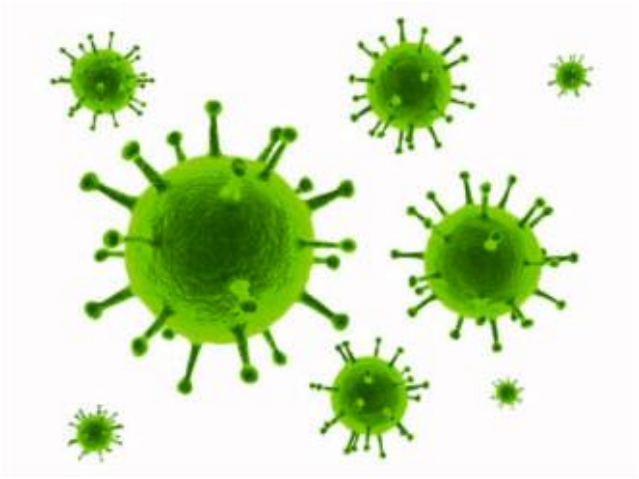

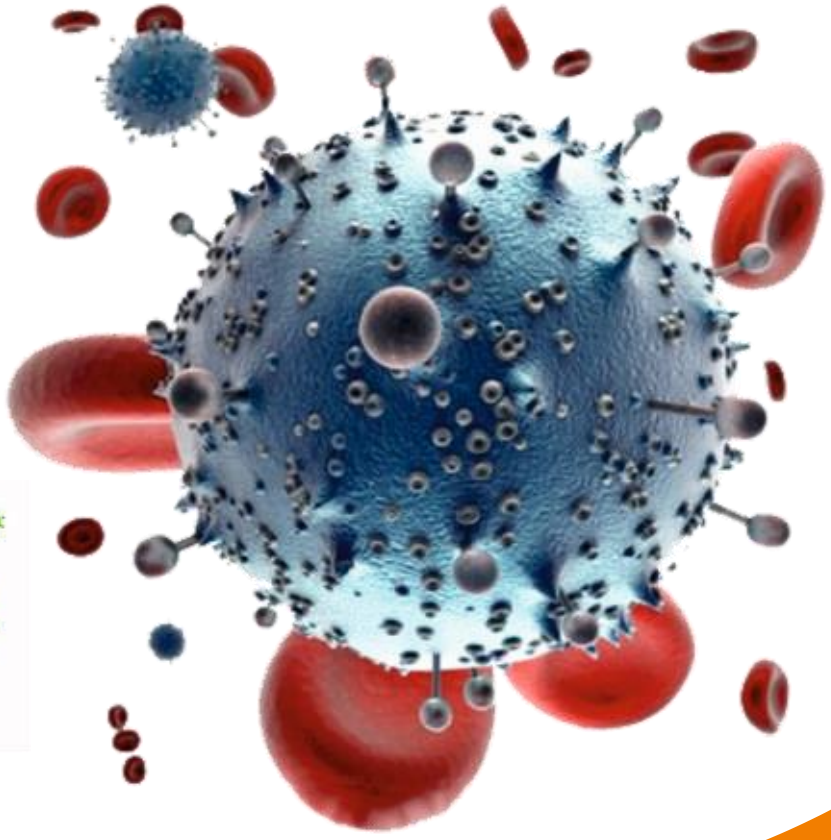

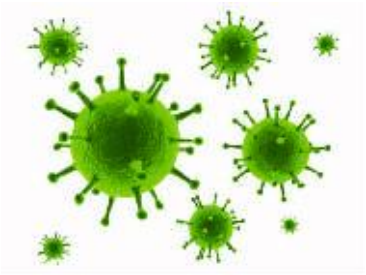

HIV

SENTINEL SURVEILLANCE (ANC)

Telangana State Report

2016-17

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HIV

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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 15th 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. S. Venkatesh, Deputy 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

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Contents

CHAPTER 1.

INTRODUCTION

Acquired immune deficiency syndrome or acquired immunodeficiency syndrome (AIDS) is a disease of the human immune system caused by the human immunodeficiency virus (HIV). This condition progressively reduces the effectiveness of the immune system and leaves individuals susceptible to opportunistic infections and tumours. The first HIV infection was reported in the year 1981 in the United States of America. Afterwards the epidemic spread rapidly throughout the globe.

In India it was in 1986, the first HIV infection reported from Chennai, Tamil Nadu. In the last two decades the awful disease spread throughout the country.

