		1.60	4.40
		Sites Total		4000	81	2.03	1.50	2.7	2.03	78.652	0.002	1.04	1.96	3999	66	1.65	1.25	0.84	1.66
	Bishnupur	Bishnupur_District Hospital	IVDU	250	27	10.8			10.8	24.084		7.57	14.03	250	56	22.40		18.06	26.74
	Churachandpur	Churachandpur_District Hospital	IVDU	250	73	29.2			29.2	51.684		24.47	33.93	249	82	32.93		28.03	37.83
	Churachandpur	New Lamkha_LRRC, DORCAS Hall	IVDU	250	73	29.2			29.2	51.684		24.47	33.93						

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
	Imphal East	Imphal_District Hospital	IVDU	250	37	14.8			14.8	31.524		11.11	18.49	249	45	18.07		14.06	22.08
		Sites Total		1000	210	21.0	22.00	29.2	21.0	158.976	0.012	19.40	24.60	748	183	24.47	22.40	21.91	27.02
	Imphal West	Imphal_District T.B. Hospital Chingmeirong	TUB	400	75	18.8			18.8			15.54	21.96						
		Sites Total		400	75	18.8			19.8			15.54	21.96						
Meghalaya	Jaintia Hills	Jowai_Civil Hospital	STD	250	0	0.0			0.0	0		0.00	0.00	130	0	0.00		0.00	0.00
	Shillong		STD											250	1	0.40		-0.26	1.06
	West Garo Hills	Ture,Civil Hospital	STD	250	0	0.0			0.0	0		0.00	0.00						
		Sites Total		500	0	0.0	0.00	0.0	0.0	0		0.00	0.00	380	1	0.26	0.20	-0.17	0.70
	Garo Hil		ANC											169	1	0.59		-0.38	1.56
	East Khasi Hills	Shillong_G.D. Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	1	0.25		-0.16	0.66
		Sites Total		400	0	0.0			1.0	0		0.00	0.00	569	2	0.35	0.42	-0.06	0.76
	East Khasi Hills	Shillong_SANKER Rehabilitation Center	IVDU	30	0	0.0			0.0	0		0.00	0.00	76	0	0.00		0.00	0.00
		Sites Total		30	0	0.0			1.0	0		0.00	0.00	76	0	0.00	0.00	0.00	0.00
Mizoram	Champhai	Saiha_Civil Hospital	STD	250	2	0.8			0.8	1.984		-0.13	1.73	250	4	1.60		0.29	2.91
	Aizawl	Aizawl_Civil Hospital	STD	250	3	1.2			1.2	2.964		0.07	2.33	250	15	6.00		3.53	8.47
		Sites Total		500	5	1.00	1.00		1.00	4.948	0.004	0.27	1.73	500	19	3.80	3.80	2.40	5.20
	Aizawl	Aizawl_MCH Clinic, Civil Hospital	ANC	400	5	1.3			1.3	4.937		0.34	2.16	400	3	0.75		0.04	1.46
	Champhai	Champhai_Civil Hospital	ANC	400	11	2.8			2.8	10.697		1.41	4.10	400	14	3.50		1.99	5.01
	Champhai	Lungei_CHC Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	8	2.00		0.85	3.15
		Sites Total		1200	18	1.50	1.25	2.0	1.50	17.625	0.004	0.92	2.08	1200	25	2.08	2.00	1.41	2.76
Mumbai	Mumbai(Suburban)	Mumbai_Cooper Hospital	STD	151	14	9.3			9.3	12.701		5.39	13.15	154	12	7.79		4.24	11.35
	Mumbai	Mumbai_GT Hospital & St. George	STD	80	19	23.8			23.8	14.487		15.92	31.58	112	42	37.50		29.97	45.03
	Mumbai(Suburban)	Mumbai_MT Agarwal Hospital	STD	230	36	15.7			15.7	30.365		11.71	19.59	249	78	31.33		26.49	36.16
		Sites Total		461	69	15.0	15.65	19.7	15.0	57.554	0.016	12.26	17.67	515	132	25.63	31.33	22.59	28.68
	Mumbai (Suburban) *	Mumbai_Bhagwati Hospital	ANC	400	7	1.75			1.75	6.877		0.67	2.83	400	4	1.00		0.18	1.82
	Mumbai	Mumbai_Cama Hospital	ANC	400	5	1.25			1.25	4.937		0.34	2.16	399	9	2.26		1.03	3.48
	mumbai (Suburban) *	Kurla_KB Bhabha Hospital	ANC	400	3	0.75			0.75	2.977		0.04	1.46	400	3	0.75		0.04	1.46
	Mumbai (Suburban) *	Mumbai_M.W.Desai Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	6	1.50		0.50	2.50
	Mumbai (Suburban) *	Rajawadi_Rajawadi Peripheral Hospital	ANC	400	5	1.25			1.25	4.937		0.34	2.16	400	5	1.25		0.34	2.16
	Mumbai (Suburban) *	Govandi_Shatabdi Hospital	ANC	401	4	0.997			0.997	3.960		0.18	1.81	399	5	1.25		0.34	2.17
		Sites Total		2401	26	1.08	1.12	1.3	1.082	25.680	0.002	0.69	1.56	2398	32	1.33	1.25	0.77	1.73
	Mumbai (Suburban) *	Mumbai_Mukti Sadan Foundation Project	IVDU	250	73	29.2			29.2	51.684		24.47	33.93						
		SANKALP												249	57	22.89		18.51	27.27
		Sites Total		250	73	29.2			29.2	51.684		24.47	33.93	249	57	22.89	22.89	18.51	27.27
	Mumbai (Suburban) *	Mumbai_HAMSAFAR Trust	MSM	250	24	9.6			9.6	21.696		6.54	12.66	250	47	18.80		14.74	22.87

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
		Sites Total		250	24	9.6			9.6	21.696		6.54	12.66	250	47	18.80	18.80	14.74	22.87
	Mumbai	Mumbai_Gaurabhai Hospital	FSW	210	94	44.8			44.8	51.923		39.12	50.41	175	95	54.29		48.09	60.48
		Sites Total		210	94	44.8			44.8	51.923		39.12	50.41	175	95	54.29	54.29	48.09	60.48
	Mumbai	GTB-RDTB Clinic	TUB	400	44	11			11			8.43	13.57						
		Sites Total		400	44	11			12			8.43	13.57						
Nagaland	Kohima	Kohima_Naga Hospital	STD	233	4	1.72			1.72	3.931		0.32	3.12	205	2	0.98		-0.15	2.10
		Sites Total		233	4	1.72			2.716			0.32	3.12	205	2	0.98	0.98	-0.15	2.10
	Dimapur	Dimapur_Civil Hospital	ANC	378	3	0.8			0.8	2.976		0.04	1.54	400	4	1.00		0.18	1.82
	Kohima	Kohima_Naga Hospital	ANC	399	7	1.8			1.8	6.877		0.67	2.84	399	7	1.75		0.67	2.84
	Mokokchung	Mokokchung_Civil Hospital	ANC	398	10	2.5			2.5	9.748		1.22	3.80	396	0	0.00		0.00	0.00
	Mon	Mon_Civil Hospital	ANC	359	4	1.1			1.1	3.955		0.20	2.03	400	5	1.25		0.34	2.16
	Phek	Phek_Civil Hospital	ANC	135	0	0.0			0.0	0		0.00	0.00	235	5	2.13		0.58	3.68
	Tuensang	Tuensang_Civil Hospital	ANC	275	10	3.6			3.6	9.636		1.78	5.49	400	17	4.25		2.59	5.91
	Wokha	Wokha_Civil Hospital	ANC	406	3	0.7			0.7	2.977		0.04	1.44	368	3	0.82		0.04	1.59
	Zunheboto	Zunheboto_Civil Hospital	ANC	319	6	1.9			1.9	5.887		0.63	3.13	249	2	0.80		-0.13	1.73
		Sites Total		2669	43	1.6	1.43	2.0	1.6	42.058	0.002	0.93	1.94	2847	43	1.51	1.13	0.66	1.59
	Dimapur	Dimapur_Civil Hospital	IVDU	245	11	4.5			4.5	10.506		2.31	6.67	249	26	10.44		7.25	13.63
	Mon	Mon_Civil Hospital	IVDU	246	1	0.4			0.4	0.995		-0.26	1.07	42	0	0.00		0.00	0.00
	Tuensang	Tuensang_Civil Hospital	IVDU	250	22	8.8			8.8	20.064		5.85	11.75	186	44	23.66		18.53	28.78
		Sites Total		741	34	4.6	4.49		4.6	31.566	0.007	3.34	5.84	477	70	14.68	10.44	12.07	17.28
	Mokokchung	Mokokchung_T.B. Hospital	TUB	139	10	7.2			7.2			3.59	10.80						
		Sites Total		139	10	7.2			7.2			3.59	10.80						
Orissa	Baleshwar	Balasore_DHH	STD	250	7	2.8			2.8	6.804		1.08	4.52	250	8	3.20		1.37	5.03
	Ganjam	Berhampur_MKCG Medical College	STD	251	10	4.0			4.0	9.601		1.95	6.01	248	17	6.85		4.22	9.49
	Khordha	Bhubaneshwar_Capital Hospital	STD	250	16	6.4			6.4	14.976		3.85	8.95	250	1	0.40		-0.26	1.06
	Cuttack	Cuttack_SCB Medical College	STD	251	6	2.4			2.4	5.856		0.80	3.98	250	7	2.80		1.08	4.52
	Koraput	Koraput_DHH	STD	250	13	5.2			5.2	12.324		2.89	7.51	250	6	2.40		0.81	3.99
	Puri	Puri_DHH	STD	250	4	1.6			1.6	3.936		0.29	2.91	250	4	1.60		0.29	2.91
	Sambalpur	Sambalpur_DHH	STD	250	0	0.0			0.0	0		0.00	0.00	250	1	0.40		-0.26	1.06
		Sites Total		1752	56	3.2	2.80	4.6	3.2	53.498	0.004	1.94	3.66	1748	44	2.52	2.40	1.63	3.17
	Ganjam	Berhampur_City Hospital	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	0	0.00		0.00	0.00
	Sambalpur	Burla_VSS Medical College	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	0	0.00		0.00	0.00

