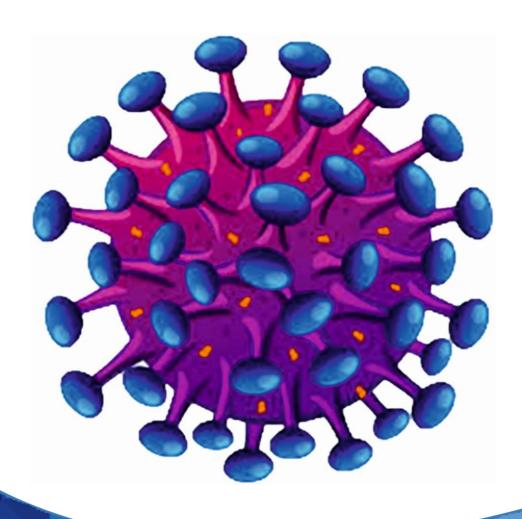
# HIV SENTINEL SURVEILLANCE (ANC) Tamil Nadu State Report



2018-19











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2018-19







TAMILNADU STATE AIDS CONTROL SOCIETY
Chennai



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### **Foreword**

HIV Sentinel surveillance among ANC attendees is one of the most important national level activities, as it helps the programme managers in framing health policies towards controlling HIV infection in the state and the country as well. The objectives of HIV sentinel surveillance are to understand the trends, assess spread and distribution of HIV infection among geographical areas across the state. In order to have uniform geographical coverage, the number of sentinel sites in the state has been increased over a period of years by keeping at least one site in each district.

The National Institute of Epidemiology, Chennai, one of the Regional Institutes for 8 southern states, is involved in the HIV surveillance activities since 2006. This report is prepared based on the data collected during the 16<sup>th</sup> round of surveillance, in conjunction with the past years data to analyze the trend and to have an insight of epidemiological factors. I hope this report will serve as a very useful tool for the policy makers, scholars, researchers and other stakeholders in formulating guidelines in controlling HIV and enhancing their knowledge of HIV in their state.

I take this opportunity to thank Dr. Shobini Rajan, Assistant Director General, NACO and Dr. Pradeep Kumar, Consultant (surveillance) & his team for entrusting this activity to NIE and also for providing technical support in implementing the surveillance. I also wish to thank the Project Director and nodal officer of State AIDS Control Society for their help in completing the surveillance activities in a timely manner. I express my gratitude to all the State Referral Laboratories, National Referral Laboratories, State Surveillance Team members, Sentinel sites personnel and other National and International partners who helped us in completing the surveillance successfully.

Dr. Manoj V Murhekar



WHO Collaborating Centre for Leprosy Research and Epidemiology



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### CHAPTER 1.

### INTRODUCTION: HIV AND HSS

Acquired immune deficiency syndrome or acquired immunodeficiency syndrome (AIDS), caused by the human immunodeficiency virus (HIV), progressively reduces the effectiveness of the immune system, leaving the infected susceptible to opportunistic infections. HIV was first reported in USA in 1981, following which the infection spread globally. Three decades since its inception, the epidemic still continues to be a global public health threat and interventions at various levels are ongoing for HIV management. Unprotected sex, sharing used needles or syringes and transfusion of untested blood increases the risks of HIV infection.

The first HIV case in India was reported in 1986 in Chennai, followed by a rapid spread across the nation within a decade. Based on their risk of disease transmission and HIV prevalence levels, the population in India is divided into 3 categories high-risk groups with - high prevalence, bridge populations with moderate prevalence and general population with low prevalence.

Single Male Migrants

Bridge Population

STI Clinic Attendees

Long-Distant Truckers

Clients of HRGs

Men having Sex with Men (MSM)

General Population

Figure 1: HIV Transmission Dynamics among HIV Sub-population groups

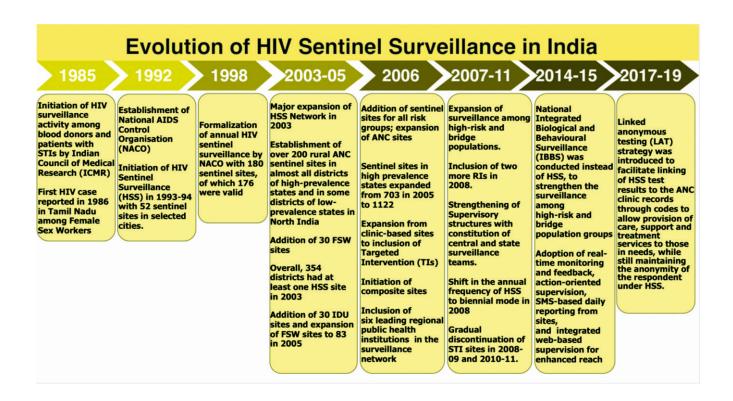
HIV in India is highly concentrated among the high-risk population groups. Unprotected sex with female sex workers (FSW), injecting drug users (IDU), and unprotected anal sex between men are the three primary routes of HIV transmission in India. The bridge population, generally the clients or partners of high-risk population, transmit the disease to the general population. Hence measures to reduce the HIV prevalence levels in high-risk population has been observed as an effective method to reduce the transmission risks.



# 1.1 HIV Sentinel Surveillance (HSS)

HIV sentinel surveillance is defined as a system of monitoring the HIV epidemic among the specified population groups by collecting information on HIV from designated sites (sentinel sites) over years, through a uniform and consistent methodology that allows comparison of findings across place and time, to guide programme response. A sentinel site is a designated service point/facility where blood specimens and relevant information are collected from a fixed number of eligible individuals from a specified population group over a fixed period of time, periodically, for the purpose of monitoring the HIV epidemic.

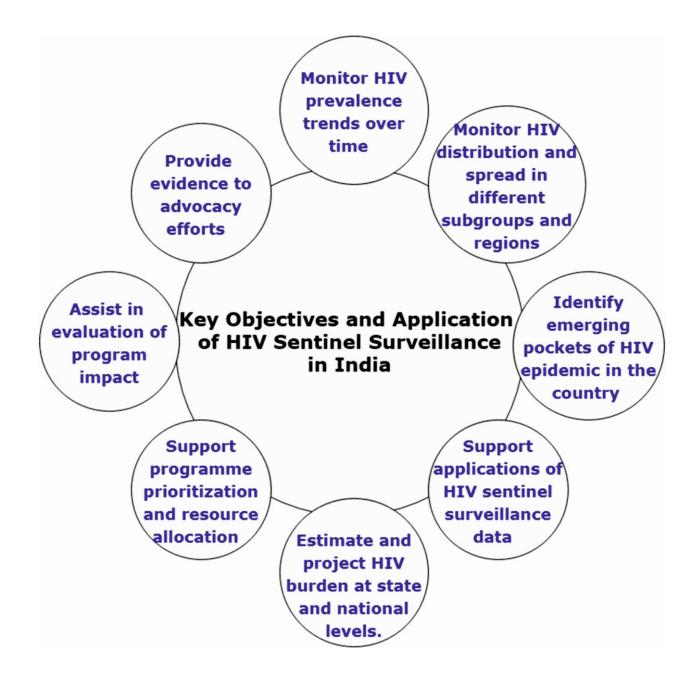
Figure 2: Evolution of HIV sentinel surveillance in India



The HIV sentinel surveillance (HSS) in India was initiated in 1985 among the blood donors and patients with STIs by the Indian Council of Medical Research (ICMR). It is one of the largest HSS systems in the world which helps to understand the dynamics of the HIV epidemic and monitor the trends among different population groups and geographical areas. It provides inputs to the programme for strengthening prevention and control activities. The sentinel sites have been scaled up in a phased manner from 176 in 1998 (including 92 ANC sites) to 1359 in 2010-11 (including 696 ANC sites). HSS 2019 was implemented at 776 ANC sites. In continuation, the 16th round of HIV Sentinel Surveillance (HSS) among antenatal care (ANC) clinic attendees was implemented during year 2019 at 833 sites across 35 States/UTs and 642 districts (out of total of 727 districts). This is highest in various rounds of HSS under NACP till now.



Figure 3: Objectives and Application of HIV Sentinel Surveillance





### **CHAPTER 2**

### **HSS - METHODOLOGY AND IMPLEMENTATION**

### 2.1 Implementation Structure of HIV Sentinel Surveillance in India

HIV sentinel surveillance has a robust structure for planning, implementation, and review. It follows a four-tier supervisory structure at national, regional, state, and district levels.

National level Organizations and Institutes act as Nodal Agencies while the 8 regional institutes provide technical support to the State AIDS Control Societies (SACS) for all HSS activities. SACS is primarily responsible for implementation of HSS in their respective states with the support of functional district AIDS Prevention and Control Units (DAPCUs), for coordination of HSS activities at the sentinel sites and the associated testing labs. The entire HSS structure is involved the assessment of HSS implementation plans and review of the outcomes of each round.

Figure 4: Implementation Structure of HSS

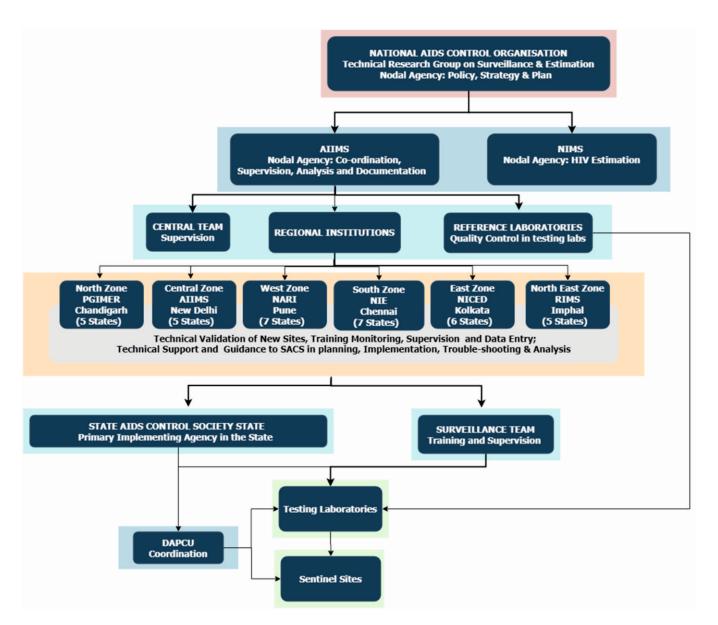




Table 1: Regional Institu	tes and their States Covered
Name of regional institution	Responsible states
Central: All India Institute of Medical	Uttar Pradesh, Bihar, Jharkhand, Uttaranchal, and
Science, New Delhi	Delhi.
North: PostgraduateInstitute of Medical	Haryana, Himachal Pradesh, Jammu & Kashmir,
Education and Research, Chandigarh	Punjab, and Chandigarh.
West: National AIDS Research Institute,	Maharashtra, Gujarat, Goa, Madhya Pradesh,
Pune	Rajasthan, Daman & Diu, and Dadra Nagar Haveli
South: National Institute of Epidemiology,	Andhra Pradesh, Tamil Nadu, Karnataka, Kerala,
Chennai	Odisha, Puducherry, and Lakshadweep and
	Telangana.
East: National Institute of Cholera and	West Bengal, Chhattisgarh, Sikkim, Andaman &
Enteric Diseases, Kolkata	Nicobar Islands, Meghalaya, and Nagaland.
Northeast: Regional Institute of Medical	Manipur, Mizoram, Tripura, Assam, and
Sciences, Imphal	Arunachal Pradesh.

# 2.2 Initiatives during HSS 2018-19:

In response to key issues identified in the implementation of HSS during the previous rounds as well as to improve the quality and promptness of the surveillance, several new initiatives were implemented in the 16th round, as part of continuous quality improvement.

### SACS checklist for preparatory activities:

- Developed to monitor the planning process for HSS in each state (Annex 3).
- All preparatory activities were broken into specific tasks with clear timelines and all SACS were required to submit the completion status for each task.
- A team of officers from NACO coordinated with state nodal persons to ensure that preparatory activities in all states adhered to the timelines.

### Pre-surveillance sentinel site evaluation (SSE):

- A pre-surveillance evaluation of ANC and STD sentinel sites was conducted to identify and correct human resources and infrastructure-related issues at the sentinel sites before initiation of surveillance.
- The evaluation also provided site information such as type of facility, average OPD attendance, availability of HIV and AIDS services, and distance of facilities from HSS labs (Annex 4), which may have implications on adherence to methodology.

### Standard operational manuals, wall charts, and bilingual data forms:

- Developed to simplify the HSS methodology for site-level personnel and to ensure uniform implementation of the guidelines in all the sentinel sites.
- These were printed centrally and distributed across the country.



### Training during HSS 2018-19:

### Steps to improve quality of training:

- 1. A well-structured training programme was adopted to ensure that all the personnel involved in HSS at different levels were adequately and uniformly trained in the respective areas of responsibility.
- 2. The training agenda, curriculum, and planning and reporting formats were standardized and used in all the states. Standard slide sets and training manuals for training of sentinel site personnel were developed centrally to ensure uniformity.
- 3. Trainings included group work and a "know your sentinel site" exercise, which helped participants to identify the routine practices that could affect the implementation of surveillance at their sites and recommended actions to address the same.
- 4. Pre and post-test assessments were given to each participant at the site-level trainings. Analysis of these scores helped state teams to identify the priority sites for supervisory visits.
- 5. Training reports for each batch were submitted in standard formats at the end of each training.

### Details of trainings:

- 1. Trainings started with two batches of national pre-surveillance meetings with about 90 personnel from regional institutes and SACS to discuss the critical aspects of planning for HSS 2018-19 and to clearly understand the system for supportive supervision through the online Strategic Information Management System (SIMS) application.
- 2. This was followed by 2-day regional TOTs organised by the RIs for SACS officers and state surveillance teams, comprised of public health experts and microbiologists, to create state-level master trainers and to plan for the site-level trainings.
- 3. Site-level trainings (2 days per batch @ 8-10 sites per batch) were conducted in all the states. Representatives from the regional institutes and NACO observed the trainings to ensure that trainings were provided as per the protocol and that all the sessions were covered as per the session plan.
- 4. Separate trainings on surveillance testing protocols and lab reporting mechanisms through the SIMS application for HSS were organised for microbiologists and lab technicians from 117 ANC/STD testing labs and 13 NRLs.
- 5. Overall, 40 central team members; 30 officers from six RIs; 95 SACS officers including in-charge surveillance, Epidemiologists, and M&E officers; 280 state surveillance team members; 260 laboratory personnel including microbiologists and lab technicians from the designated testing labs; and more than 3,000 sentinel site personnel including medical officers, nurse/counsellors, and lab technicians were trained under HSS 2018-19.



### Laboratory system:

- The laboratory system was strengthened by limiting the sample testing to designated SRLs.
- introduction of web based reporting through the SIMS application ensured real-time monitoring of the quality of blood specimens and laboratory processes
- Quality assurance aspects of sample testing under HSS were standardized
- Responses in case of discordant test results between testing lab and reference lab were streamlined through the SIMS application.

### Supervisory mechanisms for HSS 2018-19:

- Supervision of all HSS activities was prioritized to ensure smooth implementation and high-quality data collection.
- Extensive mechanisms were developed to set up a comprehensive supervisory system for HSS and to ensure that 100 % of HSS sites were visited in the first 15 days of the start of sample collection.
- The principles adopted included action-oriented supervision, real-time monitoring and feedback, accountability for providing feedback and taking action, and an integrated web-based system to enhance the reach and effectiveness of supervision.

### SIMS modules for web-based supervision:

- Specific modules were developed and made operational in the web-based SIMS for HSS to facilitate real-time monitoring of HSS 2018-19.
- Field supervision was conducted by trained supervisors who visited the sentinel sites to monitor the quality of recruitment of respondents and other site-level procedures. Real-time reporting of field supervision used the SIMS supervisor module via the field supervisory quick feedback and action taken report sub-modules. The module was used extensively by all the supervisors and helped in quick identification and resolution of challenges in the field.
- Data were supervised by data managers at RIs to monitor the quality of data collection and transportation using the SIMS module.
- Laboratory supervision was conducted by SRLs and NRLs to monitor the quality of blood specimens, progress in laboratory processing, and external quality assurance, using the SIMS lab module.
- Overall, 80 % of supervisors reported on the SIMS field supervisor quick feedback format, and 52 % of action taken report formats were submitted by HSS focal persons from SACS and RIs. Laboratory reporting through the lab module was completed by 87% of SRLs.

### Integrated monitoring and supervision plan:

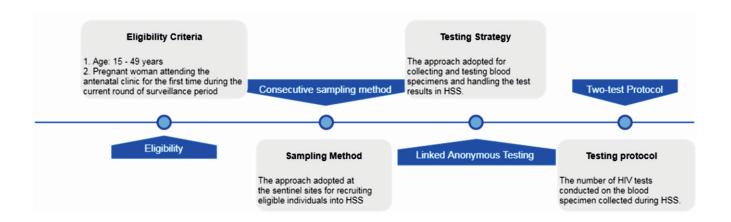
- An integrated supervision plan for each state was developed by RIs, SACS, and AIIMS to avoid duplication in monitoring coverage, thereby facilitating maximum coverage of surveillance sites.
- The first round of visits was conducted by RI, SACS, and SST members.
- Central team members (CTM) visited the top priority sites identified in feedback from the first round of visits.
- Subsequent visits were based on priority with a goal of making at least three visits to each identified site which require supervision.