Surveillance is a vital component of any disease control programme. The purpose of surveillance is to actually look for evidence of disease risk, to predict the pattern and to plan appropriate action for control and prevention. Providing meaningful insights for action at policy, strategy, planning, or implementation levels at the appropriate time is the key objective of surveillance. The HIV epidemic in India is concentrated, with high prevalence among high-risk groups, moderate prevalence among bridge populations, and low prevalence among general population. 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. HIV sentinel surveillance measures the prevalence of HIV in a specific risk group in a specific region at a specific point of time. The HIV sentinel surveillance system in India is based on the HIV transmission dynamics mentioned above and monitors the HIV epidemic patterns among the following groups:

1. High-risk groups

a. Female sex workers
b. Men who have sex with men (MSM)
c. Injecting drug users
d. People who are TG (transgender)/eunuchs

2. Bridge populations

a. Single male migrants
b. Long-distance Truckers (LDTs)
c. People attending STI or gynaecology clinics (currently discontinued)

3. General population

a. Pregnant women attending the ANC clinics in urban and rural areas, and the ANC clinic attendees were considered proxy for general population. STI patients were considered proxy for people with high-risk behaviour (high-risk and bridge populations and their partners).

1.1. Objectives and Application of HIV Sentinel Surveillance

The key objectives of HIV sentinel surveillance in India are to:

1. Monitor trends in HIV prevalence over time.
2. Monitor the distribution and spread of HIV in different subgroups and geographical areas.
3. Identify emerging pockets of HIV epidemic in the country.
4. Applications of HIV sentinel surveillance data.
5. Estimate and project burden of HIV at state and national levels.
6. Support programme prioritization and resource allocation.
7. Assist evaluation of programme impact.
8. Provide evidence to advocacy efforts.

1.2. Evolution of HIV Sentinel Surveillance in India

HIV surveillance in India began in 1985 when the Indian Council of Medical Research (ICMR) initiated a surveillance activity among blood donors and patients with STIs. After the National AIDS Control Organisation (NACO) was established in 1992, sentinel surveillance for HIV in India was initiated in 1993-94 with 52 sentinel sites in selected cities. In 1998, NACO formalized annual sentinel surveillance for HIV infection in the country with 180 sentinel sites, of which 176 were valid.

The first major expansion of the surveillance network was in 2003. More than 200 rural antenatal care (ANC) sentinel sites were established at the community health centre (CHC) level in most of the districts in high-prevalence states as well as some districts in low-prevalence states in North India. However, half of these ANC rural sites, especially those in low prevalence states of North India, were discontinued in the next round because they could not achieve the required target sample size due to poor utilization rates. Another significant expansion in 2003 was the addition of 30 FSW sites. Overall, 354 districts had at least one HSS site in 2003. From 2003 and until 2005, the same sentinel sites continued with expansion to 83 FSW and 30 injecting drug user (IDU) sites.

The year 2006 could be considered the watershed year for HSS development in India. The goal was to have at least one sentinel site in every district of India and new sentinel sites were added for all risk groups in that year. Key developments in 2006 included:

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. Major expansion of STI and ANC urban sentinel sites in low-prevalence states of North India.
. Addition of rural ANC sites in high-prevalence states.
. Initiation of special ANC sites for 15-24-year-old pregnant women to monitor new infection.
. Expansion of sentinel sites among FSW, MSM and IDU.
. Initiation of sentinel sites among long-distance truckers (LDTs), single male migrants, and people who are transgender (TG).
. Introduction of composite sites in HSS that facilitated establishment of sentinel sites in places where it had been difficult to do so, such as rural areas and places with fewer HRGs.

In year 2006, the scale of surveillance operations increased from 703 sites in high prevalence states in 2005 to 1,122 sites to cover the entire country. The surveillance was also expanded from being only clinic-based to also include Targeted Intervention (TIs)

Five leading regional public health institutions in the country were involved to expand and strengthen the surveillance network and implementation activities and follow up programmes. These regional institutes (RI) provided technical support, guidance, monitoring, and supervision for implementing HSS. Two more RIs were created in 2008. Supervisory structures were further strengthened with constitution of central and state surveillance teams, comprised of public health experts, epidemiologists, and microbiologists from several medical colleges and research institutions.

During the subsequent three rounds of HSS (2007, 2008-09, and 2010-11), the focus was on expansion of surveillance among high-risk and bridge populations.