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
	Cuttack	Cuttack_SCB Medical College	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	0	0.00		0.00	0.00
	Jagatsinghpur	Jagatsinghpur_DHH	ANC	400	0	0.0			0.0	0		0.00	0.00	368	0	0.00		0.00	0.00
	Sundargarh	Rourkela_RG Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
		Sites Total		2000	10	0.5	0.50	0.5	0.5	9.89	0.002	0.18	0.82	1968	0	0.00	0.00	0.00	0.00
Pondicherry	Karaikal	Karaikal_General Hospital	STD	250	6	2.4			2.4	5.856		0.81	3.99	113	3	2.65		0.17	5.14
	Pondicherry	GHP/SSTCP, Pondicherry	STD	250	12	4.8			4.8	11.424		2.58	7.02	250	6	2.40		0.81	3.99
		Pondicherry_JIPMER	STD	179	21	11.7			11.7	18.536		7.78	15.69	250	6	2.40		0.81	3.99
		Sites Total		679	39	5.7	4.80	8.3	5.7	35.816	0.009	4.29	7.19	613	15	2.45	2.40	1.42	3.47
	Karaikal	Karaikal_General Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	0	0.00		0.00	0.00
	Pondicherry	Pondicherry_Maternity Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	1	0.25		-0.16	0.66
		Sites Total		800	2	0.3	0.25	0.3	0.3	1.995	0.002	-0.04	0.54	800	1	0.13	0.13	-0.08	0.33
Punjab	Bathinda	Bathinda_Civil Hospital	STD	250	1	0.4			0.4	0.996		-0.26	1.06	250	3	1.20		0.07	2.33
	Patiala	Patiala_Medical College	STD	274	3	1.1			1.1	2.967		0.06	2.13	250	4	1.60		0.29	2.91
	Amritsar	Amritsar_Government Medical College	STD	250	5	2			2	4.9		0.54	3.46	250	5	2.00		0.54	3.46
		Sites Total		774	9	1.16	1.09	1.5	1.16	8.863	0.003	0.53	1.80	750	12	1.60	1.60	0.85	2.35
	Amritsar	Amritsar_Medical College	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	400	0	0.00		0.00	0.00
	Faridkot	Faridkot_Medical College	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	400	0	0.00		0.00	0.00
	Hossiarpur	Hoshiarpur_Civil Hospital	ANC	400	1	0.25			0.25	0.997		-0.16	0.66	400	2	0.50		-0.08	1.08
	Ludhiana	Ludhiana_Civil Hospital	ANC	400	4	1			1	3.96		0.18	1.82	400	0	0.00		0.00	0.00
		Sites Total		1600	7	0.44	0.25	0.4	0.437	6.952	0.001	-0.09	0.59	1600	2	0.13	0.00	-0.18	0.18
Rajasthan	Ajmer	Ajmer_JLN Medical College & Hospital	STD	153	16	10.5			10.5	14.326		6.39	14.53	148	9	6.08		2.85	9.31
	Alwar	Alwar_District Hospital	STD	241	3	1.2			1.2	2.962		0.07	2.42	250	1	0.40		-0.26	1.06
	Barmer	Barmer_District Hospital	STD	245	24	9.8			9.8	21.648		6.67	12.92	250	17	6.80		4.18	9.42
	Bikaner	Bikaner_PBM Hospital	STD	237	3	1.3			1.3	2.962		0.07	2.46	100	0	0.00		0.00	0.00
	Jaipur	Jaipur_SMS Medical College	STD	129	6	4.7			4.7	5.720		1.60	7.70	250	35	14.00		10.39	17.61
	Kota	Kota_District MBS Hospital	STD	239	0	0.0			0.0	0		0.00	0.00	250	1	0.40		-0.26	1.06
	Udaipur	Udaipur_Medical College & Hospital	STD	137	4	2.9			2.9	3.883		0.55	5.29	208	15	7.21		4.26	10.16
		Sites Total		1381	56	4.06	2.92	7.2	4.06	51.504	0.005	1.85	3.99	1456	78	5.36	6.08	4.89	7.27
	Bhilwara	Bhilwara_District MG Hospital	ANC	402	0	0.0			0.0	0		0.00	0.00	400	1	0.25		-0.16	0.66
	Dungarpur	Dungarpur_District Hospital	ANC	301	2	0.7			0.7	1.986		-0.11	1.43	400	0	0.00		0.00	0.00
	Jaipur	Jaipur_SMS Medical College	ANC	401	3	0.7			0.7	2.977		0.04	1.46	400	0	0.00		0.00	0.00
	Jhalawar	Jhalawar_District Hospital	ANC	244	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Jodhpur	Jodhpur_Medical College	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Ganganagar	Sriganganagar_District Hospital	ANC	403	0	0.0			0.0	0		0.00	0.00	400	1	0.25		-0.16	0.66
		Sites Total		2151	5	0.23	0.00	0.5	0.23	4.964	0.001	-0.21	0.21	2400	2	0.08	0.00	-0.12	0.12