# 2.3 Methodology of HSS at ANC Sentinel Sites:

The methodology for the 2019 round of HSS at ANC clinic attendees remained as same as the earlier round. The complete methodology may be found in the HIV Sentinel Surveillance Operational Guidelines available on the website of the National AIDS Control Organisation (NACO).

Figure 5: HSS Methodology



Sentinel site	Antenatal clinic
Sample size	400
Duration	3 months
Frequency	Once in 2 years (biennial)
Sampling method	d Consecutive sampling
Eligibility	Pregnant women ages 15-49 years attending ANC clinic for the first time
	during the current round
<b>Testing strategy</b>	Linked anonymous testing
<b>Blood specimen</b>	Serum collected through venous blood specimen
<b>Testing protocol</b>	Two-test



### Key elements of the HSS methodology:

- In HSS among pregnant women, recruitment of respondents is conducted biennially for three months between January to March at selected ANC sentinel sites, across the nation.
- Because of the low HIV prevalence in India, the classical survey method of sample size calculation gives
  a large sample size. Owing to the practical difficulty in data and sample collection from such a large
  sample size through facility-based surveillance on regular basis, a sample size of 400 for surveillance
  among ANC attendees has been fixed.
- All eligible respondents are enrolled until the sample size of 400 in each sentinel site is reached or until the end of the surveillance period, whichever is earlier.
- Eligibility: All pregnant women eligible under the above inclusion criteria are included in the survey irrespective of the date of antenatal registration, known HIV positivity status, testing status under PPTCT programme or participation in the previous rounds of HSS.
- Inclusion Criteria: i. Age 15-49 years; ii. Pregnant woman attending the antenatal clinic for the first time during the current round of surveillance period
- Exclusion Criteria: i. Pregnant women not in the age group of 15-49 years; ii. Pregnant woman attending the antenatal clinic for the second or more time during the current round of surveillance period
- Sampling method, testing strategy and test protocol are standard components of any surveillance. Consecutive sampling method, linked anonymous testing strategy and two-test protocol are followed in HSS among pregnant women.

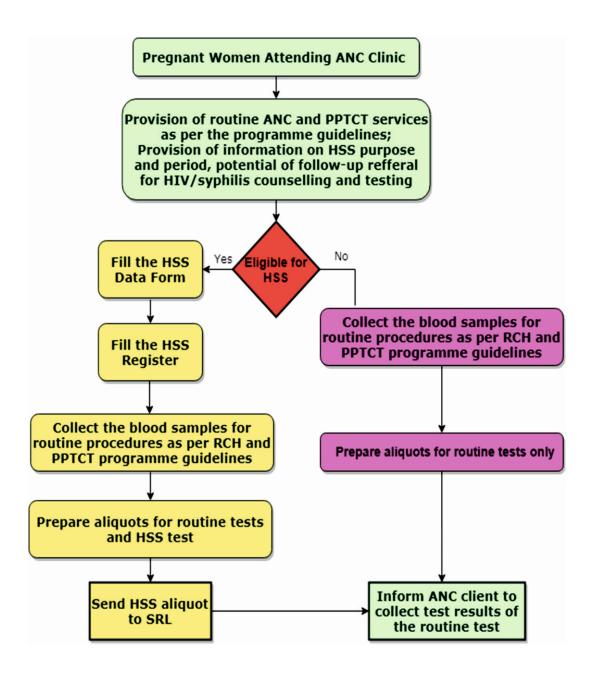
Site Type	2003	2004	2005	2006	2007	2009	2011	2013	2015	2017	2019
ANC	52	63	63	63	63	63	72	72	72	71	71
FSW	1	1	-	11	10	28	27	-	-	24	24
MSM	2	2	-	2	2	17	17	-	-	15	15
IDU	1	1	-	2	2	2	2	-	-	0	0
Truckers	-	-	-	-	-	-	2	-	-	2	2
Migrants	-	-	-	-	-	-	3	-	-	2	2
Transgender	-	-	-	-	-	-	2	-	-	1	1
STD	11	11	-	11	11	-	-	-	-	0	0
Tuberculosis	_	_	_	1	_	_	_	_	_	_	_



### 2.4 Information Collected under HSS at ANC Sentinel Sites

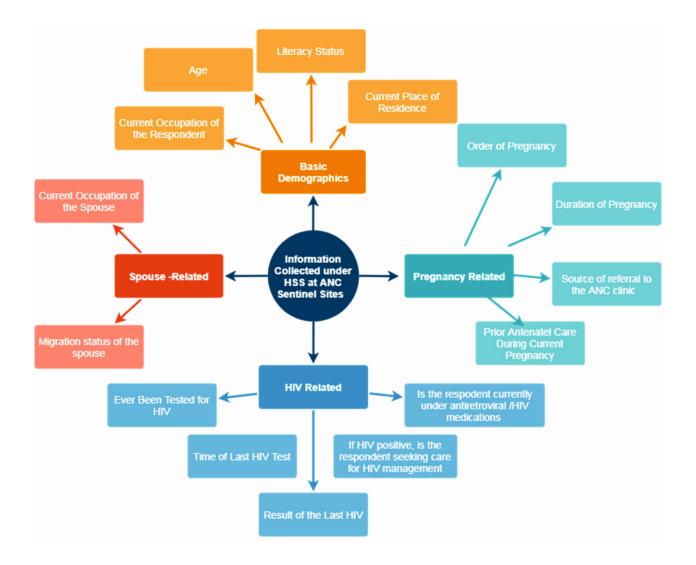
Information on 15 variables pertaining to the respondents' socio-demographic characteristics, HIV testing and management was collected. The data collected during the surveillance is robust and gives an insight on the socio-demographics and vulnerabilities of the respondents. The data helps the program managers and policy makers to identify of specific characteristics associated with higher risk of acquiring HIV infection. Thus the data has guided the HIV intervention program in responding to the epidemic effectively.

Figure 6: Recruitment process of ANC attendees at ANC Sentinel Sites for HSS





Figure~7: Information~Collected~under~HSS~at~ANC~Sentinel~Sites





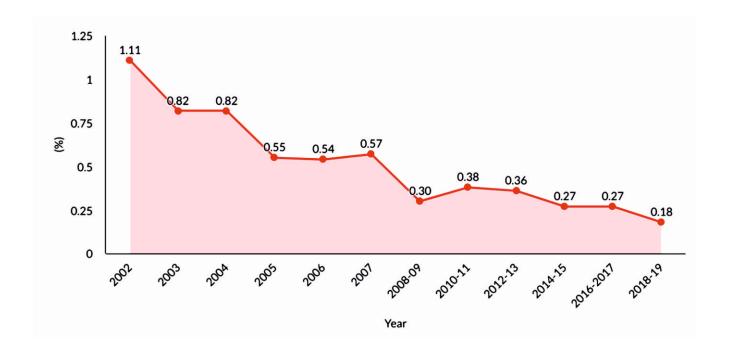
### **CHAPTER 3**

### PROFILE OF ANC ATTENDEES IN TAMIL NADU

Tamil Nadu (TN), situated at South-East India, shares its boundary with Andhra Pradesh, Telangana and Karnataka in the North, Kerala in the West, the Indian Ocean in the south and Pondicherry and the Bay of Bengal in the East. TN has 37 districts with a total area of 130,060 sq. km and a projected population of 72.15 million in 2019. The first HIV case in Tamil Nadu was reported in 1986 and was considered as one of the HIV high prevalent states in India, with heterosexual transmission being the predominant mode of HIV transmission. The pregnant women who attend the ANC clinics are considered proxy for general population and serve as a key indicator of the adult HIV prevalence. TN has pioneered various programmes to bring down the HIV prevalence in the state. As a result, HIV prevalence among pregnant women which was 1.11% in 2002, has gradually declined to 0.18% in 2019.

The section presents findings from the 2019 round of sentinel surveillance among the antenatal clinic attendees in Tamil Nadu. First, the distribution of the respondents by their background characteristics has been presented, followed by HIV and Syphilis sero-positivity. Analysis of these variables is important because they help programme managers and policy makers understand the background characteristics of clinic attendees. Also, they help in the identification of particular characteristics which make respondents more prone to acquiring HIV infection.

Figure 8: HIV Prevalence Trend in Tamil Nadu among ANC Attendees, 2002-19





 ${\bf Table~4:~Distribution~of~the~respondents~by~their~background~characteristics}$ 

Tamil Nadu (N=28400)

Variables	Number	% <sup>#</sup>
Age		
15-24	16390	57.7
25-34	11457	40.3
35-44	553	1.9
45-49	0	0.0
Literacy Status		
Illiterate	539	1.9
Literate and till 5 <sup>th</sup> standard	1062	3.7
6 <sup>th</sup> to 10 <sup>th</sup> standard	10316	36.3
Standard 11 to Graduation	14068	49.5
Post-Graduation	2405	8.5
Order of current pregnancy	2405	0.5
	100.10	
First	13340	47.0
Second	11321	39.9
Third Fourth or more	2941 773	10.4
Fourth or more  Duration of current pregnancy	773	2.7
First trimester	4477	15.8
Second trimester Third trimester	8756 15121	30.8 53.2
	15121 46	53.2 0.2
Received ANC service during current pregnancy	40	0.2
Yes	25849	91.0
No	2500	8.8
Source of referral to the ANC clinic		
Self-Referral	5155	18.2
Family/ Relatives/ Neighbours/ Friends	3675	12.9
NGO	3	0.0
Private Hospital (Doctor/ Nurses)	257	0.9
Govt. Hospital (including, ASHA/ ANM)	19159	67.5
ICTC / ART Centre	134	0.5
Current place of residence		
Urban	8732	30.7
Rural  Current occupation of the respondent	19547	68.8
	20-	
Agricultural Labourer	207	0.7
Non-Agricultural Labourer	327	1.2
Domestic Servant	21	0.1
Skilled / Semi-Skilled Worker	149	0.5
Petty Business / Small Shop Owner	35	0.1
Large Business/SelfEmployed	10	0.0
Service (Government/Private)	850	3.0
Student	193	0.7
H . 10. CC	9	0.0
Hotel Staff		
Hotel Staff Truck driver/Helper Local transport worker(auto/taxi driver, hand cart pullers, rickshaw pullers etc)	0	0.0



Housewife  Current occupation of the spouse	26504	93.3
Agricultural Labourer	2337	8.2
Non-Agricultural Labourer	6148	21.6
Domestic Servant	94	0.3
Skilled / Semi-skilled Worker	6030	21.2
Petty business / small shop	1345	4.7
Large Business/Self employed	756	2.7
Service (Govt./Pvt.)	6053	21.3
Student	23	0.1
Hotel staff	809	2.8
Truck driver/Helper	1090	3.8
Local transport worker (auto/taxi driver, hand cart pullers, rickshaw pullers etc)	2829	10.0
Agricultural cultivator / landholder	800	2.8
Unemployed	40	0.1
Not Applicable (For Never married/widows/Divorced/Separated)	35	0.1
Spouse resides alone in another place/town from wife for work for longer than 6 months	33	0.1
Yes	1449	5.1
No	26915	94.8
Not Applicable (For Never married/Widows/Divorced/Separated)	29	0.1
Ever Been tested for HIV		
Yes	23525	82.8
No	4875	17.2
If ever tested HIV, when was the last test taken?		
Tested during current pregnancy	20131	70.9
Consented today	0	0.0
Tested before current pregnancy	3390	11.9
NA (For never tested)	4875	17.2
Result of respondent's last HIV test		
Positive	46	0.2
Negative	23448	82.6
Did not collect the last result	31	0.1
No response	51	0.1
NA (For never tested/Consented today)	4875	17.2
If previous HIV test positive, taking ART medications	1075	17.2
Yes	45	0.2
No	1	0.00
NA (For never tested or Not positive when last tested/Consented today)	28354	99.8
No continue	20250	00.0
Negative Positive	28350 50	99.8 0.18
	50	0.18
Syphilis	20250	00.0
NI	28359	99.9
Negative Positive	41	0.14



### **CHAPTER 4**

### DISTRIBUTION AND HIV PREVALENCE BY SOCIO-DEMOGRAPHIC VARIABLES

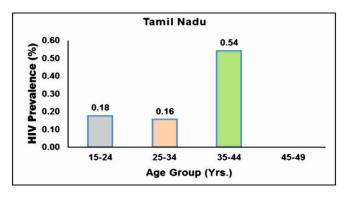
The respondent's background characteristics and HIV prevalence has been presented.

# 4.1 Distribution and HIV Prevalence by Age Group:

Figure 9: Percentage (%) Distribution of respondents by age group



Figure 10: HIV Prevalence among ANC Clinic Attendees by Age



Age of the respondents ranged from 15 to 44 years with a median age of 24 years. Majority (57.76%) of the respondents were aged from 15 to 24 years and a little more than a third (40.34%) were in the age group of 25-34 years (Figure 9). The HIV prevalence among the former was 0.18% and the later was 0.26% in 25-34. While only 1.90% respondents belonged to the age group of 35-44 years, HIV prevalence among them was 0.54%. None of the respondents were in the age group of 45-49 years (Figure 10).

# 4.2 Distribution and HIV Prevalence by Literacy Status

Figure 11: Percent Distribution of respondents by educational status

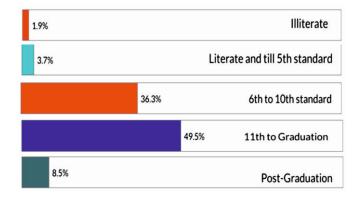
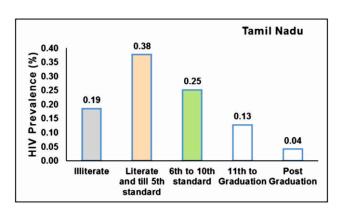


Figure 12: HIV Prevalence (%) among ANC Clinic Attendees by Literacy Status





Nearly half the respondents had higher secondary or undergraduate level of education while over one-third (36.3%) had secondary level education. The HIV prevalence among the former was 0.13% and the later was 0.25%. While only 1.9% were illiterates and 3.7% were educated up to primary levels, 8.5% were post-graduates (Figure 11). The HIV prevalence among them was 0.19%, 0.38% and 0.04% respectively. Predominantly, higher the standard of education level, lower was the HIV prevalence (Figure 12).

# 4.3 Distribution and HIV Prevalence by Order of Pregnancy

Figure 13: Percent Distribution of respondents by order of pregnancy

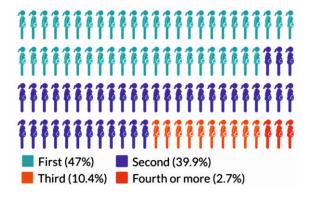
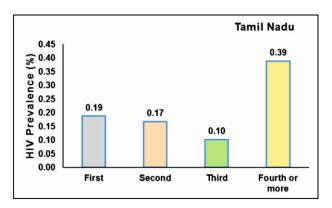


Figure 14: HIV Prevalence (%) among ANC Clinic Attendees by Order of Pregnancy



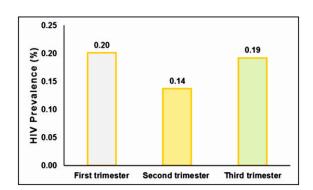
The order of pregnancy, also known as gravida, is the number of times a woman had become pregnant including live births, still births and abortions. About 47% of the respondents were in their first gravida, 39.9% in their second and 10.4% in their third (Figure 13) with a prevalence of 0.19%, 0.17% and 0.10% respectively. Other higher order pregnancies were only 2.7% with a prevalence of 0.39% (Figure 14).

# 4.4 Distribution and HIV Prevalence by Duration of Pregnancy:

Figure 15: Percent Distribution of respondents by duration of current pregnancy



Figure 16: HIV Prevalence (%) among ANC Clinic Attendees by Duration of Pregnancy



Half of the respondents (53.31%) belonged to the third trimester followed by 30.86% in second trimester and 15.83% in the first trimester (Figure 15). However, highest HIV prevalence (0.20%) was recorded among respondents in first trimester, followed by 0.19% in third and 0.14% in second trimesters (Figure 16).



# **4.5Distribution and HIV Prevalence by ANC Service Utilization:**

Figure 17: Percent Distribution of respondents by ANC Service uptake

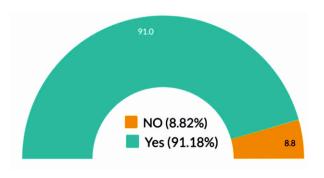
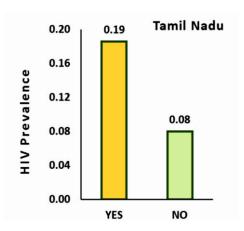


Figure 18: HIV Prevalence (%) among ANC Clinic Attendees by ANC Service uptake



This refers to any prior receipt of antenatal care services from a health care facility (PHC/CHC/District hospitals/Maternity hospitals/Private health care facilities/NGO Health care facilities) by the pregnant women during her current pregnancy. In Tamil Nadu, about 89.18% of respondents had received ANC services during current pregnancy prior to the surveillance whereas 8.82% of respondents had not received prior ANC services(Figure 17). HIV prevalence was 0.19% and 0.08% among respondents who had and had not received prior ANC services, respectively (Figure 18).

# 4.6 Distribution and HIV Prevalence by Source of Referral:

Figure 19: Percent Distribution of respondents by Source of Referral

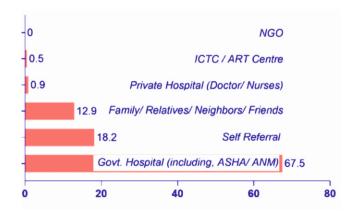
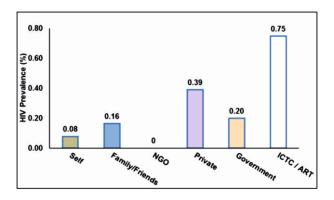


Figure 20: HIV Prevalence (%) among ANC Clinic Attendees by Source of Referral





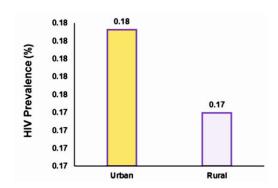
Knowing the sources of referral helps to identify referral bias introduced being in the sample due to specific referrals of HIV-positive cases from any source. Government based sources including hospital, ANM/ASHA were identified as the major referral source (67.5%) to ANC clinics, followed by self-referral (18.2%), and family/relatives/ neighbour/friends (12.9%)(Figure 19). Highest HIV prevalence (0.75 %) recorded in respondents referred by ICTC/ART centres followed by private ANCs (0.39%) although the proportion referred accounted to only 0.5% and 0.9% respectively (Figure 20).

# 4.7 Distribution and HIV Prevalence by Place of Residence:

Figure 21: Percent Distribution of respondents by current place of residence

Figure 22: HIV Prevalence (%) among ANC Clinic Attendees by Place of residence





Current residence of the respondent was recorded either as urban or rural. Areas under municipal corporation, municipal council, or cantonment area, were classified as urban and the rest were classified as rural. At the state level, 68.8 % of the respondents reported to be currently residing in rural areas and the rest (34.9%) reported to be currently residing in urban areas. However, there were inter-district variations (Figure 21). HIV prevalence among the urban-resident respondents was 0.18%; whereas it was 0.17% among the rural-resident respondents (Figure 22).

# 4.8 Distribution and HIV Prevalence by Occupation of the Respondent:

Figure 23: District-wise % distribution of respondents by occupation

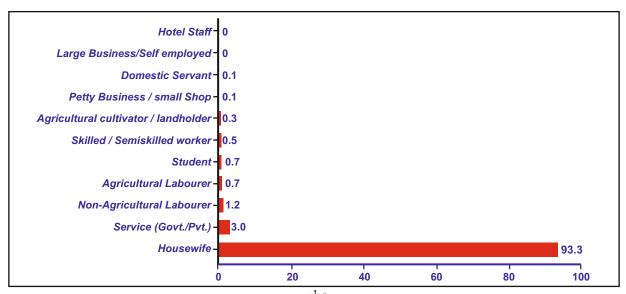
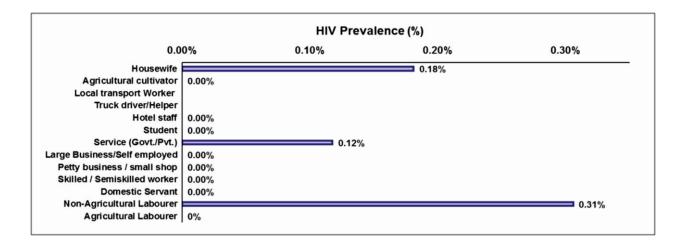


Figure 24: HIV Prevalence (%) among ANC Clinic Attendees by Current Occupation of Respondent



Certain occupations are associated with higher risk of exposure and HIV infection. Hence, understanding the profile of respondents with respect to their occupation, helps to identify specific focus areas. While a vast majority of them were housewives, about 3.0% were in the service sector followed by agricultural labourer and non-agricultural labourer (Figure 23). In Tamil Nadu, the highest HIV prevalence was recorded among pregnant mothers whose current occupation was non-agricultural labourers (0.31%) followed by housewives (0.18%) and those in service sectors (0.12%) (Figure 24).

# 4.9 Distribution and HIV Prevalence by Occupation of the Respondents' Spouse:

HIV transmission in South India is mainly driven through heterosexual route and pregnant mothers represent the sexually active population. Hence occupation of spouse serves to identify population groups at higher infection risk. The occupation of spouses of nearly two-thirds of ANC corresponded to non-agricultural labourers (21.6%), service sector (21.3%) and skilled/semi-skilled workers (21.2%), while 10 % were local transport workers, 8.2% were agricultural labourers and 3.2% were truckers. While 4.7% were petty or small business owners, agricultural cultivators, hotel staffs and large business owners accounted to nearly 3% each(Figure 25). HIV prevalence was the highest among the ANC attendees whose spouses were local transport workers (0.39%) followed by hotel staffs (0.37%). The prevalence ranged from 0.07% to 0.25% among respondents whose spouses were agricultural / non-agricultural labourers, agricultural cultivators, truckers, skilled or semi-skilled workers, Petty / small shop owners and service sector employees (Figure 26).

Figure 25: Percentage distribution of respondents by the Occupation of spouse

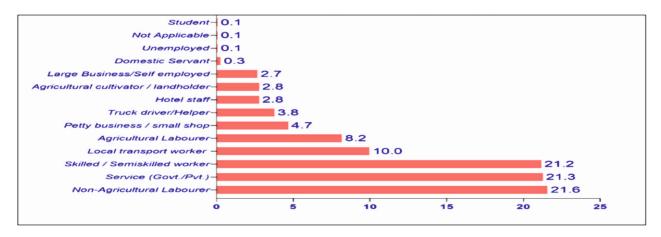
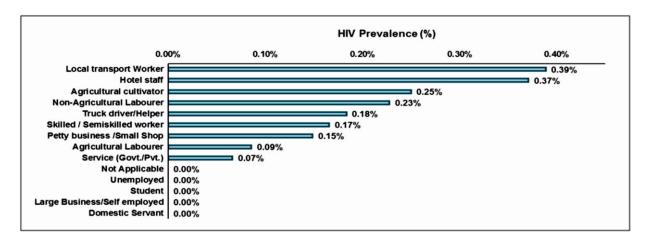




Figure 26: HIV Prevalence among ANC Clinic Attendees by Current Occupation of Spouse

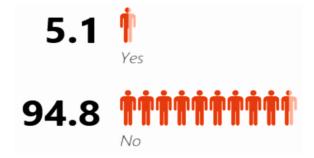


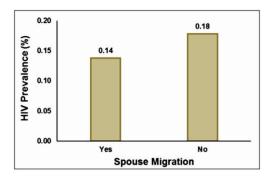
# 4.10 Distribution and HIV Prevalence by Migration Status of the Respondents' Spouse:

The spouse of the respondent is considered to be a migrant if he resides alone in another place or town away from wife for work for longer than 6 months. In TN, during HSS 2019, 94.8% of the pregnant women reported their husbands to be non-migrants while the spouses of 5.1% pregnant women were migrants (Figure 27). While the HIV prevalence among pregnant women with migrant spouses was 0.14%, that of the pregnant women with non-migrant spouses was 0.18% (Figure 28).

Figure 27: Percentage of respondents with migrant spouse

Figure 28: HIV Prevalence among ANC Clinic Attendees by Migration status of Spouse



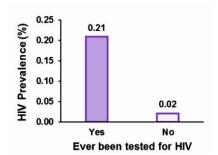


### 4.11 Distribution and HIV Prevalence by HIV Test History:

Figure 29: Percent Distribution of respondents by HIV testing history



Figure 30: HIV Prevalence by HIV Test History





HIV Testing has been mandated for all pregnant mothers. With reference to their previous HIV test history, 82.8% of the respondents were already tested for HIV, prior to the current surveillance (Figure 29). HIV prevalence among those who had previously tested for HIV was 0.21% (Figure 30).

Figure 31: Percentage of respondents with migrant spouse

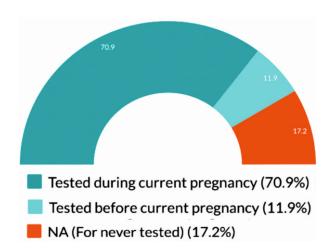
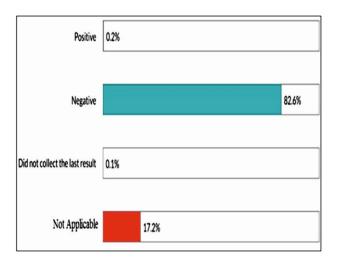


Figure 32: HIV Prevalence among ANC Clinic Attendees by Migration status of Spouse



Among the respondents, 70.9% had tested for HIV prior to the surveillance during current pregnancy while 11.9% had tested before current pregnancy, whereas 17.2% had not tested for HIV(Figure 31).Of the total respondents, 82.8% had last tested for HIV, prior to the current surveillance, 82.6% were HIV Negative, 0.2% were HIV positive, 0.1% had not collected the results of the last HIV test(Figure 32).

# 4.12 Distribution and HIV Prevalence by HIV Management:

Based on the result of the last HIV test of the respondents, 46 pregnant women were reported to be known-positives. HIV management related information were gathered from known-positive respondents. With reference to the enrolment of HIV positive respondents in any HIV care, either for pre-ART or ART services, at the time of surveillance, 97.8% (n=45) of them, were taking care from Government hospital/ART centres, 2.2% (n=1) were not seeking any care for HIV management. With reference to the current uptake of 'Antiretroviral therapy' or HIV medications, 97.8% (n=45) of them, were taking ART or HIV medications, whereas 2.2% (n=1) were not taking any HIV medications.



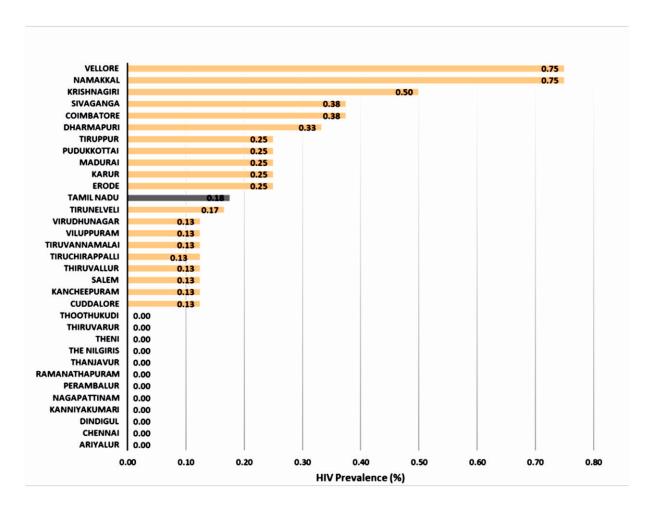
### **CHAPTER 5**

### 5.1 District-wise Distribution of Respondents, HIV Prevalence and Trend

The national, state and district response to the HIV epidemic is guided by data obtained through HIV Sentinel Surveillance (HSS). The HIV epidemic in India continues to be concentrated among HRG with low level and declining prevalence among general population. Over time, HIV Sentinel Surveillance has offered vital clues to newer areas where HIV was emerging, highlighting rising trends in certain districts or regions.

This chapter gives district-wise distribution of respondents, HIV prevalence and its trend details as observed against the key fifteen socio-demographic variables which were recorded for each respondent. Data from the year 2002 has been used for trend analysis. Data from only consistent sites was used for trend analysis as it avoids the effect of addition of new sites on HIV prevalence in subsequent years, and hence provides a better picture of HIV trends in a district. Though there was a clear declining trend seen in Tamil Nadu, within the state, there are variations in HIV prevalence among the districts (Figure 33-34) (Table 5-31). A detailed district-wise analysis by applying local knowledge about vulnerabilities and risk factors, will be needed to understand heterogeneity of the disease and inter-district variations, which is essential for planning district strategies in HIV prevention and control.

Figure 33: District-wise HIV Prevalence in Tamil Nadu, 2019





 $Figure\,34: Spatial\,Representation\,of\,district\text{-}wise\,HIV\,Prevalence\,in\,Tamil\,Nadu, 2019$ 

District	Ariyalur	Chennai	Coimbatore	Cuddalore	Dharmapuri	Dindigul	Erode	Kanchipuram	Kanyakumari	Karur	Krishnagiri	Madurai	Nagapattinam	Namakkal	Nilgiris	Perambalur	Pudukkottai	Ramanathapuram	Salem	Sivaganga	Thanjavur	Theni	Thiruchirapalli	Thiruvallur	Thiruvannamalai	Thiruvarur	Tirunelveli	Tiruppur	Thoothukudi	Vellore	Villupuram	Virudhunagar
SI.No	1	2	3	4	2	9	2	80	თ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	59	30	31	32

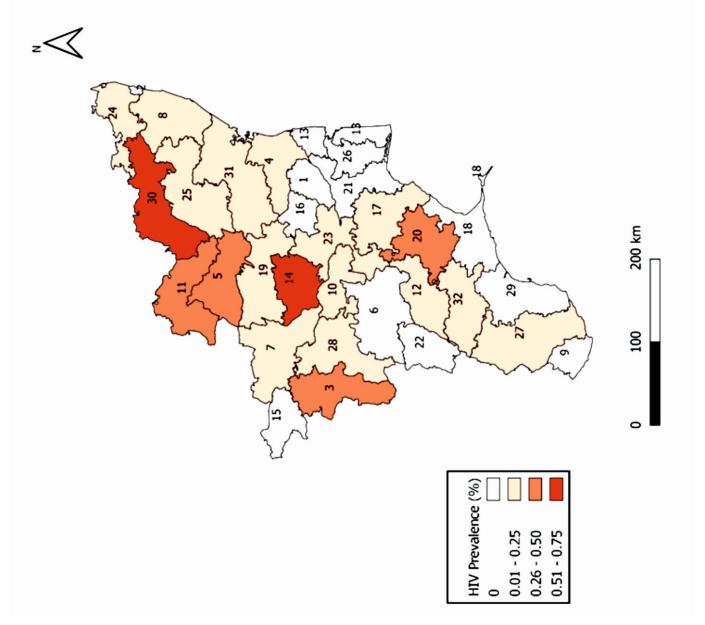




	Table	5: Dis	trict -w	ise HIV	Preval	ence t	rend 2	002-2	019(%	6)		
District	2002	2003	2004	2005	2006	2007	2009	2011	2013	2015	2017	2019
Ariyalur		1.28	1.00	0.00	0.50	0.75	0.00	0.25	0.25	0.13	0.00	0.00
Chennai	0.50	0.00	0.13	0.25	0.13	0.50	0.13	0.17	0.42	0.33	0.63	0.00
Coimbatore	0.50	0.63	0.67	0.33	0.58	0.25	0.33	0.94	0.19	0.19	0.50	0.38
Cuddalore	0.25	0.63	0.75	0.63	0.00	0.25	0.13	0.25	0.13	0.38	0.25	0.13
Dharmapuri			0.88	0.50	0.38	0.38	0.25	0.92	0.58	0.83	0.33	0.33
Dindigul	0.75	0.75	0.75	0.50	0.38	0.38	0.25	0.25	0.25	0.13	0.13	0.00
Erode		0.13	0.50	0.63	0.75	0.38	0.50	0.50	1.63	0.25	0.50	0.25
Kancheepuram		0.25	0.38	0.00	0.00	0.00	0.25	0.13	0.00	0.13	0.13	0.13
Kanyakumari		0.00	0.50	0.00	0.08	0.17	0.00	0.17	0.51	0.08	0.00	0.00
Karur		0.75	3.00	1.13	0.88	0.38	1.00	0.25	0.00	0.00	0.13	0.25
Krishnagiri		1.38	0.88	0.75	1.13	1.13	0.00	0.75	0.38	0.50	0.25	0.50
Madurai		1.01	1.36	1.25	0.25	0.00	0.50	0.38	0.25	0.63	0.38	0.25
Nagapattinam		0.25	0.50	0.00	0.25	0.13	0.00	0.00	0.50	0.13	0.00	0.00
Namakkal	4.01	3.13	1.63	1.75	1.75	2.00	0.63	0.75	0.75	0.50	0.50	0.75
Perambalur		0.50	1.25	1.50	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Pudukkottai	0.25	1.00	0.63	0.63	0.75	0.63	0.38	0.13	0.50	0.13	0.38	0.25
Ramanathapuram		0.50	0.63	0.50	0.13	1.00	0.00	0.00	0.00	0.25	0.13	0.00
Salem	1.50	0.38	1.63	0.63	2.25	2.25	0.50	1.50	1.50	0.75	0.38	0.13
Sivaganga		0.25	1.25	0.25	0.50	0.63	0.75	0.38	0.13	0.37	0.38	0.38
Thanjavur		1.88	0.63	0.00	0.38	0.13	0.00	0.00	0.00	0.00	0.13	0.00
The Nilgiris		0.25	0.63	0.75	0.38	0.25	0.38	0.00	0.00	0.38	0.00	0.00
Theni		1.25	1.38	0.63	1.13	1.25	0.25	0.50	0.00	0.00	0.13	0.00
Thiruvallur		0.50	0.75	0.50	0.75	0.25	0.63	0.25	0.00	0.00	0.00	0.13
Thiruvarur		0.50	0.13	0.25	0.00	0.00	0.25	0.00	0.63	0.13	0.13	0.00
Thoothukkudi		0.76	0.75	0.13	0.25	0.38	0.38	0.13	0.13	0.12	0.00	0.00
Tiruchirappalli		1.13	0.75	0.75	1.33	0.83	0.42	0.69	0.63	0.19	0.50	0.13
Tirunelveli	1.25	1.25	0.25	0.50	0.25	0.00	0.00	0.33	0.42	0.56	0.58	0.17
Tiruppur									0.25	0.13	0.50	0.25
Tiruvannamalai		1.25	1.38	0.88	0.37	1.00	0.13	0.00	0.25	0.00	0.25	0.13
Vellore	1.00	0.89	0.63	0.88	0.13	0.88	0.38	0.75	0.50	0.50	0.25	0.75
Vilupuram		1.00	0.38	0.50	0.25	0.38	0.00	0.38	0.38	0.75	0.38	0.13
Virudhunagar		0.00	0.25	0.50	0.13	0.63	0.13	0.00	0.13	0.00	0.38	0.13