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
Sikkim	East	Gangtok_STNM Hospital	STD	160	0	0.0			0.0	0		0.00	0.00	128	0	0.00		0.00	0.00
		Sites Total		160	0	0.0			0.0	0		0.00	0.00	128	0	0.00	0.00	0.00	0.00
	East	Gangtok_STNM Hospital	ANC	401	0	0.0			0.0	0		0.00	0.00	400	1	0.25		-0.16	0.66
		Sites Total		401	0	0.0			0.0	0		0.00	0.00	400	1	0.25	0.25	-0.16	0.66
Tam Nadu	Kancheepuram	Chengalpat_Government Hospital	STD	250	15	6.0			6.0	14.1		3.53	8.47	250	13	5.20		2.89	7.51
	Coimbatore	Government Medical college Hospital	STD	250	21	8.4			8.4	19.236		5.51	11.29	249	24	9.64		6.56	12.72
	Karur	Government Distt. Hq Hospital	STD	250	33	13.2			13.2	28.644		9.68	16.72	250	21	8.40		5.51	11.29
	Chennai	Govt. Stanley Medical College Hospital	STD	250	20	8.0			8.0	18.4		5.18	10.82	248	18	7.26		4.55	9.97
	Madurai	Govt. Madurai Medical College Rajaji Hospital	STD	250	76	30.4			30.4	52.896		25.61	35.19	250	52	20.80		16.58	25.02
	Ramanathapuram	Government Distt. Hq Hospital	STD	250	13	5.2			5.2	12.324		2.89	7.51	220	13	5.91		3.29	8.52
	Sale	Government Mohan Kumarmangalam Med. College Hosp	STD	250	21	8.4			8.4	19.236		5.51	11.29	250	29	11.60		8.27	14.93
	Thanjavur	Government Medical College Hospital	STD	250	37	14.8			14.8	31.524		11.11	18.49	250	36	14.40		10.75	18.05
	Tiruchirappalli	Government Medical College Hospital	STD	250	51	20.4			20.4	40.596		16.21	24.59	250	54	21.60		17.32	25.88
	Tirunchalli		STD											250	84	33.60		28.69	38.51
	Tirunelveli	Govt. Medical College Hospital	STD	250	35	14.0			14.0	30.1		10.39	17.61						
	Vellore	Government Medical College Hospital	STD	250	10	4.0			4.0	9.6		1.96	6.04	250	15	6.00		3.53	8.47
		Sites Total		2750	332	12.1	8.40	14.4	12.1	276.656	0.006	7.15	9.65	2717	359	13.21	9.64	8.34	10.94
	Ariyalur		ANC											400	5	1.25		0.34	2.16
	Chennai	Chennai_Institute of Obsetrics & Gynecology	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Chennai	St. Isabel's Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66						
	Coddalore	Government Distt. Hq Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	1	0.25		-0.16	0.66
	Coimbatore	Govt. Medical College hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	3	0.75		0.04	1.46
	Coimbatore	Sheila's Hospital	ANC	400	3	0.8			0.8	2.977		0.04	1.46						
	Dharmapuri	ANC_Krishnagiri	ANC	400	5	1.3			1.3	4.937		0.34	2.16	400	6	1.50		0.50	2.50
	Dharmapuri	Govt. Distt. Hq Hospital	ANC	400	4	1.0			1.0	3.96		0.18	1.82						
	Dindigul	Government Distt. Hq Hospital	ANC	400	3	0.8			0.8	2.977		0.04	1.46	400	5	1.25		0.34	2.16
	Erode	Govt. Distt. Hq Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	0	0.00		0.00	0.00
	Kancheepuram	Govt. Distt. Hq Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	1	0.25		-0.16	0.66
	Kanniyakumari	Govt. Medical College Hospital, Nagercoil	ANC	400	4	1.0			1.0	3.96		0.18	1.82	390	0	0.00		0.00	0.00
	Kanniyakumari	Jeyasekaran Hospital, Nagercoil	ANC	400	0	0.0			0.0	0		0.00	0.00						
	Karur	Govt. Distt. Hq Hospital	ANC	400	11	2.8			2.8	10.697		1.41	4.10	400	4	1.00		0.18	1.82
	Madurai	Govt. Madurai Medical College Rajaji Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	3	0.75		0.04	1.46
	Nagapattinam	Govt. Distt. Hq Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	1	0.25		-0.16	0.66
	Namakkal	Government Dist. HQ Hospital	ANC	400	10	2.5			2.5	9.75		1.22	3.78	399	23	5.76		3.85	7.68
	Perambalur	Govt. distt. Hq Hospital	ANC	400	5	1.3			1.3	4.937		0.34	2.16	400	2	0.50		-0.08	1.08

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
	Pudukkottai	Government Distt. Hq Hospital, Pudukottai	ANC	400	3	0.8			0.8	2.977		0.04	1.46	400	8	2.00		0.85	3.15
	Ramanathapuram	Govt. Distt. Hq Hospital	ANC	400	3	0.8			0.8	2.977		0.04	1.46	400	2	0.50		-0.08	1.08
	Sale	Govt. Mohan Kumarmangalam Med. College Hospital	ANC	400	8	2.0			2.0	7.84		0.85	3.15	400	1	0.25		-0.16	0.66
	Sivaganga	Govt. Distt. Hq Hospital	ANC	400	3	0.8			0.8	2.977		0.04	1.46	400	1	0.25		-0.16	0.66
	Thanjavur	Govt. Distt. Hq Hospital, Kumbakonam	ANC	400	3	0.8			0.8	2.977		0.04	1.46	400	13	3.25		1.79	4.71
	The Nilgiris	Govt. Distt. Hq Hospital, Ooty	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	1	0.25		-0.16	0.66
	Theni	Govt. Distt. Hq Hospital	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	4	1.00		0.18	1.82
	Thiruvallur	Govt. Distt. Hq Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	2	0.50		-0.08	1.08
	Thiruvarur	Govt. Distt. Hq Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	2	0.50		-0.08	1.08
	Thoothukkudi	Govt. Medical College Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	390	3	0.77		0.04	1.50
	Tiruchirappalli	Govt. Medical College Hospital	ANC	400	5	1.3			1.3	4.937		0.34	2.16	400	6	1.50		0.50	2.50
	Tiruchirappalli	CSI Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08						
	Tirunelveli	Govt. Medical College Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	9	2.25		1.03	3.47
	Tiruvannamalai	Govt. distt. Hq. Hospital	ANC	400	6	1.5			1.5	5.91		0.50	2.50	400	5	1.25		0.34	2.16
	Tiruvannamalai	Vasantha Nursing Home	ANC	400	0	0.0			0.0	0		0.00	0.00						
	Vellore	Vellore_Government Hospital	ANC	400	3	0.8			0.8	2.977		0.04	1.46	399	5	1.25		0.34	2.17
	Viluppuram	Dist. Hq Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	4	1.00		0.18	1.82
	Virudhunagar	Govt. Distt. Hq Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	391	0	0.00		0.00	0.00
		Sites Total		14000	108	0.8	0.50	1.0	0.8	106.58	0.000	0.35	0.65	11969	120	1.00	0.75	0.56	0.94
	Chennai	IVDU Project	IVDU	253	101	39.9			39.9	60.679		34.86	44.99	105	67	63.81		56.10	71.52
		Sites Total		253	101	39.9			39.9					105	67	63.81	63.81	56.10	71.52
	Chennai	Chennai_Stanley Medical College	MSM	250	17	6.8			6.8	15.844		4.18	9.42	250	17	6.80		4.18	9.42
	Viluppuram	MSM Project ARM	MSM	250	17	6.8			6.8	15.844		4.18	9.42	250	4	1.60		0.29	2.91
		Sites Total		500	34	6.8	6.80		6.8	31.688	0.011	4.95	8.65	500	21	4.20	4.20	2.74	5.66
	Chennai	Madras Christian Council of Social ServicesProject	FSW	250	10	4.0			4.0	9.6		1.96	6.04	22	250	8.80		5.85	11.75
		Sites Total		250	10	4.0			4.0	9.6		1.96	6.04	22	250	8.80	8.80	5.85	11.75
	Tiruvannamalai	Tiruvannamalai Hospital	TUB	174	12	6.9			6.9	11.172		3.74	10.06						
		Sites Total		174	12	6.9			6.9	11.172		3.74	10.06						
Tripura	NorthTripura	Kailashahar_RGM Hospital	STD	232	0	0.0			0.0	0		0.00	0.00	250	0	0.00		0.00	0.00
	West Tripura	Agartala_GB Hospital	STD	247	5	2.0			2.0	4.898		0.55	3.50	250	14	5.60		3.21	7.99
	SouthTripura	Udaipur_TSD Hospital	STD	203	0	0.0			0.0	0		0.00	0.00						
		Sites Total		682	5	0.7	0.00		0.7	4.898	0.003	0.20	1.27	500	14	2.80	2.80	1.60	4.00
	West Tripura	Agartala_IGM Hospital	ANC	395	1	0.3			0.3	0.997		-0.16	0.67	400	0	0.00		0.00	0.00
		Sites Total		395	1	0.3			0.3	0.997		-0.16	0.67	400	0	0.00	0.00	0.00	0.00