Table 6: District-wise distribution of respondents based on the age group (%)  Districts 15-24 25-34 35-44 45-49 Tot								
				0	Total 28400			
Tamil Nadu	<b>57.7</b>	40.3	1.9					
Ariyalur	52.4	46.1	1.5	0	800			
Chennai	73.1	25.4	1.5	0	800			
Coimbatore	64.3	33.1	2.6	0	1600			
Cuddalore	42.4	56.4	1.3	0	800			
Dharmapuri	80.4	19.0	0.6	0	1200			
Dindigul	60.8	37.6	1.6	0	800			
Erode	57.6	39.1	3.3	0	800			
Kancheepuram	50.5	46.5	3.0	0	800			
Kanniyakumari	34.3	61.6	4.2	0	1200			
Karur	54.5	43.3	2.3	0	800			
Krishnagiri	66.0	33.4	0.6	0	800			
Madurai	63.0	35.8	1.3	0	800			
Nagapattinam	53.8	45.5	8.0	0	800			
Namakkal	64.6	33.3	2.1	0	800			
Perambalur	57.4	41.5	1.1	0	800			
Pudukkottai	48.0	50.4	1.6	0	800			
Ramanathapuram	57.3	40.8	2.0	0	800			
Salem	59.8	37.8	2.5	0	800			
Sivaganga	50.4	47.1	2.5	0	800			
Thanjavur	45.9	52.3	1.9	0	800			
The Nilgiris	51.3	46.4	2.4	0	800			
Theni	69.6	29.9	0.5	0	800			
Thiruvallur	62.3	35.9	1.9	0	800			
Thiruvarur	41.0	57.6	1.4	0	800			
Thoothukudi	57.3	40.6	2.1	0	800			
Tiruchirappalli	59.4	38.1	2.5	0	1600			
Tirunelveli	64.7	33.5	1.8	0	1200			
Tiruppur	67.1	31.8	1.1	0	800			
Tiruvannamalai	57.3	39.8	3.0	0	800			
Vellore	57.8	40.4	1.9	0	800			
Viluppuram	52.3	45.0	2.8	0	800			
Virudhunagar	59.4	39.4	1.3	0	800			



Table 7: District-wise distribution of respondents based on the literacy status (%)										
Literate										
Districts	<b>7111.</b> .		6th to 10th	11th to	Post					
	Illiterate	standard	standard		Graduation	N				
Tamil Nadu	1.9	3.7	36.3	49.6	8.5	28400				
Ariyalur	2.6	2.0	35.3	32.8	27.4	800				
Chennai	0.9	2.5	38.0	52.9	5.8	800				
Coimbatore	1.3	3.0	27.0	55.4	13.3	1600				
Cuddalore	1.5	4.1	38.4	46.9	9.1	800				
Dharmapuri	1.3	2.9	31.5	56.2	8.1	1200				
Dindigul	2.0	4.3	38.5	49.0	6.3	800				
Erode	5.0	5.8	42.1	44.4	2.8	800				
Kancheepuram	1.8	2.9	33.9	47.9	13.6	800				
Kanniyakumari	0.0	1.8	20.5	57.1	20.6	1200				
Karur	2.3	4.3	40.8	46.9	5.9	800				
Krishnagiri	5.8	3.4	41.5	44.0	5.4	800				
Madurai	1.0	4.0	39.3	51.5	4.3	800				
Nagapattinam	0.8	2.4	36.3	51.8	8.9	800				
Namakkal	2.4	6.4	36.3	48.9	6.1	800				
Perambalur	0.4	3.4	30.5	55.9	9.9	800				
Pudukkottai	1.5	1.3	39.1	50.0	8.1	800				
Ramanathapuram	0.4	3.0	36.3	55.5	4.9	800				
Salem	3.1	6.6	30.8	52.8	6.8	800				
Sivaganga	1.4	1.0	29.0	58.8	9.9	800				
Thanjavur	0.8	2.9	36.9	48.4	11.1	800				
The Nilgiris	1.4	4.5	39.0	48.8	6.4	800				
Theni	0.3	2.1	32.8	57.6	7.3	800				
Thiruvallur	2.1	4.0	36.1	51.9	5.9	800				
Thiruvarur	0.8	2.8	38.3	47.5	10.8	800				
Thoothukudi	1.4	5.1	39.5	49.4	4.6	800				
Tiruchirappalli	3.4	3.4	33.7	49.1	10.5	1600				
Tirunelveli	0.8	4.4	41.5	48.5	4.7	1200				
Tiruppur	2.4	4.6	44.8	44.2	4.0	800				
Tiruvannamalai	2.6	3.9	41.7	46.7	5.1	800				
Vellore	2.3	8.3	48.7	37.5	3.3	800				
Viluppuram	6.0	5.3	46.8	37.5	4.5	800				
Virudhunagar	2.4	5.6	38.2	48.4	5.4	800				



Chennai       51.8       32.6       10.6         Coimbatore       53.4       34.1       9.8         Cuddalore       40.5       46.9       9.8         Dharmapuri       45.5       40.8       11.1         Dindigul       49.6       40.8       7.1         Erode       45.3       40.5       10.8         Kancheepuram       55.0       37.0       6.8         Kanniyakumari       43.4       44.3       9.2         Karur       40.9       39.4       16.0         Krishnagiri       35.4       48.3       13.0         Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Theni       47.4       37.4       13.0         Theni       47.4       47.4 <th>d Fourth or more</th> <th>N</th>	d Fourth or more	N
Chennai       51.8       32.6       10.6         Coimbatore       53.4       34.1       9.8         Cuddalore       40.5       46.9       9.8         Dharmapuri       45.5       40.8       11.1         Dindigul       49.6       40.8       7.1         Erode       45.3       40.5       10.8         Kancheepuram       55.0       37.0       6.8         Kanniyakumari       43.4       44.3       9.2         Karur       40.9       39.4       16.0         Krishnagiri       35.4       48.3       13.0         Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Theni       47.4       37.4       13.0         Theni       47.4       37.4 <th>2.7</th> <th>28400</th>	2.7	28400
Coimbatore       53.4       34.1       9.8         Cuddalore       40.5       46.9       9.8         Dharmapuri       45.5       40.8       11.1         Dindigul       49.6       40.8       7.1         Erode       45.3       40.5       10.8         Kancheepuram       55.0       37.0       6.8         Kanniyakumari       43.4       44.3       9.2         Karur       40.9       39.4       16.0         Krishnagiri       35.4       48.3       13.0         Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Theni       47.4       37.4       13.0         Theni       47.4       37.4       13.0         Theni       47.4       43.0	3.5	800
Cuddalore       40.5       46.9       9.8         Dharmapuri       45.5       40.8       11.1         Dindigul       49.6       40.8       7.1         Erode       45.3       40.5       10.8         Kancheepuram       55.0       37.0       6.8         Kanniyakumari       43.4       44.3       9.2         Karur       40.9       39.4       16.0         Krishnagiri       35.4       48.3       13.0         Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thenjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       <	5.0	800
Dharmapuri       45.5       40.8       11.1         Dindigul       49.6       40.8       7.1         Erode       45.3       40.5       10.8         Kancheepuram       55.0       37.0       6.8         Kanniyakumari       43.4       44.3       9.2         Karur       40.9       39.4       16.0         Krishnagiri       35.4       48.3       13.0         Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thenjigiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1	2.8	1600
Dindigul       49.6       40.8       7.1         Erode       45.3       40.5       10.8         Kancheepuram       55.0       37.0       6.8         Kanniyakumari       43.4       44.3       9.2         Karur       40.9       39.4       16.0         Krishnagiri       35.4       48.3       13.0         Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thenjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1	2.9	800
Erode       45.3       40.5       10.8         Kancheepuram       55.0       37.0       6.8         Kanniyakumari       43.4       44.3       9.2         Karur       40.9       39.4       16.0         Krishnagiri       35.4       48.3       13.0         Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8 <td>2.6</td> <td>1200</td>	2.6	1200
Kancheepuram       55.0       37.0       6.8         Kanniyakumari       43.4       44.3       9.2         Karur       40.9       39.4       16.0         Krishnagiri       35.4       48.3       13.0         Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tiruppur       46.9<	2.5	800
Kanniyakumari       43.4       44.3       9.2         Karur       40.9       39.4       16.0         Krishnagiri       35.4       48.3       13.0         Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tiruppur       46.9       39.0       11.4	3.5	800
Karur       40.9       39.4       16.0         Krishnagiri       35.4       48.3       13.0         Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	1.1	800
Krishnagiri       35.4       48.3       13.0         Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	2.9	1200
Madurai       48.0       40.5       9.5         Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	3.8	800
Nagapattinam       49.8       40.1       7.8         Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	3.4	800
Namakkal       45.6       38.8       12.0         Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	2.0	800
Perambalur       39.0       45.1       12.8         Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	2.4	800
Pudukkottai       51.1       39.9       7.4         Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	3.6	800
Ramanathapuram       47.3       44.8       7.5         Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	3.1	800
Salem       42.0       42.5       12.4         Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	1.6	800
Sivaganga       47.9       39.8       11.0         Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	0.4	800
Thanjavur       48.0       39.4       10.3         The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	3.0	800
The Nilgiris       49.5       43.8       5.0         Theni       47.4       37.4       13.0         Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	1.4	800
Theni 47.4 37.4 13.0 Thiruvallur 44.4 42.3 10.1 Thiruvarur 48.1 43.0 7.3 Thoothukudi 49.1 39.9 8.4 Tiruchirappalli 49.8 37.3 10.0 Tirunelveli 54.8 34.9 8.9 Tiruppur 46.9 39.0 11.4	2.4	800
Thiruvallur       44.4       42.3       10.1         Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	1.0	800
Thiruvarur       48.1       43.0       7.3         Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	2.3	800
Thoothukudi       49.1       39.9       8.4         Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	3.0	800
Tiruchirappalli       49.8       37.3       10.0         Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	1.3	800
Tirunelveli       54.8       34.9       8.9         Tiruppur       46.9       39.0       11.4	2.6	800
Tiruppur 46.9 39.0 11.4	2.7	1600
	1.4	1200
Tiruvannamalai 45.5 37.4 12.0	2.8	800
	5.0	800
Vellore 42.3 36.1 17.6	3.9	800
Viluppuram 35.6 41.1 17.5	5.8	800



State/District	First trimester	Second trimester	Third trimester	N
Tamil Nadu	15.8	30.8	53.2	28400
Ariyalur	17.8	38.4	43.9	800
Chennai	10.8	24.5	64.8	800
Coimbatore	23.6	35.4	40.9	1600
Cuddalore	28.0	35.5	36.3	800
Dharmapuri	7.0	34.3	58.7	1200
Dindigul	13.5	22.8	63.8	800
Erode	17.1	26.0	56.9	800
Kancheepuram	14.5	32.5	53.0	800
Kanniyakumari	21.8	26.5	51.7	1200
Karur	14.0	31.6	54.4	800
Krishnagiri	8.3	20.9	70.9	800
Madurai	13.9	44.4	41.8	800
Nagapattinam	10.9	32.9	56.3	800
Namakkal	11.8	25.4	62.8	800
Perambalur	17.5	43.1	39.3	800
Pudukkottai	5.5	37.4	57.1	800
Ramanathapuram	16.4	30.0	53.0	800
Salem	10.4	31.6	57.6	800
Sivaganga	7.1	26.3	66.4	800
Thanjavur	7.1	32.8	60.0	800
The Nilgiris	19.0	32.5	47.3	800
Theni	16.8	34.3	49.0	800
Thiruvallur	20.8	20.6	58.6	800
Thiruvarur	13.9	27.5	58.4	800
Thoothukudi	24.0	31.0	45.0	800
Tiruchirappalli	17.0	24.7	57.9	1600
Tirunelveli	12.4	30.8	56.7	1200
Tiruppur	23.3	29.4	47.3	800
Tiruvannamalai	24.0	35.8	40.1	800
Vellore	18.1	37.3	43.9	800
Viluppuram	10.3	21.5	68.0	800
Virudhunagar	22.4	31.1	46.5	800



State/District	Yes	No	Tota
Tamil Nadu	91.0	8.8	2840
Ariyalur	64.9	35.0	800
Chennai	96.8	3.1	80
Coimbatore	67.3	32.7	160
Cuddalore	81.8	18.3	80
Dharmapuri	98.6	1.4	120
Dindigul	89.0	11.0	80
Erode	89.1	10.9	80
Kancheepuram	98.1	1.9	80
Kanniyakumari	79.8	20.3	120
Karur	96.1	3.9	80
Krishnagiri	97.5	2.5	80
Madurai	99.5	0.5	80
Nagapattinam	92.9	7.1	80
Namakkal	98.5	1.4	80
Perambalur	93.8	6.3	80
Pudukkottai	97.0	2.9	80
Ramanathapuram	87.9	11.1	80
Salem	93.4	6.6	80
Sivaganga	97.8	2.0	80
Thanjavur	96.9	2.8	80
The Nilgiris	94.3	4.1	80
Theni	98.9	1.0	80
Thiruvallur	85.9	14.1	80
Thiruvarur	97.8	1.5	80
Thoothukudi	85.6	14.3	80
Tiruchirappalli	90.8	9.0	160
Tirunelveli	99.0	0.9	120
Tiruppur	98.0	1.8	80
Tiruvannamalai	96.0	3.9	80
Vellore	93.4	6.1	80
Viluppuram	99.5	0.3	80
Virudhunagar	78.9	21.1	800



Table 11: Distr	ict-wise di	stribution of	respo	ndents bas	sed on the So	ource of	Referral
State/District	Self Referral	Family/ Relatives/ Neighbors/ Friends	NGO	Private (Doctor/ Nurses)	Govt (including, ASHA/ ANM)	ICTC / ART Centre	Total
Tamil Nadu	18.2	12.9	0.0	0.9	67.5	0.5	28400
Ariyalur	1.9	0.3	0.0	0.0	97.9	0.0	800
Chennai	11.4	19.6	0.0	3.9	65.1	0.0	800
Coimbatore	30.0	15.3	0.1	8.0	53.8	0.0	1600
Cuddalore	29.3	16.6	0.0	1.3	52.9	0.0	800
Dharmapuri	0.8	9.5	0.0	0.0	89.6	0.0	1200
Dindigul	7.5	4.0	0.0	0.9	87.6	0.0	800
Erode	3.1	7.0	0.0	0.3	89.6	0.0	800
Kancheepuram	0.0	2.8	0.0	0.4	96.9	0.0	800
Kanniyakumari	36.8	47.4	0.0	0.4	15.3	0.0	1200
Karur	23.1	5.8	0.0	0.6	70.3	0.1	800
Krishnagiri	4.5	1.5	0.0	0.1	93.9	0.0	800
Madurai	1.1	59.1	0.0	0.0	39.8	0.0	800
Nagapattinam	41.9	18.5	0.0	0.0	39.6	0.0	800
Namakkal	6.4	17.9	0.0	3.9	71.9	0.0	800
Perambalur	0.0	0.1	0.0	0.0	99.8	0.0	800
Pudukkottai	26.9	15.4	0.0	2.0	55.6	0.0	800
Ramanathapuram	11.4	29.0	0.0	0.5	59.1	0.0	800
Salem	26.8	0.0	0.0	0.0	73.3	0.0	800
Sivaganga	40.5	26.1	0.0	0.3	33.1	0.0	800
Thanjavur	43.3	10.4	0.0	0.5	45.9	0.0	800
The Nilgiris	4.4	0.0	0.0	0.1	94.1	1.1	800
Theni	18.5	0.3	0.0	0.0	81.1	0.0	800
Thiruvallur	9.1	12.5	0.0	0.1	78.3	0.0	800
Thiruvarur	19.3	5.9	0.0	3.4	71.4	0.0	800
Thoothukudi	35.6	19.9	0.0	1.1	43.4	0.0	800
Tiruchirappalli	34.8	8.6	0.1	1.3	55.2	0.0	1600
Tirunelveli	15.2	19.3	0.0	0.3	58.0	7.3	1200
Tiruppur	3.0	2.6	0.0	3.8	90.1	0.3	800
Tiruvannamalai	37.8	9.3	0.0	2.4	46.6	4.0	800
Vellore	0.1	0.3	0.0	0.3	99.3	0.0	800
Viluppuram	0.4	0.0	0.0	0.5	98.8	0.3	800
Virudhunagar	28.6	12.8	0.0	0.9	57.4	0.0	800



State / Districts	Urban	Rural	Total
Гаmil Nadu	30.7	68.8	28400
Ariyalur	8.3	90.9	800
Chennai	69.1	30.8	800
Coimbatore	47.1	52.2	1600
Cuddalore	31.1	68.9	800
Dharmapuri	7.7	92.3	1200
Dindigul	32.0	68.0	800
Erode	40.5	59.1	800
Kancheepuram	56.5	43.5	800
Kanniyakumari	23.6	76.3	1200
Karur	39.0	60.9	800
Krishnagiri	28.0	72.0	800
Madurai	45.6	54.0	800
Nagapattinam	17.5	82.3	800
Namakkal	23.0	76.1	800
Perambalur	2.3	97.8	800
Pudukkottai	12.8	87.3	800
Ramanathapuram	27.9	71.3	800
Salem	32.4	67.3	800
Sivaganga	17.6	82.4	800
Γhanjavur	22.0	78.0	800
Γhe Nilgiris	52.9	46.8	800
Гheni	40.4	59.6	800
Γhiruvallur	18.4	80.9	800
Γhiruvarur	13.4	83.5	800
Γhoothukudi	44.1	55.8	800
Tiruchirappalli	33.1	66.1	1600
Γirunelveli	33.0	66.8	1200
Гiruppur	44.4	54.5	800
Γiruvannamalai	27.1	72.8	800
Vellore	44.9	55.0	800
Viluppuram	10.4	89.3	800
Virudhunagar	33.4	65.6	800



Table 13: District-wise distribution of respondents based on the Occupation (%)

State/District	Agricultural Labourer	Non-Agricultural Labourer	Domestic Servant	Skilled / Semiskilled worker	Petty business / small shop	Large Business/Self employed	Service (Govt./Pvt.)	Student	Hotel staff	Truck driver/Helper	Local transport Worker	Agricultural cultivator	Housewife	Total
Tamil Nadu	0.7	1.2	0.1	0.5	0.1	0.0	3.0	0.7	0.0	0.0	0.0	0.3	93.3	28400
Ariyalur	3.1	0.5	0.0	0.6	0.1	0.0	3.3	1.6	0.1	0.0	0.0	3.0	87.6	800
Chennai	0.1	0.0	0.0	0.3	0.4	0.0	4.3	0.1	0.0	0.0	0.0	0.0	94.8	800
Coimbatore	0.3	0.6	0.1	0.1	0.0	0.2	5.0	0.6	0.1	0.0	0.0	0.0	93.1	1600
Cuddalore	0.0	0.1	0.0	0.0	0.0	0.3	3.6	8.0	0.0	0.0	0.0	0.0	95.3	800
Dharmapuri	1.1	0.3	0.2	0.1	0.0	0.0	1.8	0.3	0.0	0.0	0.0	0.2	96.2	1200
Dindigul	1.1	0.4	0.0	0.3	0.0	0.0	2.1	1.8	0.0	0.0	0.0	0.0	94.4	800
Erode	0.3	1.6	0.1	1.0	0.0	0.0	1.3	0.3	0.1	0.0	0.0	0.0	95.4	800
Kancheepuram	0.5	0.1	1.5	0.0	0.3	0.0	4.0	0.6	0.0	0.0	0.0	0.0	93.0	800
Kanniyakumari	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.9	0.0	0.0	0.0	0.0	90.8	1200
Karur	8.0	1.0	0.0	0.1	0.1	0.1	3.3	1.3	0.3	0.0	0.0	0.0	93.1	800
Krishnagiri	0.0	1.3	0.0	0.0	0.0	0.0	1.1	0.3	0.1	0.0	0.0	0.3	97.0	800
Madurai	0.0	0.5	0.0	0.9	0.4	0.0	2.6	0.9	0.0	0.0	0.0	0.0	94.8	800
Nagapattinam	0.0	0.1	0.0	0.3	0.0	0.0	2.3	0.3	0.1	0.0	0.0	0.0	97.0	800
Namakkal	0.0	1.6	0.0	1.3	0.1	0.0	0.4	1.3	0.0	0.0	0.0	0.0	95.4	800
Perambalur	4.1	2.4	0.1	0.5	0.3	0.0	4.4	1.3	0.0	0.0	0.0	5.4	81.6	800
Pudukkottai	0.0	0.4	0.0	0.9	0.0	0.0	0.5	0.4	0.0	0.0	0.0	0.3	97.5	800
Ramanathapuram	0.0	0.3	0.0	0.3	0.1	0.0	1.5	0.3	0.0	0.0	0.0	0.0	97.6	800
Salem	0.1	0.3	0.0	0.1	0.0	0.0	2.8	0.9	0.0	0.0	0.0	0.0	95.9	800
Sivaganga	0.3	0.1	0.1	0.3	0.0	0.0	3.1	1.4	0.0	0.0	0.0	0.0	94.8	800
Thanjavur	0.0	0.5	0.0	0.0	0.0	0.0	1.5	0.9	0.0	0.0	0.0	0.0	97.1	800
The Nilgiris	0.4	1.3	0.0	0.0	0.0	0.1	2.6	0.0	0.0	0.0	0.0	0.0	95.5	800
Theni	1.3	0.4	0.0	0.1	0.1	0.0	2.1	1.9	0.1	0.0	0.0	0.0	94.0	800
Thiruvallur	0.4	7.3	0.0	0.5	0.4	0.0	2.9	0.1	0.0	0.0	0.0	0.0	88.5	800
Thiruvarur	2.0	0.3	0.0	0.1	0.3	0.0	2.5	0.5	0.0	0.0	0.0	0.1	94.3	800
Thoothukudi	1.1	3.3	0.1	0.3	0.4	0.0	3.4	0.9	0.0	0.0	0.0	0.1	90.5	800
Tiruchirappalli	2.4	0.6	0.1	0.1	0.1	0.0	5.6	0.6	0.1	0.0	0.0	0.1	90.3	1600
Tirunelveli	0.5	6.5	0.0	0.6	0.2	0.0	3.3	0.4	0.0	0.0	0.0	0.1	88.5	1200
Tiruppur	0.0	1.5	0.0	8.8	0.4	0.1	1.9	0.5	0.0	0.0	0.0	0.1	86.8	800
Tiruvannamalai	0.5	0.3	0.0	0.1	0.3	0.0	0.9	0.0	0.0	0.0	0.0	0.1	97.9	800
Vellore	0.8	0.1 0.4	0.0	0.0	0.3	0.0	1.3	0.0	0.0	0.0	0.0	0.3	97.4	800
Viluppuram Virudhunagar	0.6 0.8	2.6	0.1	0.0	0.1	0.0	2.1 3.5	0.4 1.0	0.0	0.0	0.0	1.4 0.0	94.9 91.3	800
v ii uuiiuiiagai	0.0	2.0	0.0	0.0	0.0	0.3	٥.٥	1.0	0.0	0.0	0.0	0.0	71.3	000



State/District	Agricultural Labourer	Non-Agricultural Labourer	Domestic Servant	Skilled / Semiskilled worker	Petty business / small shop	LargeBusiness/Self employed	Service (Govt./Pvt.)	Student	Hotel staff	Truck driver/Helper	Local transport Worker	Agricultural cultivator	Unemployed	Not Applicable	Tot
Tamil Nadu	8.2	21.6	0.3	21.2	4.7	2.7	21.3	0.1	2.8	3.8	10.0	2.8	0.1	0.1	284
Ariyalur	9.3	15.4	0.0	10.4	3.0	2.8	25.4	0.4	4.5	2.5	9.1	17.1	0.1	0.1	80
Chennai	1.0	6.1	0.4	16.9	7.9	4.9	42.1	0.0	2.4	3.9	13.0	1.5	0.0	0.0	80
Coimbatore	2.8	22.1	0.2	22.1	6.2	6.6	28.2	0.1	0.9	0.9	9.4	0.4	0.1	0.0	160
Cuddalore	5.3	45.3	0.0	9.9	4.3	1.5	18.4	0.0	1.5	1.6	11.3	1.1	0.0	0.0	80
Dharmapuri	11.5	25.0	0.3	19.6	7.0	0.4	18.9	0.3	0.8	8.0	5.1	2.9	0.3	0.0	120
Dindigul	8.5	35.1	0.0	16.0	6.0	2.5	14.6	0.0	3.3	0.6	12.8	0.4	0.0	0.3	80
Erode	6.1	29.8	0.0	40.8	1.3	2.5	7.3	0.0	1.4	1.3	9.8	0.0	0.0	0.0	80
Kancheepuram	14.5	3.3	7.5	9.1	4.8	2.9	45.5	0.0	1.5	1.5	9.4	0.0	0.0	0.1	8
Kanniyakumari	8.0	5.4	0.2	49.3	1.1	4.2	29.8	0.0	1.3	1.3	6.5	0.0	0.0	0.1	12
Karur	2.8	24.5	0.0	34.5	2.9	5.1	13.5	0.0	3.5	5.1	7.3	0.8	0.0	0.1	8
Krishnagiri	0.9	16.0	0.0	21.8	6.4	2.8	26.9	0.0	4.1	1.9	12.0	7.4	0.0	0.0	8
Madurai	4.5	39.1	0.0	13.9	2.8	3.5	21.3	0.0	2.9	0.1	11.4	0.6	0.0	0.0	80
Nagapattinam	9.4	5.9	0.0	41.6	3.6	0.8	18.4	0.0	3.1	5.3	10.1	1.4	0.1	0.1	80
Namakkal	5.6	23.3	0.0	28.3	4.6	1.6	10.3	0.1	0.5	9.1	16.0	0.5	0.1	0.0	80
Perambalur	7.8	9.8	0.0	13.6	3.8	0.5	20.4	0.4	6.1	2.8	10.6	24.4	0.0	0.0	8
Pudukkottai	14.9	13.5	0.0	37.0	5.8	0.6	6.5	0.0	4.9	2.0	6.8	7.9	0.3	0.0	80
Ramanathapuram	8.5	24.4	0.3	22.8	5.1	4.0	18.1	0.1	3.3	0.6	12.4	0.0	0.3	0.3	80
Salem	7.0	35.9	0.3	11.0	2.4	3.0	24.1	0.1	0.4	12.6	3.3	0.0	0.0	0.0	80
Sivaganga	2.1	26.9	0.0	14.1	4.9	2.6	16.5	0.0	9.6	2.5	14.6	5.3	0.9	0.0	80
Thanjavur	15.8	25.5	0.0	25.0	4.0	2.3	8.6	0.0	2.6	2.1	12.3	1.8	0.1	0.0	80
The Nilgiris	30.9	20.5	0.1	6.8	4.8	2.4	14.5	0.0	3.8	7.8	8.3	0.3	0.0	0.0	80
Theni	10.8	16.5	0.3	20.3	5.0	2.6	23.6	0.0	3.5	2.4	10.8	4.3	0.0	0.1	80
Thiruvallur	5.1	18.3	0.4	13.3	5.8	1.3	39.1	0.3	1.3	2.4	12.1	0.3	0.4	0.1	80
Thiruvarur	18.6	7.0	0.0	31.9	1.5	1.0	11.9	0.0	4.1	8.0	11.1	4.8	0.0	0.1	80
Thoothukudi	3.4	35.0	0.0	15.5	8.6	1.9	14.4	0.1	2.6	5.0	12.6	0.8	0.0	0.1	80
Tiruchirappalli	7.9	26.9	0.4	5.9	4.1	5.7	31.3	0.1	3.1	3.1	10.1	0.3	0.4	0.5	160
Tirunelveli	13.1	29.4	0.4	6.3	6.3	1.0	22.1	0.0	3.1	11.7	6.3	0.2	0.0	0.3	120
Tiruppur	2.3	20.5	0.0	48.0	3.9	0.8	14.4	0.0	0.3	5.0	4.4	0.3	0.1	0.1	80
Tiruvannamalai	10.1	16.9	0.1	21.1	9.5	2.1	22.0	0.3	2.9	2.8	11.1	0.8	0.3	0.1	80
Vellore	6.4	26.5	0.0	21.8	6.3	2.4	12.6	0.1	5.6	2.5	14.4	0.9	0.0	0.5	80
Viluppuram	17.6	10.3	0.0	18.4	4.9	8.0	16.3	0.0	3.5	4.4	10.9	11.8	0.9	0.5	80
Virudhunagar	3.8	30.0	0.0	21.8	2.5	2.6	24.9	0.1	2.4	1.3	10.4	0.0	0.3	0.1	8



Table 15: District-wise distribution of respondents based on Migration of Spouse (%) State/District Yes No **Not Applicable** Total **Tamil Nadu** 5.1 94.8 0.1 28400 Ariyalur 6.5 93.4 0 800 Chennai 1.3 98.8 0 800 0 Coimbatore 8.0 99.2 1600 0 Cuddalore 0.9 99.1 800 0 0.3 99.8 1200 Dharmapuri 0.3 Dindigul 99.6 0.1 800 Erode 99.6 0.4 0 800 99.4 0.1 Kancheepuram 0.5 800 Kanniyakumari 6.5 93.4 0.1 1200 Karur 1.9 98.0 0.1 800 Krishnagiri 1.4 98.6 0 800 Madurai 7.8 92.3 0 800 19.5 0.1 Nagapattinam 80.4 800 Namakkal 1.3 98.8 0 800 0 Perambalur 12.6 87.4 800 Pudukkottai 21.5 78.5 0 800 Ramanathapuram 18.5 81.3 0 800 Salem 0.4 99.6 0 800 0 17.6 82.4 800 Sivaganga Thanjavur 13.9 0 800 86.1 The Nilgiris 1.1 98.9 0 800 Theni 2.4 0.1 97.5 800 Thiruvallur 1.9 98.0 0.1 800 Thiruvarur 8.3 0 800 91.6 Thoothukudi 4.9 95.0 0.1 800 Tiruchirappalli 2.8 96.8 0.5 1600 Tirunelveli 3.1 96.7 0.3 1200 Tiruppur 0.6 99.3 0.1 800 Tiruvannamalai 11.1 8.88 0.1 800 Vellore 0.5 99.0 0.3 800 Viluppuram 1.5 97.9 0.5 800 Virudhunagar 98.8 800 1.1 0.1



State/District	Yes	No	Total
Tamil Nadu	82.8	17.2	2840
Ariyalur	79.8	20.3	800
Chennai	94.0	6.0	800
Coimbatore	82.4	17.6	1600
Cuddalore	77.4	22.6	800
Dharmapuri	96.8	3.3	1200
Dindigul	83.6	16.4	800
Erode	85.0	15.0	800
Kancheepuram	79.5	20.5	800
Kanniyakumari	84.5	15.5	1200
Karur	91.8	8.3	800
Krishnagiri	94.6	5.4	800
Madurai	95.4	4.6	800
Nagapattinam	92.1	7.9	800
Namakkal	91.0	9.0	800
Perambalur	92.9	7.1	800
Pudukkottai	77.9	22.1	800
Ramanathapuram	92.5	7.5	800
Salem	82.4	17.6	800
Sivaganga	97.6	2.4	800
Thanjavur	93.4	6.6	800
The Nilgiris	95.1	4.9	800
Theni	93.4	6.6	800
Thiruvallur	80.6	19.4	800
Thiruvarur	72.9	27.1	800
Thoothukudi	78.5	21.5	800
Tiruchirappalli	51.8	48.2	1600
Tirunelveli	95.8	4.3	1200
Tiruppur	46.6	53.4	800
Tiruvannamalai	71.0	29.0	800
Vellore	46.3	53.8	800
Viluppuram	97.5	2.5	800



Table 17: District- wise distribution of respondents based on the Time of their last HIV test (%) (Only the respondent whom tested for HIV test previously)

	during current	Consented	<b>Tested before</b>	
State/District	pregnancy	today	current pregnancy	Total
Tamil Nadu	85.57	0.00	14.41	23525
Ariyalur	89.03	0.00	10.97	638
Chennai	91.89	0.00	8.11	752
Coimbatore	86.58	0.00	13.42	1319
Cuddalore	77.54	0.00	22.46	619
Dharmapuri	95.61	0.00	4.39	1161
Dindigul	83.71	0.00	16.29	669
Erode	94.12	0.00	5.88	680
Kancheepuram	84.12	0.00	15.88	636
Kanniyakumari	85.21	0.00	14.79	1014
Karur	94.55	0.00	5.45	734
Krishnagiri	94.19	0.00	5.81	757
Madurai	45.61	0.00	54.26	763
Nagapattinam	92.27	0.00	7.73	737
Namakkal	85.30	0.00	14.70	728
Perambalur	93.54	0.00	6.46	743
Pudukkottai	48.80	0.00	51.20	623
Ramanathapuram	89.73	0.00	10.27	740
Salem	98.03	0.00	1.97	659
Sivaganga	90.52	0.00	9.48	781
Thanjavur	93.57	0.00	6.43	747
The Nilgiris	95.14	0.00	4.86	761
Theni	64.93	0.00	35.07	747
Thiruvallur	82.95	0.00	17.05	645
Thiruvarur	87.14	0.00	12.86	583
Thoothukudi	80.25	0.00	19.75	628
Tiruchirappalli	95.30	0.00	4.70	829
Tirunelveli	97.48	0.00	2.44	1149
Tiruppur	99.73	0.00	0.27	373
Tiruvannamalai	31.16	0.00	68.84	568
Vellore	96.22	0.00	3.24	370
Viluppuram	87.95	0.00	12.05	780
Virudhunagar	86.66	0.00	13.34	592