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
Uttar Pradesh	Agra	Agra_District Hospital	STD	250	1	0.4			0.4	0.996		-0.26	1.06	250	5	2.00		0.54	3.46
	Allahabad	Allahabad_District Hospital	STD	250	5	2.0			2.0	4.9		0.54	3.46	250	1	0.40		-0.26	1.06
	Azamgarh	Azamgarh_District Hospital	STD	250	4	1.6			1.6	3.936		0.29	2.91	247	2	0.81		-0.13	1.75
	Bareilly	Bareilly_District Hospital	STD	235	0	0.0			0.0	0		0.00	0.00	238	0	0.00		0.00	0.00
	Basti	Basti_District Hospital	STD	250	3	1.2			1.2	2.964		0.07	2.33	250	2	0.80		-0.13	1.73
	Farrukhabad	Farrukhabad_District Hospital	STD	247	2	0.8			0.8	1.983		-0.13	1.75	223	2	0.90		-0.14	1.94
	Ghaziabad	Ghaziabad_District Hospital	STD	250	2	0.8			0.8	1.984		-0.13	1.73	250	0	0.00		0.00	0.00
	Gonda	Gonda_District Hospital	STD	250	4	1.6			1.6	3.936		0.29	2.91	240	18	7.50		4.70	10.30
	Gorakhpur	Gorakhpur_District Hospital	STD	250	1	0.4			0.4	0.996		-0.26	1.06	250	4	1.60		0.29	2.91
	Hamirpur	Hamirpur_District Hospital	STD	250	0	0.0			0.0	0		0.00	0.00	250	0	0.00		0.00	0.00
	Jhansi	Jhansi_District Hospital	STD	250	4	1.6			1.6	3.936		0.29	2.91	250	0	0.00		0.00	0.00
	Lucknow	Lucknow_Balrampur Hospital	STD	250	2	0.8			0.8	1.984		-0.13	1.73	249	1	0.40		-0.26	1.06
	Mirzapur	Mirzapur_District Hospital	STD	250	0	0.0			0.0	0		0.00	0.00	181	1	0.55		-0.35	1.46
	Moradabad	Moradabad_District Hospital	STD	250	0	0.0			0.0	0		0.00	0.00	250	1	0.40		-0.26	1.06
	Muzaffarnagar	Muzaffar Nagar_District Hospital	STD	250	0	0.0			0.0	0		0.00	0.00	250	0	0.00		0.00	0.00
	Sultanpur	Sultanpur_District Hospital	STD	250	7	2.8			2.8	6.804		1.08	4.52	250	3	1.20		0.07	2.33
	Varanasi	Varanasi_District Hospital	STD	250	1	0.4			0.4	0.996		-0.26	1.06	250	12	4.80		2.58	7.02
		Sites Total		4232	36	0.85	0.80	1.6	0.85	35.415	0.001	0.51	1.09	4128	52	1.26	0.55	0.20	0.90
	Aligarh	Aligarh_Mahila Hospital	ANC	395	1	0.3			0.3	0.997		-0.16	0.67	400	0	0.00		0.00	0.00
	Bahraich	Bahraich_Mahila Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	399	0	0.00		0.00	0.00
	Ballia	Balia_Mahila Hospital	ANC	378	2	0.5			0.5	1.989		-0.08	1.14	398	0	0.00		0.00	0.00
	Banda	Banda_Mahila Hospital	ANC	400	7	1.8			1.8	6.877		0.67	2.83	398	0	0.00		0.00	0.00
	Barabanki	Barabanki_Mahila Hospital	ANC	400	3	0.8			0.8	2.977		0.04	1.46	399	0	0.00		0.00	0.00
	Bijnor	Bijnore_Mahila Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Etawah	Etawah_Mahila Hospital	ANC	399	5	1.3			1.3	4.937		0.34	2.17	400	0	0.00		0.00	0.00
	Gorakhpur	Gorakhpur_Mahila Hospital	ANC	398	3	0.8			0.8	2.977		0.04	1.47	400	0	0.00		0.00	0.00
	Jaunpur	Jaunpur_Mahila Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	1	0.25		-0.16	0.66
	Kanpur Nagar	Kanpur_Medical College	ANC	401	1	0.3			0.3	0.997		-0.16	0.66	400	1	0.25		-0.16	0.66
	Lalitpur	Lalitpur_Mahila Hospital	ANC	396	0	0.0			0.0	0		0.00	0.00	400	4	1.00		0.18	1.82
	Lucknow	Lucknow_Queens Mary Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	0	0.00		0.00	0.00
	Mirzapur	Mirzapur_Mahila Hospital	ANC	392	0	0.0			0.0	0		0.00	0.00	400	3	0.75		0.04	1.46
			ANC											400	0	0.00		0.00	0.00
	Pratapgarh	Partapgarh_Mahila Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	2	0.50		-0.08	1.08
	Pilibhit	Pilibhit_Mahila Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Saharanpur	Saharanpur_Mahila Hospital	ANC	400	1	0.3			0.3	0.997		-0.16	0.66	400	2	0.50		-0.08	1.08
		Sites Total		6359	28	0.44	0.25	0.6	0.44	27.729	0.001	0.08	0.42	6794	13	0.19	0.00	-0.11	0.11

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
Uttaranchal	Dehradun	Dehradun_District Hospital	STD	250	3	1.2			1.2	2.964		0.07	2.33	250	0	0.00		0.00	0.00
	Garhwal	Tehri Garwal_District Hospital	STD	161	0	0.0			0.0	0		0.00	0.00	91	0	0.00		0.00	0.00
	Uttarkashi	Uttarkashi_District Hospital	STD	136	1	0.7			0.7	0.992		-0.47	1.94	122	0	0.00		0.00	0.00
	Almora	Almora_District Hospital	STD	251	0	0.0			0.0	0		0.00	0.00	250	1	0.40		-0.26	1.06
		Sites Total		798	4	0.5	0.37	0.9	0.5	3.956	0.003	-0.15	0.88	713	1	0.14	0.00	-0.29	0.29
	Nainital	Haldwani_Mahila Hospital	ANC	415	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Hardwar	Haridwar_Mahila Hospital	ANC	402	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
	Pithoragarh	Pithoragarh_Mahila Hospital	ANC	369	0	0.0			0.0	0		0.00	0.00	400	0	0.00		0.00	0.00
		Sites Total		1186	0	0.0	0.00		0.0	0	0.000	0.00	0.00	1200	0	0.00	0.00	0.00	0.00
West Bengal	South Twenty FourParganas	MR Bangura Hospital	STD	250	3	1.2			1.2	2.964		0.07	2.33	250	10	4.00		1.96	6.04
	Murshidabad	Bahrampur/Berhampore_District Hospital	STD	243	4	1.6			1.6	3.934		0.30	2.99	250	10	4.00		1.96	6.04
	Dakshin Dinajpur	Balurghat_Sadar Hospital	STD	243	1	0.4			0.4	0.995		-0.26	1.09	238	3	1.26		0.07	2.45
	Bankura	Bankura_Medical College	STD	204	0	0.0			0.0	0		0.00	0.00	250	4	1.60		0.29	2.91
	Barddhaman	Burdwan_Medical College	STD	244	2	0.8			0.8	1.983		-0.13	1.77	234	1	0.43		-0.27	1.13
	Medinipur	Haldia_SD Hospital	STD	244	6	2.5			2.5	5.852		0.83	4.09	249	4	1.61		0.30	2.92
	Kolkata	Howrah District Hospital	STD	213	2	0.9			0.9	1.981		-0.15	2.03						
	Kolkata	Kolkata_Kolkata Medical College & Hospital	STD	233	46	19.7			19.7	36.918		15.45	24.03	250	24	9.60		6.54	12.66
	Nadia	Krishnagar_Sadar Hospital	STD	244	2	0.8			0.8	1.983		-0.13	1.77						
	Jalpaiguri	Jalapaiguri_District Hospital	STD	250	0	0.0			0.0	0		0.00	0.00						
		Sites Total		2368	66	2.79	0.88	1.5	2.79	56.613	0.003	0.22	1.53	1721	56	3.25	1.61	0.74	2.48
	Kolkata	Abinash Dutta Maternity Home	ANC	400	5	1.3			1.3	4.937		0.34	2.16	400	3	0.75		0.04	1.46
	Barddhaman	Durgapur_SD Hospital	ANC	400	4	1.0			1.0	3.96		0.18	1.82	400	2	0.50		-0.08	1.08
	Maldah	Malda_District Hospital	ANC	373	0	0.0			0.0	0		0.00	0.00	312	0	0.00		0.00	0.00
	Medinipur	Midnapur_Tamluk District Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	400	3	0.75		0.04	1.46
	Murshidabad		ANC																
	Puruliya	Puruliya_District Hospital	ANC	400	2	0.5			0.5	1.99		-0.08	1.08	400	0	0.00		0.00	0.00
	RGKMCH Kolkata		ANC											400	2	0.50		-0.08	1.08
	Siliguri		ANC											400	1	0.25		-0.16	0.66
	Uttar Dinajpur	Uttar Dinajpur_Raiganj Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00	408	3	0.74		0.04	1.43
	Darjiling	Darjeeling_District Hospital	ANC	398	2	0.5			0.5	1.989		-0.08	1.09						
	Koch bihar	Coochbehar_MJN Hospital	ANC	400	0	0.0			0.0	0		0.00	0.00						
	SouthTwenty Four Parganas	Bijaygarh State Hospital	ANC	310	2	0.6			0.6	1.987		-0.10	1.39						
				3481	15	0.43	0.50	0.6	0.43	14.864	0.001	0.27	0.73	3120	14	0.45	0.50	0.25	0.75