Table 18: District-wise distribution of respondents based on the Result of their last HIV test (%) (Only therespondent whom tested for HIV test previously)

State/District	Positive	Negative	Did not collect the test result	No Response	Total
·					
Tamil Nadu	0.20	99.67	0.13	0.00	23525
Ariyalur	0.00	100.00	0.00	0.00	638
Chennai	0.00	100.00	0.00	0.00	752
Coimbatore	0.45	98.64	0.91	0.00	1319
Cuddalore	0.16	99.84	0.00	0.00	619
Dharmapuri	0.26	99.74	0.00	0.00	1161
Dindigul	0.00	100.00	0.00	0.00	669
Erode	0.29	99.71	0.00	0.00	680
Kancheepuram	0.16	99.84	0.00	0.00	636
Kanniyakumari	0.00	100.00	0.00	0.00	1014
Karur	0.27	99.73	0.00	0.00	734
Krishnagiri	0.53	99.47	0.00	0.00	757
Madurai	0.26	99.48	0.26	0.00	763
Nagapattinam	0.00	99.86	0.14	0.00	737
Namakkal	0.55	99.45	0.00	0.00	728
Perambalur	0.00	100.00	0.00	0.00	743
Pudukkottai	0.32	99.68	0.00	0.00	623
Ramanathapuram	0.00	99.86	0.14	0.00	740
Salem	0.15	99.85	0.00	0.00	659
Sivaganga	0.38	99.62	0.00	0.00	781
Thanjavur	0.00	100.00	0.00	0.00	747
The Nilgiris	0.00	100.00	0.00	0.00	761
Theni	0.00	100.00	0.00	0.00	747
Thiruvallur	0.16	99.84	0.00	0.00	645
Thiruvarur	0.00	99.83	0.17	0.00	583
Thoothukudi	0.00	99.84	0.16	0.00	628
Tiruchirappalli	0.24	99.52	0.24	0.00	829
Tirunelveli	0.17	99.39	0.44	0.00	1149
Tiruppur	0.54	98.39	1.07	0.00	373
Tiruvannamalai	0.00	99.65	0.35	0.00	568
Vellore	1.62	98.38	0.00	0.00	370
Viluppuram	0.13	99.87	0.00	0.00	780
Virudhunagar	0.17	99.83	0.00	0.00	592



State/District	(1) ART	(2) NGO	(3) PVt	(4)Pharmacist/Chemist	(5) Alternative/non Allopathic	(6) Any other type	(7) Not taking for HIV management	ART+NGO (1)+(2)	ART+PVT. (1)+(3)	ART+ (Alternative/non Allopathic) (1)+(5)	ART + Any other type (1)+(6)	Total
Tamil Nadu	97.8	0	0	0	0	0	2.2	0	0	0	0	46
Coimbatore	83.3	0	0	0	0	0	16.7	0	0	0	0	6
Cuddalore	100	0	0	0	0	0	0	0	0	0	0	1
Dharmapuri	100	0	0	0	0	0	0	0	0	0	0	3
Erode	100	0	0	0	0	0	0	0	0	0	0	2
Kancheepuram	100	0	0	0	0	0	0	0	0	0	0	1
Karur	100	0	0	0	0	0	0	0	0	0	0	2
Krishnagiri	100	0	0	0	0	0	0	0	0	0	0	4
Madurai Namakkal	100	0	0	0	0	0	0	0	0	0	0	2
Namakkal Budukkattai	100	0	0	0	0	0	0	0	0	0	0	4
Pudukkottai	100	0	0	0	0	0	0	0	0	0	0	2
Salem	100	0	0 0	0	0	0 0	0 0	0	0 0	0 0	0 0	1 3
Sivaganga	100			_								_
Thiruvallur Tiruchirappalli	100 100	0	0	0 0	0	0 0	0	0 0	0 0	0 0	0 0	1 2
Tiruchirappani Tirunelveli	100	0	0	0	0	0	0	0	0	0	0	2
Tiruneiven Tiruppur	100	0	0	0	0	0	0	0	0	0	0	2
Vellore	100	0	0	0	0	0	0	0	0	0	0	6
Viluppuram	100	0	0	0	0	0	0	0	0	0	0	1
v nuppuram	100	U	U	U	U	U	U	U	U	U	U	T



Table 20: District - wise distribution of HIV positive respondents based on the ART uptake (%). (Results Only; If respondent whom Previous HIV test results positive and ART taken currently or not)

State/District	Yes	No	Total
Tamil Nadu	97.8	2.2	46
Coimbatore	83.3	16.7	6
Cuddalore	100	0	1
Dharmapuri	100	0	3
Erode	100	0	2
Kancheepuram	100	0	1
Karur	100	0	2
Krishnagiri	100	0	4
Madurai	100	0	2
Namakkal	100	0	4
Pudukkottai	100	0	2
Salem	100	0	1
Sivaganga	100	0	3
Thiruvallur	100	0	1
Tiruchirappalli	100	0	2
Tirunelveli	100	0	2
Tiruppur	100	0	2
Vellore	100	0	6
Viluppuram	100	0	1
Virudhunagar	100	0	1



Table 21:	HIV F	Prevalenc	e among	ANC Clin	nic Atten	dees b	y Age		
State / Districts	1!	5-24	25	5-34	35-	44	45	49	Total
State/Districts	%	N	%	N	%	N	%	N	Total
Tamil Nadu	0.18	16390	0.16	11457	0.54	553	0	0	28400
Ariyalur	0	419	0	369	0	12	0	0	800
Chennai	0	585	0	203	0	12	0	0	800
Coimbatore	0.39	1029	0.38	529	0	42	0	0	1600
Cuddalore	0.29	339	0	451	0	10	0	0	800
Dharmapuri	0.10	965	1.3	228	0	7	0	0	1200
Dindigul	0	486	0	301	0	13	0	0	800
Erode	0.43	461	0	313	0	26	0	0	800
Kancheepuram	0.25	404	0	372	0	24	0	0	800
Kanniyakumari	0	411	0	739	0	50	0	0	1200
Karur	0	436	0.29	346	5.6	18	0	0	800
Krishnagiri	0.57	528	0.37	267	0	5	0	0	800
Madurai	0	504	0.70	286	0	10	0	0	800
Nagapattinam	0	430	0	364	0	6	0	0	800
Namakkal	0.77	517	0.75	266	0	17	0	0	800
Perambalur	0	459	0	332	0	9	0	0	800
Pudukkottai	0.26	384	0.25	403	0	13	0	0	800
Ramanathapuram	0	458	0	326	0	16	0	0	800
Salem	0.21	478	0	302	0	20	0	0	800
Sivaganga	0.25	403	0.27	377	5	20	0	0	800
Thanjavur	0	367	0	418	0	15	0	0	800
The Nilgiris	0	410	0	371	0	19	0	0	800
Theni	0	557	0	239	0	4	0	0	800
Thiruvallur	0.20	498	0	287	0	15	0	0	800
Thiruvarur	0	328	0	461	0	11	0	0	800
Thoothukudi	0	458	0	325	0	17	0	0	800
Tiruchirappalli	0	950	0.33	610	0	40	0	0	1600
Tirunelveli	0.13	776	0.25	402	0	22	0	0	1200
Tiruppur	0.37	537	0	254	0	9	0	0	800
Tiruvannamalai	0.22	458	0	318	0	24	0	0	800
Vellore	0.87	462	0.31	323	6.7	15	0	0	800
Viluppuram	0.24	418	0	360	0	22	0	0	800
Virudhunagar	0	475	0.32	315	0	10	0	0	800



Table 22:HIV Prevalence (%) among ANC Clinic Attendees by Literacy Status and Districts

State/District	1. Illit Total	erate	till 5th	rate and I Ird Total		to 10th ard Total	4. 11th Gradu Total		5. Post Gradu Total		Total
ŕ	%	N	%	N	%	N	%	N	%	N	
Tamil Nadu	0.19	539	0.38	1062	0.25	10316	0.13	14068	0.04	2405	28400
Ariyalur	0	21	0	16	0	282	0	262	0	219	800
Chennai	0	7	0	20	0	304	0	423	0	46	800
Coimbatore	0	20	0	48	0.69	432	0.34	886	0	213	1600
Cuddalore	0	12	0	33	0	307	0.27	375	0	73	800
Dharmapuri	6.25	16	2.86	35	0.53	378	0	674	0	97	1200
Dindigul	0	16	0	34	0	308	0	392	0	50	800
Erode	0	40	0	46	0.30	336	0.28	354	0	22	800
Kancheepuram	0	14	0	23	0.37	271	0	383	0	109	800
Kanniyakumari	0		0	22	0	246	0	685	0	247	1200
Karur	0	18	0	34	0.61	326	0	375	0	47	800
Krishnagiri	0	46	0	27	0	332	0.85	352	2.33	43	800
Madurai	0	8	0	32	0.32	314	0.24	412	0	34	800
Nagapattinam	0	6	0	19	0	290	0	414	0	71	800
Namakkal	0	19	1.96	51	1.38	290	0.26	391	0	49	800
Perambalur	0	3	0	27	0	244	0	447	0	79	800
Pudukkottai	0	12	0	10	0	313	0.50	400	0	65	800
Ramanathapurm	0	3	0	24	0	290	0	444	0	39	800
Salem	0	25	1.89	53	0	246	0	422	0	54	800
Sivaganga	0	11	0	8	1.29	232	0	470	0	79	800
Thanjavur	0	6	0	23	0	295	0	387	0	89	800
The Nilgiris	0	11	0	36	0	312	0	390	0	51	800
Theni	0	2	0	17	0	262	0	461	0	58	800
Thiruvallur	0	17	0	32	0.35	289	0	415	0	47	800
Thiruvarur	0	6	0	22	0	306	0	380	0	86	800
Thoothukudi	0	11	0	41	0	316	0	395	0	37	800
Tiruchirappalli	0	54	0	55	0.19	538	0.13	784	0	167	1600
Tirunelveli	0	10	0	53	0.20	498	0.17	582	0	56	1200
Tiruppur	0	19	0	37	0.56	358	0	353	0	32	800
Tiruvannamalai	0	21	0	31	0	333	0.27	373	0	41	800
Vellore	0	18	1.52	66	1.03	389	0.33	300	0	26	800
Viluppuram	0	48	0	42	0	374	0.33	300	0	36	800
Virudhunagar	0	19	0	45	0	305	0.26	387	0	43	800



Table 23: HIV Prevalence (%) among ANC Clinic Attendees by Order of Pregnancy and districts **First** Second Third Fourth omore State/District Total % % % N N N % **Tamil Nadu** 0.19 0.17 0.10 0.39 Ariyalur Chennai 0.55 Coimbatore 0.35 Cuddalore 0.31 Dharmapuri 0.37 0.41 Dindigul Erode 0.28 0.31 Kancheepuram 0.23 Kanniyakumari Karur 0.78 3.33 0.71 Krishnagiri 0.52 0.31 Madurai 0.26 Nagapattinam Namakkal 1.10 0.32 3.45 Perambalur Pudukkottai 0.63 Ramanathapuram 0.29 Salem 0.26 Sivaganga 0.31 1.14 Thanjavur The Nilgiris Theni Thiruvallur 0.30 Thiruvarur Thoothukudi Tiruchirappalli 0.13 2.33 Tirunelveli 0.15 0.93 Tiruppur 0.53 Tiruvannamalai 0.33 Vellore 0.89 1.04 Viluppuram 0.35 Virudhunagar 0.24 



Table 24: HIV Prevalen	ce (%) amo	ng ANC Clin	ic Attende	es by Durati	on of Pr	egnancy and	districts
State/District	First t	rimester	Second	trimester	Third	trimester	Total
State/District	%	N	%	N	%	N	Total
Tamil Nadu	0.20	4477	0.14	8756	0.19	15121	28400
Ariyalur	0	142	0	307	0	351	800
Chennai	0	86	0	196	0	518	800
Coimbatore	0.27	377	0.53	567	0.31	655	1600
Cuddalore	0	224	0	284	0.34	290	800
Dharmapuri	0	84	0.49	412	0.28	704	1200
Dindigul	0	108	0	182	0	510	800
Erode	1.46	137	0	208	0	455	800
Kancheepuram	0.86	116	0	260	0	424	800
Kanniyakumari	0	261	0	318	0	620	1200
Karur	0.89	112	0	253	0.23	435	800
Krishnagiri	1.52	66	0.60	167	0.35	567	800
Madurai	0	111	0.56	355	0	334	800
Nagapattinam	0	87	0	263	0	450	800
Namakkal	1.06	94	0	203	1.00	502	800
Perambalur	0	140	0	345	0	314	800
Pudukkottai	2.27	44	0	299	0.22	457	800
Ramanathapuram	0	131	0	240	0	424	800
Salem	0	83	0	253	0.22	461	800
Sivaganga	0	57	0	210	0.56	531	800
Thanjavur	0	57	0	262	0	480	800
The Nilgiris	0	152	0	260	0	378	800
Theni	0	134	0	274	0	392	800
Thiruvallur	0	166	0	165	0.21	469	800
Thiruvarur	0	111	0	220	0	467	800
Thoothukudi	0	192	0	248	0	360	800
Tiruchirappalli	0	272	0.25	395	0.11	927	1600
Tirunelveli	0	149	0	370	0.29	680	1200
Tiruppur	0	186	0	235	0.53	378	800
Tiruvannamalai	0	192	0.35	286	0	321	800
Vellore	0.69	145	0.67	298	0.85	351	800
Viluppuram	0	82	0	172	0.18	544	800
Virudhunagar	0	179	0	249	0.27	372	800



Table 25: HIV Prevalence (%		Yes		lo	
State/District	%	N	%	N	Total
Tamil Nadu	0.19	25849	0.08	2500	28400
Ariyalur	0	519	0	280	800
Chennai	0	774	0	25	800
Coimbatore	0.56	1077	0	523	1600
Cuddalore	0.15	654	0	146	800
Dharmapuri	0.34	1183	0	17	1200
Dindigul	0	712	0	88	800
Erode	0.14	713	1.15	87	800
Kancheepuram	0.13	785	0	15	800
Kanniyakumari	0	957	0	243	1200
Karur	0.13	769	3.23	31	800
Krishnagiri	0.51	780	0	20	800
Madurai	0.25	796	0	4	800
Nagapattinam	0	743	0	57	800
Namakkal	0.76	788	0	11	800
Perambalur	0	750	0	50	800
Pudukkottai	0.26	776	0	23	800
Ramanathapuram	0	703	0	89	800
Salem	0.13	747	0	53	800
Sivaganga	0.38	782	0	16	800
Thanjavur	0	775	0	22	800
The Nilgiris	0	754	0	33	800
Theni	0	791	0	8	800
Thiruvallur	0.15	687	0	113	800
Thiruvarur	0	782	0	12	800
Thoothukudi	0	685	0	114	800
Tiruchirappalli	0.14	1453	0	144	1600
Tirunelveli	0.17	1188	0	11	1200
Tiruppur	0.26	784	0	14	800
Tiruvannamalai	0.13	768	0	31	800
Vellore	0.80	747	0	49	800
Viluppuram	0.13	796	0	2	800
Virudhunagar	0.16	631	0	169	800



State/District		Self erral	Rela Neig	mily/ tives/ hbors/ ends		3. GO	4. Pr (Doc Nur	tor/	(inc	Govt luding, 1/ ANM)	6. ICTC Cent	•	Tota
	%	N	%	N	%	N	%	N	%	N	%	N	
Tamil Nadu	0.08	5155	0.16	3675	0	3	0.39	257	0.20	19159	0.75	134	2840
Ariyalur	0	15	0	2					0	783			800
Chennai	0	91	0	157			0	31	0	521			800
Coimbatore	0	480	0.41	245	0	1	7.69	13	0.46	861			160
Cuddalore	0.43	234	0	133			0	10	0	423			800
Dharmapuri	0	10	0.88	114					0.28	1075			120
Dindigul	0	60	0	32			0	7	0	701			800
Erode	0	25	1.79	56			0	2	0.14	717			800
Kancheepuram			0	22			0	3	0.13	775			800
Kanniyakumari	0	442	0	569			0	5	0	184			120
Karur	0	185	0	46			0	5	0.18	562	100.00	1	800
Krishnagiri	2.78	36	0	12			0	1	0.40	751			800
Madurai	0	9	0.21	473					0.31	318			800
Nagapattinam	0	335	0	148					0	317			800
Namakkal	0	51	0	143			0	31	1.04	575			800
Perambalur			0	1					0	798			800
Pudukkottai	0	215	0	123			0	16	0.45	445			800
Ramanathapuram	0	91	0	232			0	4	0	473			800
Salem	0	214							0.17	586			800
Sivaganga	0.31	324	0	209			0	2	0.75	265			800
Thanjavur	0	346	0	83			0	4	0	367			800
The Nilgiris	0	35					0	1	0	753	0	9	800
Theni	0	148	0	2					0	649			800
Thiruvallur	0	73	1.00	100			0	1	0	626			800
Thiruvarur	0	154	0	47			0	27	0	571			800
Thoothukudi	0	285	0	159			0	9	0	347			800
Tiruchirappalli	0.18	556	0	137	0	2	0	20	0.11	883			160
Tirunelveli	0	182	0.43	231			0	3	0.14	696	0	88	120
Tiruppur	0	24	0	21			0	30	0.28	721	0	2	800
Tiruvannamalai	0	302	0	74			0	19	0.27	373	0	32	800
Vellore	0	1	0	2			0	2	0.76	794			800
Viluppuram	0	3	-	=			0	4	0.13	790	0	2	800
Virudhunagar	0	229	0	102			0	7	0.22	459	-	-	800



Table 27: Prevalence am					uistrict
G /B		ban		ural	N
State/District	%	N	%	N	20100
Tamil Nadu	0.18	8732	0.17	19547	28400
Ariyalur	0	66	0	727	800
Chennai	0	553	0	246	800
Coimbatore	0.40	754	0.36	835	1600
Cuddalore	0.40	249	0	551	800
Dharmapuri	0	92	0.36	1108	1200
Dindigul	0	256	0	544	800
Erode	0.31	324	0.21	473	800
Kancheepuram	0	452	0.29	348	800
Kanniyakumari	0	283	0	915	1200
Karur	0	312	0.41	487	800
Krishnagiri	0.45	224	0.52	576	800
Madurai	0.27	365	0.23	432	800
Nagapattinam	0	140	0	658	800
Namakkal	1.63	184	0.49	609	800
Perambalur	0	18	0	782	800
Pudukkottai	0	102	0.29	698	800
Ramanathapuram	0	223	0	570	800
Salem	0.39	259	0	538	800
Sivaganga	0.71	141	0.30	659	800
Thanjavur	0	176	0	624	800
The Nilgiris	0	423	0	374	800
Theni	0	323	0	477	800
Thiruvallur	0	147	0.15	647	800
Thiruvarur	0	107	0	668	800
Thoothukudi	0	353	0	446	800
Tiruchirappalli	0.19	529	0.09	1057	1600
Tirunelveli	0	396	0.25	801	1200
Tiruppur	0.56	355	0	436	800
Tiruvannamalai	0	217	0.17	582	800
Vellore	0.28	359	1.14	440	800
Viluppuram	0	83	0.14	714	800
Virudhunagar	0	267	0.19	525	800



		Total			28400	800	800	1600	800	1200	800	800	800	1200	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	1600	1200	800	800	800	800	008
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			훈	%	0.18	0	0	0.40	0.13	0.35	0	0.13	0.13	0	0.27	0.52	0.26	0	0.79	0	0.26	0	0.13	0.26	0	0	0	0.14	0	0	0.14	0.19	0.29	0.13	0.77	0.13	0.14
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cupati		Service	(Govt./Pvt.)	%	0.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
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Table 28: HIV Prevalence among ANC Clinic Attendees by Current Occupation of Respondent		_ Pell		z	149	2	7	7		1	7	<b>∞</b>			1		7	7	10	4	7	7	1	7			1	4	1	7	7	7	20	1			2
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ž		ಕ											_	2014								am															
		State/District			Tamil Nadu	Ariyalur	Chennai	Coimbatore	Cuddalore	Dharmapuri	Dindigul	Erode	Kancheepuram	Kanniyakumari	Karur	Krishnagiri	Madurai	Nagapattinam	Namakkal	Perambalur	Pudukkottai	Ramanathapuram	Salem	Sivaganga	Thanjavur	The Nilgiris	Theni	Thiruvallur	Thiruvarur	Thoothukudi	Tiruchirappalli	Tirunelveli	Tiruppur	Tiruvannamalai	Vellore	Viluppuram	Virudhunagar
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Appropriate the control of t						F	able 2	9: HIV	Preva	lence a	mong	ANC CI	inic Att	endees	s by CL	irrent	Occup	ation o	f Spou	Se							
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1	Ariyalur	0	74	0	123			0	83						9	8	0	36	0		0	73		22	1	8	0
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0         42         0         382         0         73         34         0         147         0         13         0         95         95         0         95         95         0         95	Coimbatore	0	4	1.13	353				354	0						1	0	15	0		0	151		_	1	160	0
1   1   1   1   1   1   1   1   1   1	Cuddalore	0	45	0	362			0		2.94					7		0	12	0			90		_		8	0
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1	Dindigul	0	89	0	281				128						7		0		0			102		_		8	0
1   1   1   1   1   1   1   1   1   1	Erode	0	49	0	238		)		326	0							0		0			78				8	0
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1	Kanniyakumari	0	10	0	65		2		591						90		0		0		0	78				120	0
1   1   2   2   2   2   2   2   2   2	Karur	0	77	0.51	196		_		576						80		0		0		0					8	0
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0         17         0         215         17         113         2.56         39         0         132         0         132         0         132         0         132         0         132         0         132         0         132         0         136         0         17         0         17         0         17         0         17         0         18         0         19         0         17         0         18         0         17         0         19         0         14         0         1	Salem	0	26	0	287			1.14	88						œ.	-1	0					76				8	0
0         146         0         146         0         146         0         416         0         417         0         417         0         418         0         418         0         419         0         419         0         419         0         419         0         419         0         419         0         420<	Sivaganga	0	17	0	215										7		0					117		7	7	8	0
0         44         0         164         1         6         4         18         0         16         16         0         6         0         28         0         6         6         0         24         0         14         0         189         0         189         0         18         0         19         0         28         0         19         0         28         0         19         0         19         0         28         0         19	Thanjavur	0	126	0	204				200	0							0		0			86		4	1	8	0
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1	Thoothukudi	0	27	0	280				124	0					2	1	0		0		0	101				8	0
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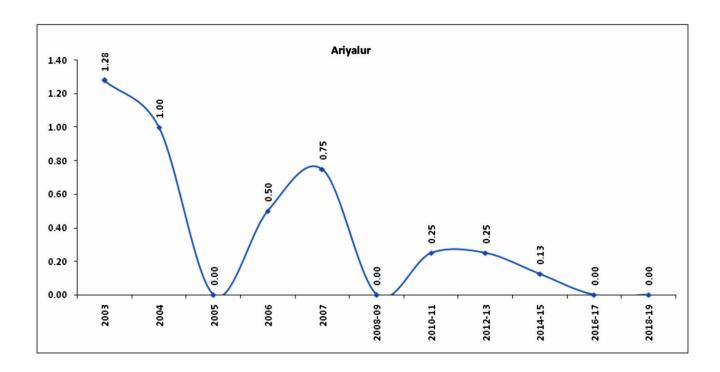
State / District	Y	'es		No	Not Ap	plicable	Total
State/District	%	N	%	N	%	N	10141
Tamil Nadu	0.14	1449	0.18	26915	0	29	28400
Ariyalır	0	52	0	747			800
Chennai	0	10	0	790			800
Coimbatore	0	13	0.38	1587			1600
Cuddalore	0	7	0.13	793			800
Dharmapuri	0	3	0.33	1197			1200
Dindigul	0	1	0	797	0	2	800
Erode	0	3	0.25	797			800
Kancheepuram	0	4	0.13	795	0	1	800
Kanniyakumari	0	78	0	1121	0	1	1200
Karur	0	15	0.26	784	0	1	800
Krishnagiri	0	11	0.51	789			800
Madurai	0	62	0.27	738			800
Nagapattinam	0	156	0	643	0	1	800
Namakkal	0	10	0.76	790			800
Perambalur	0	101	0	699			800
Pudukkottai	0.58	172	0.16	628			800
Ramanathapuram	0	148	0	650			800
Salem	0	3	0.13	797			800
Sivaganga	0	141	0.46	659			800
Thanjavur	0	111	0	689			800
The Nilgiris	0	9	0	791			800
Theni	0	19	0	780	0	1	800
Thiruvallur	0	15	0.13	784	0	1	800
Thiruvarur	0	66	0	733			800
Thoothukudi	0	39	0	760	0	1	800
Tiruchirappalli	0	44	0.13	1548	0	8	1600
Tirunelveli	0	37	0.17	1160	0	3	1200
Tiruppur	0	5	0.25	794	0	1	800
Tiruvannamalai	1.12	89	0	710	0	1	800
Vellore	0	4	0.76	792	0	2	800
Viluppuram	0	12	0.13	783	0	4	800
Virudhunagar	0	9	0.13	790	0	1	800

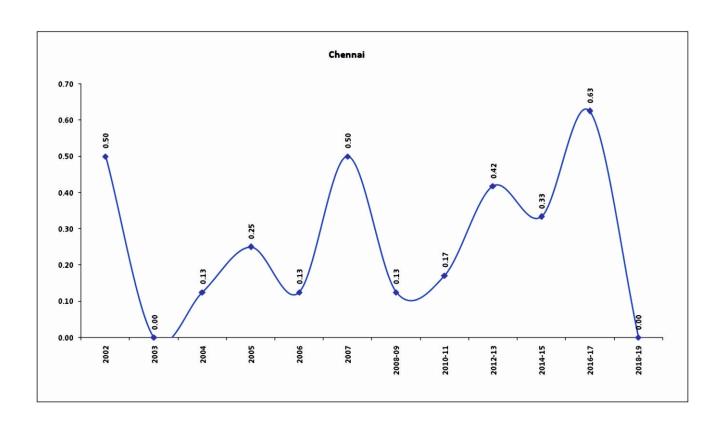


State / District		Yes	N	lo	Total
State/District	%	N	%	N	Iotai
Tamil Nadu	0.21	23525	0.02	4875	28400
Ariyalur	0	638	0	162	800
Chennai	0	752	0	48	800
Coimbatore	0.45	1319	0	281	1600
Cuddalore	0.16	619	0	181	800
Dharmapuri	0.34	1161	0	39	1200
Dindigul	0	669	0	131	800
Erode	0.29	680	0	120	800
Kancheepuram	0.16	636	0	164	800
Kanniyakumari	0	1014	0	186	1200
Karur	0.27	734	0	66	800
Krishnagiri	0.53	757	0	43	800
Madurai	0.26	763	0	37	800
Nagapattinam	0	737	0	63	800
Namakkal	0.82	728	0	72	800
Perambalur	0	743	0	57	800
Pudukkottai	0.32	623	0	177	800
Ramanathapuram	0	740	0	60	800
Salem	0.15	659	0	141	800
Sivaganga	0.38	781	0	19	800
Thanjavur	0	747	0	53	800
The Nilgiris	0	761	0	39	800
Theni	0	747	0	53	800
Thiruvallur	0.16	645	0	155	800
Thiruvarur	0	583	0	217	800
Thoothukudi	0	628	0	172	800
Tiruchirappalli	0.24	829	0	771	1600
Tirunelveli	0.17	1149	0	51	1200
Tiruppur	0.54	373	0	427	800
Tiruvannamalai	0	568	0.43	232	800
Vellore	1.62	370	0	430	800
Viluppuram	0.13	780	0	20	800
Virudhunagar	0.17	592	0	208	800

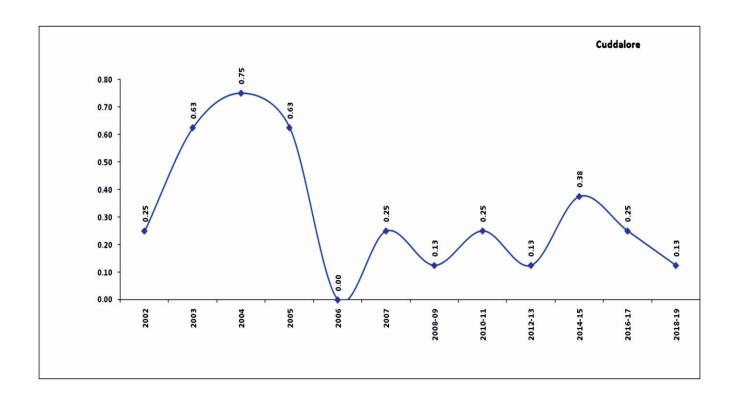


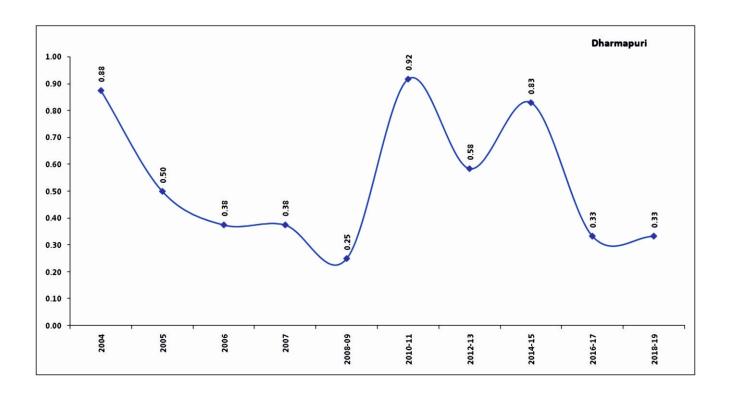
## 5.2 HIV Prevalence trend at district level