				2004										2003					
States	District Name	Sites Name	Type	Number	Number	Percent	Median		hotspot			90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent		2004			LL	UL	Tested	Positive	Positive	Percent	LL	UL
		SCIR	IVDU	225	5	2.2			2.2	4.888		0.61	3.84	230	6	2.61		0.88	4.34
		Sites Total		225	5	2.2			3.2	4.888		0.61	3.84	230	6	2.61		0.88	4.34

Note:-

1. Calculation are done on actual data (without any modification).
2. Confidence Interval(CI) is calculated on the mean prevalence when the number of site is 3 or less; and on median prevalence when the number of site is more than 3.

ANNUAL SENTINEL SURVEILLANCE ROUND - 2004

Table No 1.b : HIV Preavalence & Confidence Interval for ANC-Rural Sites in different states for 2003 - 2004

ANC Rural Sites				2004						2003					
States	Sl. No.	District Name	Sites Name	Number Tested	Number Positive	Percent Positive	Median Percent	90%Confidence Interval LL	UL	Number Tested	Number Positive	Percent Positive	Median Percent	90%Confidence Interval LL	UL
Andhra Pradesh	1	Vizianagaram	Area Hospital, Parvathipuram	400	2	0.5		-0.08	1.08	400	4	1.00		0.18	1.82
	2	Visakhapatnam	CHC, Aganampudi	400	3	0.75		0.04	1.46	400	9	2.25		1.03	3.47
	3	East Godavari	Area Hospital, Ramachandrapuram	400	7	1.75		0.67	2.83	400	15	3.75		2.19	5.31
	4	Krishna	Area Hospital, Nuzividu	400	6	1.5		0.50	2.50	400	4	1.00		0.18	1.82
	5	Guntur	Area Hospital, Narsorapet	400	6	1.5		0.50	2.50	399	11	2.76		1.41	4.11
	6	Nellore	Area Hospital, Kavali	400	9	2.25		1.03	3.47	400	2	0.50		-0.08	1.08
	7	Chittoor	Area Hospital, Srikalahasti	400	8	2		0.85	3.15	400	6	1.50		0.50	2.50
	8	Kurnool	Women & Child Hospital, Adoni	400	1	0.25		-0.16	0.66	400	1	0.25		-0.16	0.66
	9	Anantapur	Area Hospital, Guntakal	400	5	1.25		0.34	2.16	400	3	0.75		0.04	1.46
	10	Adilabad	Area Hospital, Mancherial	400	1	0.25		-0.16	0.66	400	6	1.50		0.50	2.50
	11	Warangal	Area Hospital, Jangaon	400	5	1.25		0.34	2.16	400	4	1.00		0.18	1.82
	12	Mahbubnagar	Area Hospital, Gadwal	400	3	0.75		0.04	1.46	400	2	0.50		-0.08	1.08
	13	Nalgonda	Area Hospital, Bhongir	400	3	0.75		0.04	1.46	400	3	0.75		0.04	1.46
	14	Srikakulam	CHC, Tekkali	400	4	1		0.18	1.82	400	3	0.75		0.04	1.46
	15	West Godavari	CHC, Bhimavaram	400	8	2		0.85	3.15	395	10	2.53		1.23	3.83
	16	Prakasam	Area Hospital, Chirala	400	7	1.75		0.67	2.83	400	10	2.50		1.22	3.78
	17	Cuddapah	Area Hospital, Rajampeta	400	5	1.25		0.34	2.16	400	5	1.25		0.34	2.16
	18	Karimnagar	Area Hospital, Jagitial	400	6	1.5		0.50	2.50	398	8	2.01		0.85	3.17
	19	Medak	CHC, Narsapur	400	2	0.5		-0.08	1.08	5	0	0.00		0.00	0.00
	20	Nizamabad	Area Hospital, Kamareddy	400	7	1.75		0.67	2.83	400	4	1.00		0.18	1.82
	21	Khammam	Area Hospital, Bhadrachalam	400	8	2		0.85	3.15						
			Sites Total	8400	106	1.26	1.25	1.00	1.50	7597	110	1.45	1.00	0.72	1.28
Karnataka	22	Bangalore Rural	General Hospital, Kanakapura	400	9	2.25		1.03	3.47	400	11	2.75		1.41	4.10
	23	Bangalore	G.H.K R Puram	400	0	0		0.00	0.00	400	6	1.50		0.50	2.50
	24	Bagalkot	G.H. Jamkhandi	400	10	2.5		1.22	3.78	400	14	3.50		1.99	5.01
	25	Bellary	G.H. Hospet	400	5	1.25		0.34	2.16	400	7	1.75		0.67	2.83
	26	Belgaum	G.H. Gokak	400	19	4.75		3.00	6.50	390	20	5.13		3.29	6.97
	27	Bidar	G.H. Hummabad	400	4	1		0.18	1.82	389	6	1.54		0.51	2.57
	28	Bijapur	G.H. Indi	400	3	0.75		0.04	1.46	400	3	0.75		0.04	1.46
	29	Chamrajnagar	G.H. Kollegal	400	5	1.25		0.34	2.16	390	2	0.51		-0.08	1.11
	30	Chikmagalur	G.H. Mudigere	334	5	1.50		0.40	2.59	400	3	0.75		0.04	1.46

ANC Rural Sites				2004						2003					
States	Sl. No.	District Name	Sites Name	Number	Number	Percent	Median	90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent	LL	UL	Tested	Positive	Positive	Percent	LL	UL
	31	Chitradurga	G.H. Challekere	400	3	0.75		0.04	1.46	398	1	0.25		-0.16	0.66
	32	Davangere	G.H. Channagiri	400	13	3.25		1.79	4.71	400	3	0.75		0.04	1.46
	33	Gadag	G.H. Laxmeswara	400	3	0.75		0.04	1.46	400	1	0.25		-0.16	0.66
	34	Gulbarga	G.H. Sedum	400	10	2.5		1.22	3.78	400	8	2.00		0.85	3.15
	35	Hassan	G.H. Sakaleshpur	400	5	1.25		0.34	2.16	400	4	1.00		0.18	1.82
	36	Haveri	G.H. Ranibennur	400	2	0.5		-0.08	1.08	400	7	1.75		0.67	2.83
	37	Dharwad	G.H. Navalgund	400	16	4		2.39	5.61	400	12	3.00		1.60	4.40
	38	Uttara Kannada	G.H. Dandeli	400	6	1.5		0.50	2.50	400	1	0.25		-0.16	0.66
	39	Kolar	G.H. Chikkaballapura	400	1	0.25		-0.16	0.66	400	3	0.75		0.04	1.46
	40	Koppal	G.H. Gangavathi	400	17	4.25		2.59	5.91	399	22	5.51		3.63	7.39
	41	Mandya	G.H. Malavalli	400	4	1		0.18	1.82	400	4	1.00		0.18	1.82
	42	kodagu	G.H. Siddapur	400	5	1.25		0.34	2.16	400	1	0.25		-0.16	0.66
	43	Dakshina Kannada	G.H. Bantwal	400	1	0.25		-0.16	0.66	400	2	0.50		-0.08	1.08
	44	Mysore	G.H. Hunsur	400	4	1		0.18	1.82	400	1	0.25		-0.16	0.66
	45	Rraichur	G.H. Sindhanur	400	4	1		0.18	1.82	400	7	1.75		0.67	2.83
	46	Shimoga	G.H. Sagar	400	2	0.5		-0.08	1.08	400	5	1.25		0.34	2.16
	47	Tumkur	General Hospital, Tiptur	400	7	1.75		0.67	2.83	400	10	2.50		1.22	3.78
	48	Udupi	G.H. Kundapur	400	2	0.5		-0.08	1.08	400	2	0.50		-0.08	1.08
			Sites Total	10734	165	1.54	1.25	1.01	1.49	10766	166	1.54	1.00	0.76	1.24
Maharashtra	49	Nashik	CHC, Kalwan	400	2	0.5		-0.08	1.08	400	2	0.50		-0.08	1.08
	50	Parbhani	CHC, Selu	400	4	1		0.18	1.82	400	6	1.50		0.50	2.50
	51	Chandrapur	CHC, Mul	400	3	0.75		0.04	1.46	400	1	0.25		-0.16	0.66
	52	Nagpur	CHC, Umred	400	5	1.25		0.34	2.16	400	3	0.75		0.04	1.46
	53	Latur	CHC, Murud	400	1	0.25		-0.16	0.66	400	4	1.00		0.18	1.82
	54	Bid	CHC, Parali	400	3	0.75		0.04	1.46	400	3	0.75		0.04	1.46
	55	Akola	CHC, Murtizapur	400	0	0		0.00	0.00	280	1	0.36		-0.23	0.94
	56	Buldana	CHC, khamgaon	400	0	0		0.00	0.00	400	1	0.25		-0.16	0.66
	57	Ratnagiri	CHC, Dapoli	400	3	0.75		0.04	1.46	400	2	0.50		-0.08	1.08
	58	Thane	CHC, Shahapur	400	3	0.75		0.04	1.46	400	6	1.50		0.50	2.50
	59	Raigarh	CHC, Mangaon	400	1	0.25		-0.16	0.66	399	1	0.25		-0.16	0.66
	60	Hingoli	CHC, Basmat	400	4	1		0.18	1.82	396	2	0.51		-0.08	1.09
	61	Nanded	CHC, Khandhar	400	2	0.5		-0.08	1.08	390	0	0.00		0.00	0.00
	62	Osmanabad	CHC, Omerga	400	4	1		0.18	1.82	400	3	0.75		0.04	1.46

ANC Rural Sites				2004						2003					
States	Sl. No.	District Name	Sites Name	Number Tested	Number Positive	Percent Positive	Median Percent	90%Confidence Interval LL	UL	Number Tested	Number Positive	Percent Positive	Median Percent	90%Confidence Interval LL	UL
	63	Amravati	CHC, Achalpur	400	1	0.25		-0.16	0.66	400	1	0.25		-0.16	0.66
	64	Wardha	CHC, Pulgaon	400	2	0.5		-0.08	1.08	400	2	0.50		-0.08	1.08
	65	Washim	CHC, Manglurpir	400	0	0		0.00	0.00	400	0	0.00		0.00	0.00
	66	Bhandara	CHC, Tumsar	400	3	0.75		0.04	1.46	400	3	0.75		0.04	1.46
	67	Gadchiroli	CHC, Armori	400	0	0		0.00	0.00	400	0	0.00		0.00	0.00
	68	Gondiya	CHC, Deori	400	1	0.25		-0.16	0.66	301	3	1.00		0.05	1.94
	69	Pune	CHC, Narayangaon	400	6	1.5		0.50	2.50	400	1	0.25		-0.16	0.66
	70	Satara	CHC, Karad	400	5	1.25		0.34	2.16	400	10	2.50		1.22	3.78
	71	Solapur	CHC, Akluj	400	1	0.25		-0.16	0.66	400	2	0.50		-0.08	1.08
	72	Kolhapur	CHC, Gargoti	400	5	1.25		0.34	2.16	400	2	0.50		-0.08	1.08
	73	Jalgaon	CHC, Muktainagar	400	5	1.25		0.34	2.16	400	5	1.25		0.34	2.16
	74	Aurangabad	CHC, Sillod	400	0	0		0.00	0.00	400	0	0.00		0.00	0.00
	75	Sangli	CHC, Islampur	400	15	3.75		2.19	5.31	400	16	4.00		2.39	5.61
	76	Dhule	CHC, Shirpur	401	4	1.00		0.18	1.81	394	2	0.51		-0.08	1.10
	77	Nandurbar	CHC, Navapur	400	0	0		0.00	0.00	400	1	0.25		-0.16	0.66
	78	Ahmadnagar	CHC, Pathradi	400	1	0.25		-0.16	0.66	400	4	1.00		0.18	1.82
	79	Sindhudurg	CHC, Sawantwadi	400	0	0		0.00	0.00	400	0	0.00		0.00	0.00
	80	Jalna	CHC, Ambad	400	2	0.5		-0.08	1.08						
	81	Yavatmal	CHC, Pusad	400	5	1.25		0.34	2.16						
			Sites Total	13201	91	0.69	0.50	0.35	0.65	12160	87	0.72	0.50	0.34	0.66
Manipur	82	Imphal West	CHC, Khumbong	400	2	0.5		-0.08	1.08	400	2	0.50		-0.08	1.08
	83	imphal West	CHC, Wangoi	400	3	0.8		0.04	1.46	400	0	0.00		0.00	0.00
	84	Bishnupur	PHC, Moirang	400	5	1.3		0.34	2.16	400	6	1.50		0.50	2.50
	85	Thoubal	CHC, Kakching	400	2	0.5		-0.08	1.08	400	1	0.25		-0.16	0.66
			Sites Total	1600	12	0.8	0.63	0.18	1.07	1600	9	0.56	0.38	-0.01	0.76
Nagaland	86	Dimapur	CHC, Medziphema	166	2	1.2		-0.19	2.60	253	2	0.79		-0.13	1.71
	87	Mon	CHC, Aboi	343	0	0.0		0.00	0.00	12	2	16.67		-1.03	34.36
	88	Kohima	CHC, Tseminyu	95	3	3.2		0.21	6.11	71	0	0.00		0.00	0.00
	89	Phek	CHC, Pfutsero	263	1	0.4		-0.24	1.00	127	9	7.09		3.34	10.83
	90	Mokokchung	CHC, Changtonya	327	2	0.6		-0.10	1.32						
	91	Tuensang	CHC, Tuensang (Noklak)	410	29	7.1		4.99	9.16						
	92	Wokha	CHC, Bhandhari	35	0	0.0		0.00	0.00						
	93	Zunheboto	CHC, Akuluto	19	0	0.0		0.00	0.00						
			Sites Total	1658	37	2.2	0.50	-0.24	1.23	463	13	2.81	7.09	5.68	8.50