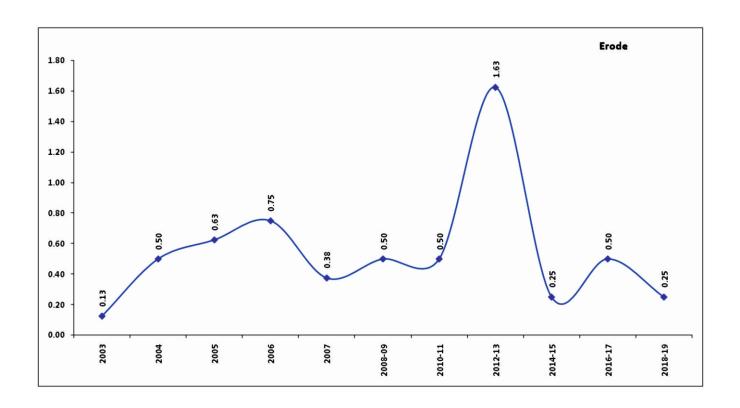


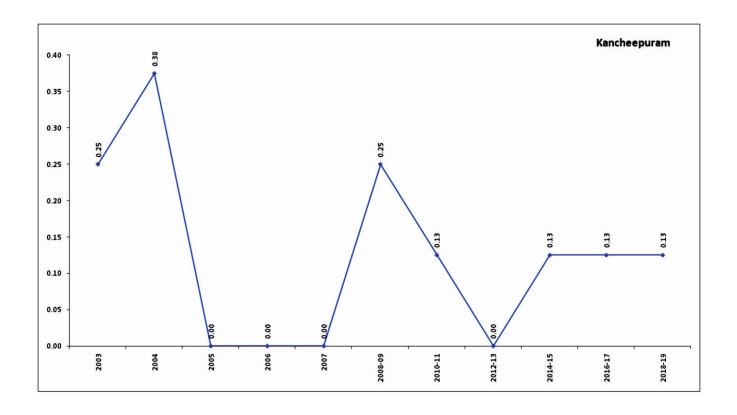




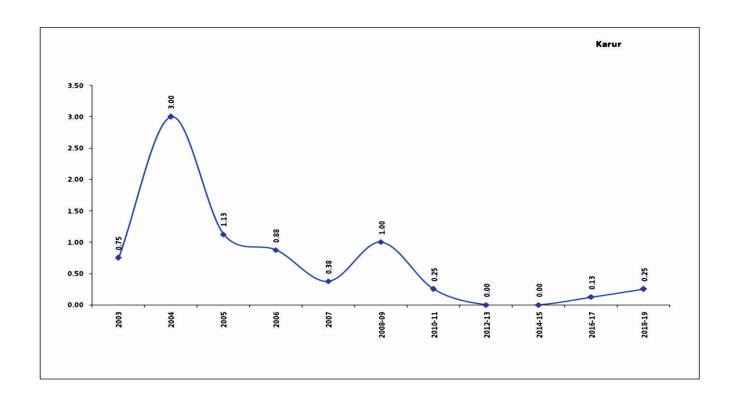


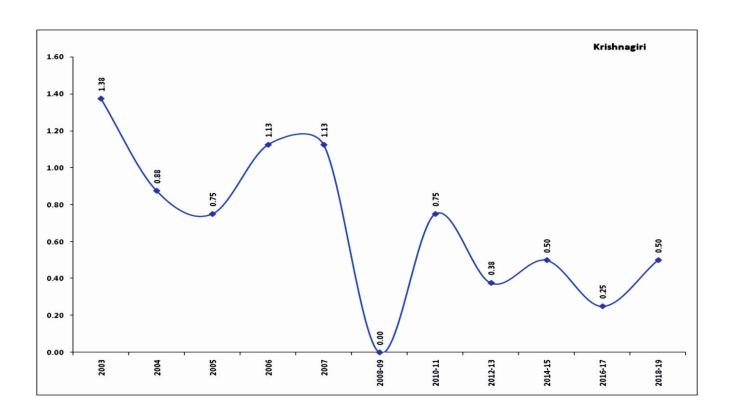




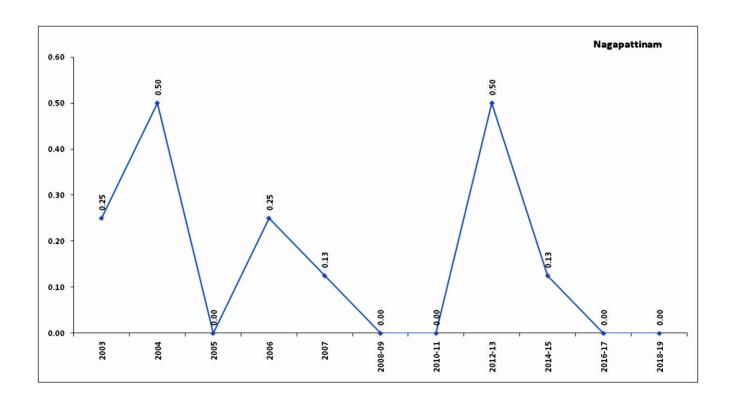


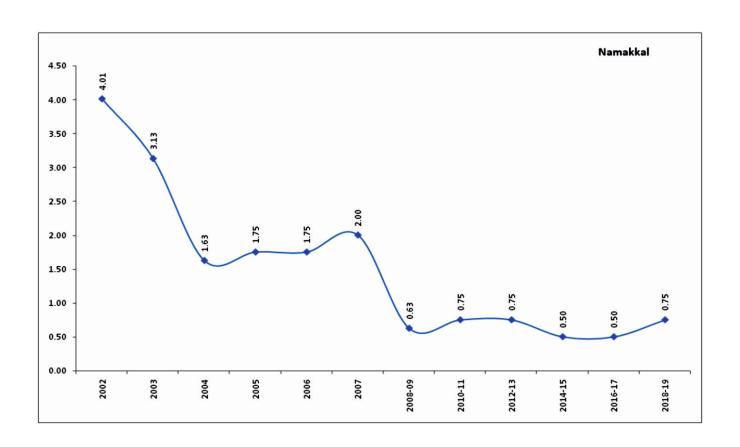




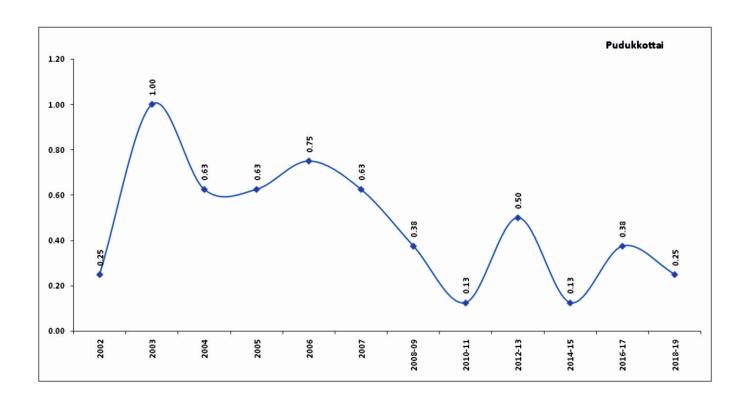


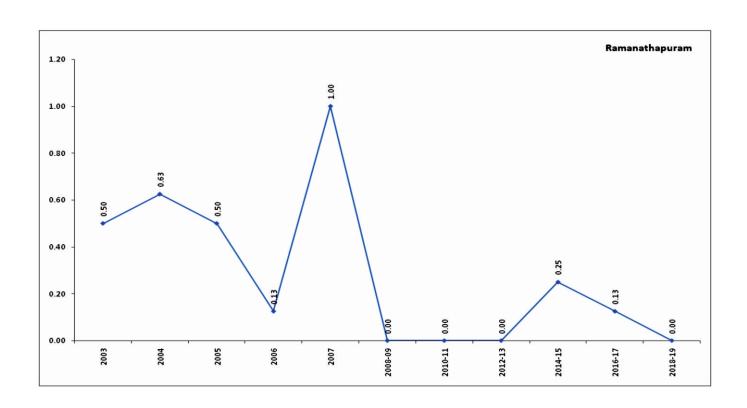




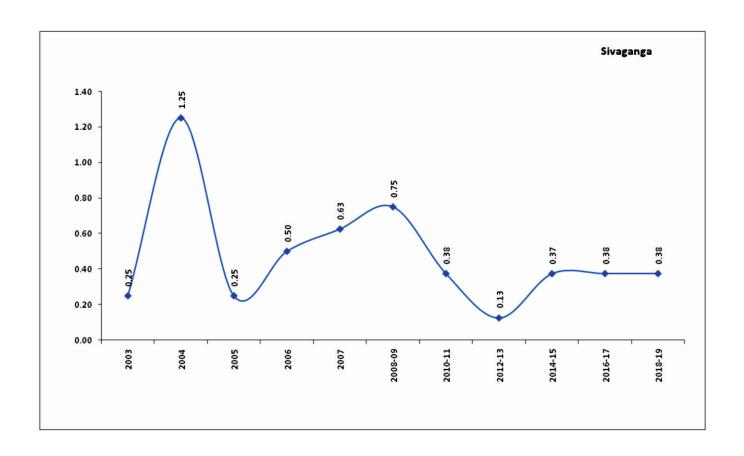


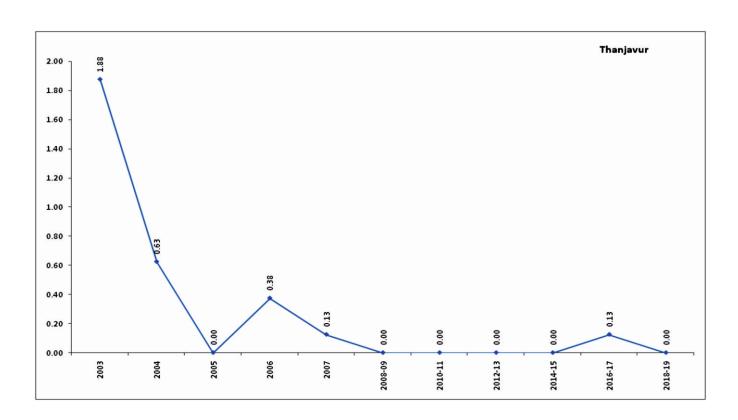




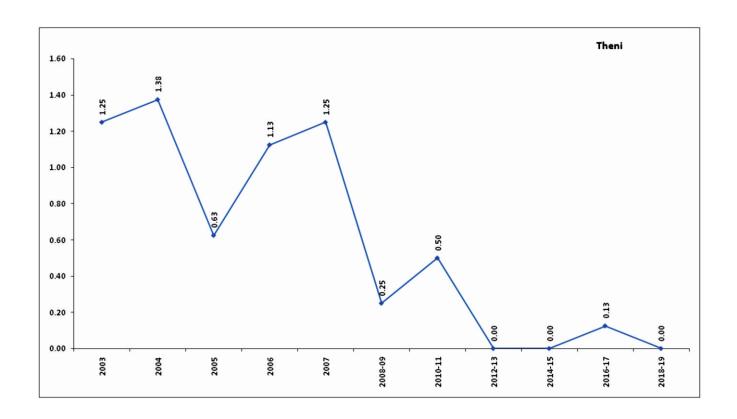


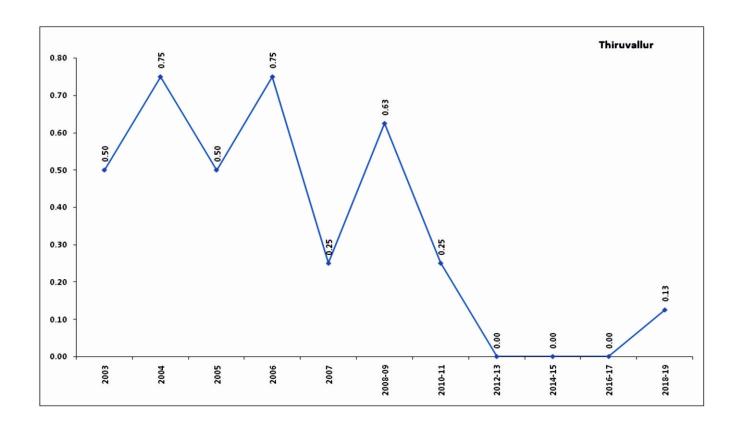




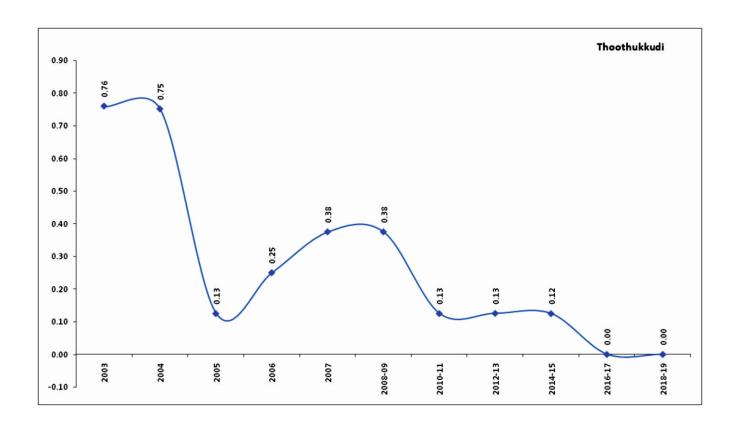


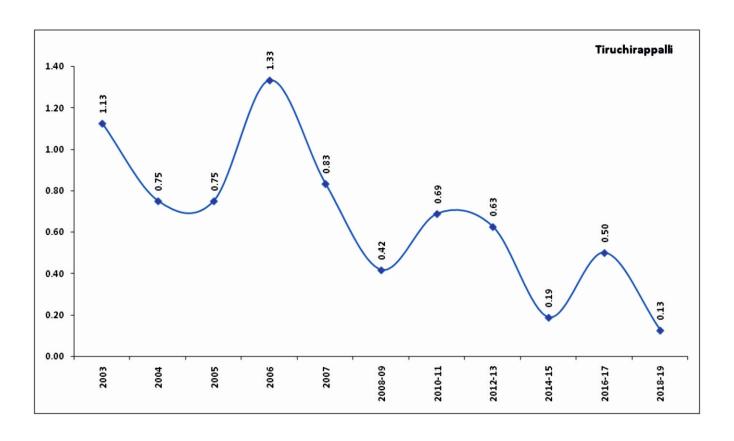




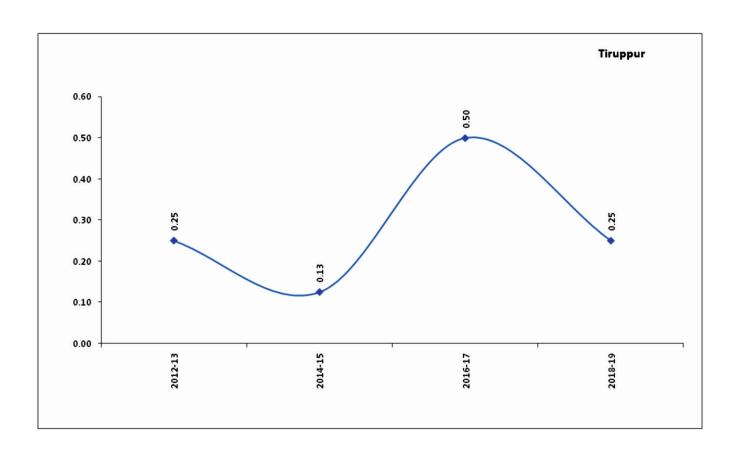


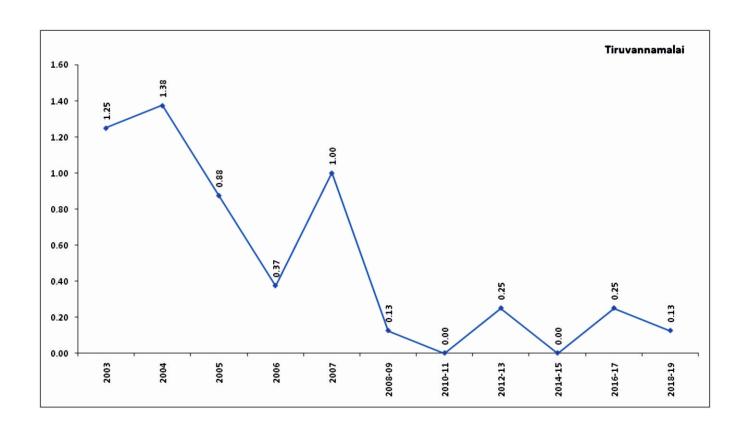




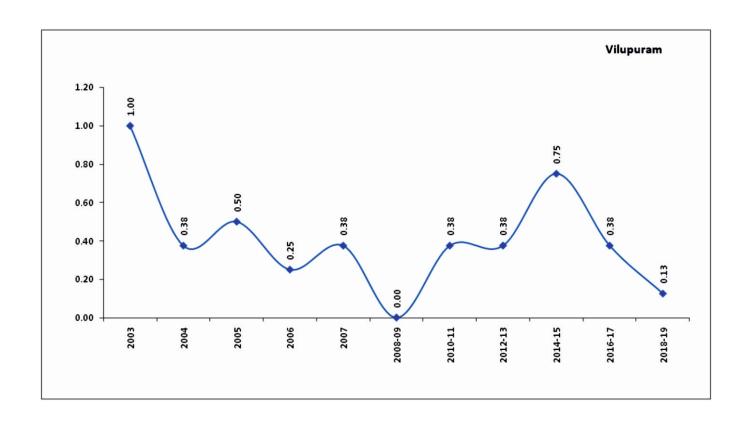


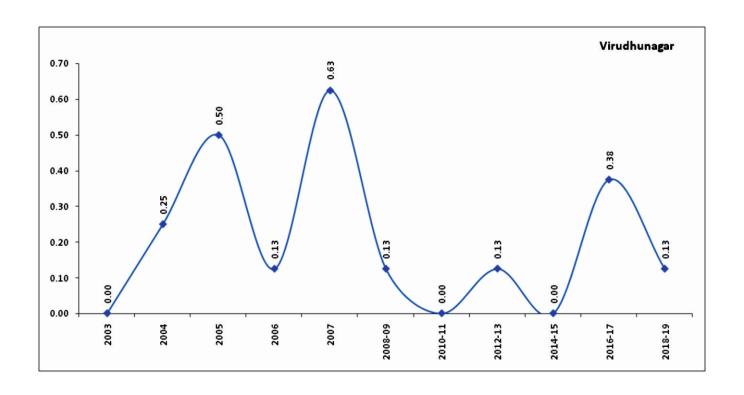














## **CHAPTER 6**

## **SUMMARY**

The 16th round of HSS among pregnant women in 2019 was implemented at 71 sites across 32 districts in Tamil Nadu collecting a total of 28400 complete data forms and biological specimens following consecutive sampling method and linked anonymous strategy as in previous round. In India, Tamil Nadu has the third highest number of ANC HSS sites.

The median age of respondents were 24 years in the state and ranged between 15 and 44 years across the districts. The overall HIV prevalence among ANC clinic attendees in Tamil Nadu in 2019 was low 0.18% (95% CI: 0.13%-0.22%). District-wise, Vellore (0.75%), Namakkal (0.75%), Krishnagiri (0.50%), Sivagangai (0.38%) and Coimbatore (0.38%) werethe top five districts with high HIV prevalence. Dharmapuri (0.33%), Tiruppur (0.25%), Pudukottai (0.25%), Madurai (0.25%), Karur (0.25%), and Erode (0.25%), were other major districts with HIV prevalence higher than the state average. Thirunelveli recorded HIV prevalence of 0.17%. Virudunagar, Villupuram, Thiruvanamalai, Thiruchirapalli, Thiruvallur, Salem, Kancheepuram and Cuddalore recorded HIV prevalence of 0.13%. The remaining 12 districts had zero HIV prevalence among the ANC attendees.

HIV prevalence among ANC clinic attendees exhibits a declining trend at the state level as well as in most districts including Chennai. A rising trend in recent past has been noted in Vellore and Namakkal.

Overall, HIV prevalence appears to be higher among those who are either illiterate or only primary literate. HIV Prevalence was the highest among pregnant women who were non-agricultural labours. Pregnant women with spouses working as local transport worker or hotel staffs also have higher prevalence.

Findings from 2019 round of ANC HSS corroborates with previous rounds showing a low and declining trend at the state level, with persistent geographical diversity at district level. Sustained declining trend among ANC clients nationally and at the stat-level, is positive indicator of the successful response of the National AIDS Control Programme (NACP). However, district-level fluctuating trends is a continuing challenge. The findings will be used as a compass by the policy makers and programme managers towards achieving 'End of AIDS' as a public health threat by 2030.





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