ANC Rural Sites				2004						2003					
States	Sl. No.	District Name	Sites Name	Number	Number	Percent	Median	90%Confidence Interval		Number	Number	Percent	Median	90%Confidence Interval	
				Tested	Positive	Positive	Percent	LL	UL	Tested	Positive	Positive	Percent	LL	UL
Tam Nadu	94	Vellore	GH, Vaniambadi	400	2	0.5		-0.08	1.08	391	2	0.51		-0.08	1.11
	95	Thiruvallur	GH, Thiruthani	400	4	1.0		0.18	1.82	400	2	0.50		-0.08	1.08
	96	Coddalore	GH, Panruti	400	4	1.0		0.18	1.82	400	4	1.00		0.18	1.82
	97	Madurai	GH, Melur	189	7	3.7		1.44	5.96	396	5	1.26		0.34	2.19
	98	Theni	GH, Cumbum	400	5	1.3		0.34	2.16	400	6	1.50		0.50	2.50
	99	Dindigul	GH, Palani	400	3	0.8		0.04	1.46	399	1	0.25		-0.16	0.66
	100	Ramanathapuram	GH, Paramakudi	400	2	0.5		-0.08	1.08	400	2	0.50		-0.08	1.08
	101	Sale	GH, Attur	400	5	1.3		0.34	2.16	400	2	0.50		-0.08	1.08
	102	Namakkal	GH, Tiruchengode	400	3	0.8		0.04	1.46	400	2	0.50		-0.08	1.08
	103	Dharmapuri	ANC_FRU Hosur (Krishnagiri)	171	1	0.6		-0.37	1.54	400	5	1.25		0.34	2.16
	104	Dharmapuri	FRU Harur	400	2	0.5		-0.08	1.08						
	105	Tiruchirappalli	GH, Manapparai	400	2	0.5		-0.08	1.08	400	3	0.75		0.04	1.46
	106	Perambalur	GH, Ariyalur	400	4	1.0		0.18	1.82	391	5	1.28		0.34	2.21
	107	Karur	GH, Kulithali	400	13	3.3		1.79	4.71	400	2	0.50		-0.08	1.08
	108	Pudukkottai	GH, Aranthangi	400	2	0.5		-0.08	1.08	400	0	0.00		0.00	0.00
	109	Coimbatore	GH, Pollachi	400	3	0.8		0.04	1.46	400	2	0.50		-0.08	1.08
	110	Erode	GH, Gobichettipalayam	400	2	0.5		-0.08	1.08	400	1	0.25		-0.16	0.66
	111	The Nilgiris	GH, Coonoor	400	3	0.8		0.04	1.46	399	1	0.25		-0.16	0.66
	112	Tirunelveli	GH, Ambasamudram	400	1	0.3		-0.16	0.66	400	1	0.25		-0.16	0.66
	113	Thoothukkudi	GH, Kovilpatti	399	4	1.0		0.18	1.82	400	3	0.75		0.04	1.46
	114	Virudhunagar	GH, Rajapalayam	400	1	0.3		-0.16	0.66	399	0	0.00		0.00	0.00
	115	Thanjavur	GH, Pattukkottai	400	2	0.5		-0.08	1.08	399	2	0.50		-0.08	1.08
	116	Kancheepuram	GH, Maduranthagam	400	3	0.8		0.04	1.46	400	1	0.25		-0.16	0.66
	117	Viluppuram	Dist. Hospital, Kallakurichi	400	1	0.3		-0.16	0.66	400	4	1.00		0.18	1.82
	118	Kanniyakumari	Govt. Hospital Padmanabapuram	400	2	0.5		-0.08	1.08						
	119	Nagapattinam	Govt. Hospital, Mayiladuthurai	400	2	0.5		-0.08	1.08						
	120	Sivaganga	Govt. Hospital, Karaikudi	400	7	1.8		0.67	2.83						
	121	Thiruvarur	Govt. Hospital, Mannargudi	400	0	0.0		0.00	0.00						
	122	Tiruvannamalai	Govt. Hospital_ Vandawasi	400	5	1.3		0.34	2.16						
			Sites Total	11159	95	0.9	0.75	0.57	0.93	9174	56	0.61	0.50	0.33	0.67

Note:-

1. Calculation are done on actual data (without any modification).
2. Confidence Interval(CI) is calculated on the mean prevalence when the number of site is 3 or less; and on median prevalence when the number of site is more than 3.

Table No 1.c : HIV Prevalence and Confidence Interval for TI sites in different states for 2003 - 2004

HIV Prevalence for IVDU(TI) sites- Statewise & sitewise

Targated Intervention Sites(TI)					2004					2003					
States	Sl. No.	District Name	Sites Name	Number Tested	Number Positive	Percent Positive	Median Percent	90%Confidence Interval LL	UL	Number Tested	Number Positive	Percent Positive	Median Percent	90%Confidence Interval LL	UL
Assam	1	Kamrup	Guwahati_AIDS Prevention Society	134	6	4.5		1.54	7.42	36	2	5.56		-0.72	11.84
			Sites Total	134	6	4.5		1.54	7.42	36	2	5.56	5.56	-0.72	11.84
Chandigarh	2	Chandigarh	Chandigarh_slums	250	12	4.8		2.58	7.02						
			Sites Total	250	12	4.8		2.58	7.02						
Delhi	3	North	Sharan	250	44	17.6		13.64	21.56						
			New Delhi_DDU Hospital							250	36	14.40		10.75	18.05
			Sites Total	250	44	17.6		13.64	21.56	250	36	14.40		10.75	18.05
Jammu & Kashmir	4	Jammu	Jammu	5	0	0		0.00	0.00	194	0	0.00		0.00	0.00
			Sites Total	5	0	0		0.00	0.00	194	0	0.00		0.00	0.00
Mizoram	5	Aizawl	Aizawl,SHALOM	250	17	6.8		4.18	9.42	250	22	8.80		5.85	11.75
	6	Champhai	TNT,Champhai	250	17	6.8		4.18	9.42						
			Sites Total	500	34	6.8	6.80	4.95	8.65	250	22	8.80		5.85	11.75
Nagaland	7	Wokha	Agape_Wokha	248	1	0.4		-0.26	1.07	250	2	0.80		-0.13	1.73
	8	Phek	Bethesda_Phek	201	2	1.0		-0.16	2.15						
	9	Mokokchung	Tuli, NEDHIV	239	7	2.9		1.13	4.72	186	5	2.69		0.74	4.64
	10	Kohima	Kirpa_Kohima	250	10	4.0		1.96	6.04						
			Sites Total	938	20	2.1	1.96	0.99	2.93	436	7	1.61	1.74	0.68	2.53
West Bengal	11	Kolkata	Kolkata_NGO TI	219	12	5.5		2.95	8.01						
			Sites Total	219	12	5.5		2.95	8.01						

HIV Prevalence for MSM(TI) sites- Statewise & sitewise

Targated Intervention Sites(TI)				2004						2003					
States	Sl. No.	District Name	Sites Name	Number Tested	Number Positive	Percent Positive	Median Percent	90%Confidence Interval LL	90%Confidence Interval UL	Number Positive	Number Tested	Percent Positive	Median Percent	90%Confidence Interval LL	90%Confidence Interval UL
Andhra Pradesh	1	Krishna	Saathi, Vijayawada, Krishna	250	40	16		12.19	19.81	250	33	13.20		9.68	16.72
				250	40	16		12.19	19.81	250	33	13.20		9.68	16.72
Bihar	2	Patna	Patna	250	4	1.6		0.29	2.91	250	4	1.60		0.29	2.91
			Sites Total	250	4	1.6		0.29	2.91	250	4	1.60		0.29	2.91
Chandigarh	3	Chandigarh	Chandigarh_slums	220	3	1.4		0.08	2.65						
			Sites Total	220	3	1.4		0.08	2.65						
Delhi	4	North East	DART	105	7	6.7		2.66	10.67	62	17	27.42		18.10	36.74
			Sites Total	105	7	6.7		2.66	10.67	62	17	27.42		18.10	36.74
Goa			Margao							99	9	9.09		4.34	13.84
	5	South Goa	Vasco_The Humsafar Trust	119	2	1.7		-0.26	3.62						
			Sites Total	119	2	1.7		-0.26	3.62	99	9	9.09	9.09	4.34	13.84
Gujarat	6	Vadodara	Vadodara_Lakshya Trust	250	17	6.8		4.18	9.42						
			Sites Total	250	17	6.8		4.18	9.42						
Karnataka	7	Bangalore	Jagruthi Ngo	250	25	10.0		6.88	13.12	250	27	10.80		7.57	14.03
			Sites Total	250	25	10.0		6.88	13.12	250	27	10.80		7.57	14.03
Kerala	8	Kozhikode	kozhikode	112	1	0.9		-0.57	2.36						
			Sites Total	112	1	0.9		-0.57	2.36						
Manipur	9	Imphal West	Imphal_SASO RIMS Road	250	35	14.0		10.39	17.61	250	73	29.20		24.47	33.93
			Sites Total	250	35	14.0		10.39	17.61	250	73	29.20	29.20	24.47	33.93
Pondicherry	10	Pondicherry	NGO_SAHOTHARAN, Pondicherry	230	12	5.2		2.81	7.63						
			Sites Total	230	12	5.2		2.81	7.63						
West Bengal	11	Kolkata	Manas Bangla	150	2	1.3		-0.21	2.87						
			Sites Total	150	2	1.3		-0.21	2.87						

HIV Prevalence for FSW(TI) sites- Statewise & sitewise

Targated Intervention Sites(TI)				2004						2003					
States	Sl. No.	District Name	Sites Name	Number Tested	Number Positive	Percent Positive	Median Percent	90%Confidence Interval LL	90%Confidence Interval UL	Number Positive	Number Tested	Percent Positive	Median Percent	90%Confidence Interval LL	90%Confidence Interval UL
Andaman & Nicobar Islands	1	Andamans	NGO_SEEDS, Port Blair	200	1	0.5		-0.32	1.32						
			Sites Total	200	1	0.5		-0.32	1.32						
Andhra Pradesh	2	Visakhapatnam	Priyadarshini Service Organization, Vishakhapatnam	250	35	14		10.39	17.61	250	32	12.80		9.32	16.28
	3	EastGodavari	East Godawari	250	102	40.8		35.69	45.91	250	113	45.20		40.02	50.38
	4	Prakasam	Lakshmi Development Society, Ongle, Prakasam	250	27	10.8		7.57	14.03	250	61	24.40		19.93	28.87
	5	Hyderabad	Hyderabad	250	25	10		6.88	13.12	250	40	16.00		12.19	19.81
	6	Kurnool	Parameswari, Kurnool	250	25	10		6.88	13.12	250	22	8.80		5.85	11.75
	7	Warangal	Warangal	250	47	18.8		14.74	22.87	250	32	12.80		9.32	16.28
	8	Guntur	Needs Society, Chilakaluripet, Guntur	250	36	14.4		10.75	18.05						
			Sites Total	1750	297	16.97	14.00	12.22	15.78	1500	300	20	14.40	4.26	24.54
Assam	9	Cachar	Silchar_Nibedita Nari Sangtha	246	0	0.0		0.00	0.00	152	0	0.00		0.00	0.00
	10	Nalbari	Nalbari_Yubasammanay	93	0	0.0		0.00	0.00						
			Sites Total	339	0	0.0	0.0	0.00	0.00	152	0	0.00		0.00	0.00
Bihar	11	Munger	Munger_Sharwan Bazar	250	1	0.4		-0.26	1.06						
	12	Muzaffarpur	Muzaffarpur_Chaturbhaj Asthan	250	0	0.0		0.00	0.00	250	12	4.80		2.58	7.02
			Sites Total	500	1	0.2	0.20	-0.13	0.53	250	12	4.80		2.58	7.02
Chandigarh	13	Chandigarh	Chandigarh_slums-I	250	1	0.4		-0.26	1.06	250	0	0.00		0.00	0.00
	14		chandigarh_slums-II	250	2	0.8		-0.13	1.73	250	3	1.20		0.07	2.33
	15		Chandigarh_slums-III	250	3	1.2		0.07	2.33						
			Sites Total	750	6	0.8	0.80	0.27	1.33	500	3	0.60	0.60	0.03	1.17
Delhi	16	North	IMDT	250	20	8.0		5.18	10.82						
	17	West	MRYDO	250	3	1.2		0.07	2.33	249	4	1.61		0.30	2.92
			Sites Total	500	23	4.6	4.60	3.08	6.12	249	4	1.61		0.30	2.92
Goa		Baina	Vasco D' Gama							136	41	30.15		23.67	36.62
										136	41	30.15	30.15	23.67	36.62
Gujarat	18	Vadodara	Vadodara_Vikas Jyot Trust	250	23	9.2		6.19	12.21						
			Sites Total	250	23	9.2		6.19	12.21						

Targated Intervention Sites(TI)				2004						2003					
States	Sl. No.	District Name	Sites Name	Number Tested	Number Positive	Percent Positive	Median Percent	90%Confidence Interval LL	UL	Number Positive	Number Tested	Percent Positive	Median Percent	90%Confidence Interval LL	UL
Himachal Pradesh	19	Shimla	Shimla	250	2	0.8		-0.13	1.73	208	0	0.00		0.00	0.00
			Sites Total	250	2	0.80		-0.13	1.73	208	0	0.00		0.00	0.00
Karnataka	20	Bangalore	Samraksha, Bangalore	250	54	21.6		17.32	25.88	250	36	14.40		10.75	18.05
			Sites Total	250	54	21.6		17.32	25.88	250	36	14.40		10.75	18.05
Kerala		Ernakulam	Ernakulam							83	0	0.00		0.00	0.00
		Kozhikode	kozhikode							87	4	4.60		0.90	8.29
		Trivandrum	Trivandrum							36	0	0.00		0.00	0.00
			Sites Total							206	4	1.94	0.00	0.38	3.50
Manipur	21	Imphal West	Khouyathong_MLSS Police Point	250	31	12.4		8.97	15.83	250	32	12.80		9.32	16.28
			Sites Total	250	31	12.4		8.97	15.83	250	32	12.80		9.32	16.28
Mizoram	22	Aizawl	CHAN,Aizawl	168	23	13.7		9.33	18.05						
			Sites Total	168	23	13.7		9.33	18.05						
Nagaland	23	Dimapur	Akimbo_Dimapur	248	11	4.4		2.28	6.59	250	11	4.40		2.27	6.53
			Sites Total	248	11	4.4		2.28	6.59	11	250	4.40	4.40	-44.10	52.90
Orissa	24	Khordha	Bhubaneshwar_OPUS	251	19	7.6		4.82	10.32						
	25	Rayagada	Rayagada_USO	251	7	2.8		1.08	4.50						
			Sites Total	502	26	5.2	5.18	3.56	6.80						
Pondicherry	26	Pondicherry	NGO_SFDRT, Pondicherry	206	4	1.9		0.36	3.52						
			Sites Total	206	4	1.9		0.36	3.52						
Rajasthan	27	Alwar	Alwar	130	3	2.3		0.14	4.47	51	2	3.92		-0.55	8.39
			Sites Total	130	3	2.3		0.14	4.47	51	2	3.92		-0.55	8.39
Uttar Pradesh	28	Allahabad	SKS, Allahbad	250	50	20.0		15.84	24.16	209	25	11.96		8.27	15.65
	29	Varanasi	Sarvjan Kalyan Samiti, Varanasi	202	0	0.0		0.00	0.00	200	2	1.00		-0.16	2.16
	30	Basti	Basti_Global Science Acadami, Maliviya Road	248	6	2.4		0.81	4.02						
			Sites Total	700	56	8.0	2.42	6.41	9.59	409	27	6.60	6.48	-23.24	36.44
West Bengal	31	Kolkata	Kolkata SHIP	250	9	3.6		1.66	5.54	250	24	9.60		6.54	12.66
	32	South Twenty Four Parganas	Diamond Harbour TI project	250	4	1.6		0.29	2.91	250	11	4.40		2.27	6.53
	33	Barddhaman	Durgapur TI project	250	11	4.4		2.27	6.53	250	20	8.00		5.18	10.82
	34	Jalpaiguri	Jalapaiguri	250	14	5.6		3.21	7.99	250	23	9.20		6.19	12.21
	35	Murshidabad	Behrampur TI project	250	5	2.0		0.54	3.46	248	15	6.05		3.56	8.54

Targated Intervention Sites(TI)				2004						2003					
States	Sl. No.	District Name	Sites Name	Number Tested	Number Positive	Percent Positive	Median Percent	90%Confidence Interval LL	90%Confidence Interval UL	Number Positive	Number Tested	Percent Positive	Median Percent	90%Confidence Interval LL	90%Confidence Interval UL
	36	Medinipur	Haldia TI project	250	24	9.6		6.54	12.66	250	5	2.00		0.54	3.46
	37	Kolkata	DMSC_Kolkata	250	5	2.0		0.54	3.46	141	8	5.67		2.47	8.88
			Sites Total	1750	72	4.1	3.60	2.63	4.57	1639	106	6.47	6.05	4.80	7.29

Note:-

1. Calculation are done on actual data (without any modification).
2. Confidence Interval(CI) is calculated on the mean prevalence when the number of site is 3 or less; and on median prevalence when the number of site is more than 3.