Key strategic HSS implementation improvements in these rounds included:

1. Technical validation of new sentinel sites by regional institutes before inclusion in surveillance and dropping poorly performing sites.
2. Introduced the dried blood spot (DBS) method of sample collection from high-risk groups (HRGs) to overcome logistic problems at HRG sites.
3. Introduced informed consent at high-risk group sites to address ethical concerns.
4. Initiated random sampling methods of recruitment at HRG sites, taking advantage of the availability of updated line lists of HRGs at the TI projects.
5. Standardized training protocols across states with uniform session plans and materials, and adoption of a two-tier training plan with training-of-trainers (TOT) followed by training of site personnel.
6. Developed a four-tier supervisory structure: national-level central team; regional institutes; state surveillance teams; and State AIDS Control Society (SACS) teams.
7. Strengthened focus on supportive supervision and action-oriented monitoring.
8. Increased focus on quality of planning, training, implementation, supervision and feedback.
9. Decreased number of testing laboratories for ANC and STD samples, limiting them to high-performing laboratories with enzyme-linked immunosorbent assay (ELISA) facilities to ensure high-quality testing and close supervision.
10. Developed a new web-based data management system to enhance data quality and ensure realtime monitoring of surveillance activities.
11. Initiated epidemiological investigation into unusual findings (sudden rise or decline in prevalence) to understand reasons and correct.
12. Conducted pre-surveillance sentinel site evaluation to assess preparedness of site for HSS and to obtain profile-related information.

Between 2008 and 2009, the annual frequency of HSS was shifted to biennial (once in two years). STI sites were gradually being discontinued in 2008-09 and 2010-11.The 13th round of HSS was implemented at 763 sentinel sites (750 ANC and 13 STI sites). Most of the STI sites from the 12th round of HSS were phased out during HSS 2014-15. For high-risk and bridge populations, National Integrated Biological and Behavioural Surveillance (IBBS) was conducted to strengthen surveillance among these groups.

CHAPTER 2

METHODOLOGY AND IMPLEMENTATION

This chapter describes HSS methodology and the implementation mechanisms adopted during HSS 2016-17.

2.1. Methodology of HIV Sentinel Surveillance at ANC Sentinel Sites

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. Under HIV sentinel surveillance (HSS), recruitment of respondents is conducted for three months at selected ANC sentinel sites. Because of the low HIV prevalence in India, the classical survey method of sample size calculation that gives a large sample size cannot feasibly be collected through facility-based surveillance on an annual basis. Hence, a sample size of 400 for surveillance among ANC attendees was approved by a consensus of experts. Eligible respondents are enrolled until the sample size of 400 is reached or until the end of the surveillance period, whichever is earlier.

The eligibility criteria for recruiting respondents at an ANC sentinel sites were:

1. Age 15-49 years

2. Pregnant woman attending the antenatal clinic for the first time during the current round of surveillance period. “Sampling method” refers to the approach adopted at the sentinel sites for recruiting eligible individuals into HSS. Consecutive sampling method is adopted in HSS in India for ANC clinic attendees. After the start of surveillance, all individuals attending the ANC sentinel site facility who are eligible for inclusion are recruited in the order they attend the clinic. This sampling method removes all chances of selection or exclusion based on individual preferences or other reasons, and hence reduces the selection bias. It is convenient, feasible, and easy to follow.

”Testing strategy” refers to the approach adopted for collecting and testing blood specimens and handling the test results in HSS. In India, the unlinked anonymous testing strategy is used. Testing is conducted on a portion of blood specimen collected for routine diagnostic purposes (such as syphilis) after removing all personal identifiers. Neither the information collected in the data form nor the HIV test result from the blood specimen is ever linked to the individual from whom the information/ specimen is collected. Neither the personnel collecting the specimen nor the personnel testing the specimen are able to track the results back to the individual.

Hence, the personal identifiers such as name, address, outpatient registration number, etc. were not mentioned anywhere in the data form, blood specimen, or data form transportation or sample transportation sheets. Similarly, the HSS sample number or any mark indicating inclusion in HSS is not mentioned in the ANC register or patient/OPD card. The portion of the blood specimen with identifiers is used for reporting the results of the routine test for which it has been collected. The portion of the blood specimen without identifiers is sent for HIV testing under HSS.

"Testing protocol" refers to the number of HIV tests conducted on the blood specimen collected during HSS. A two-test protocol is adopted in HSS. The first test is of high sensitivity and second of high specificity and is confirmatory in nature. The second test is conducted only if the first is found to be positive. HIV testing under surveillance is for the purpose of ascertaining HIV levels and trends in a community and not for case diagnosis, which is why the two-test protocol is the global standard for surveillance.

The methodology of HSS at ANC sentinel sites is summarized in Table 1 below:

Table 1: Methodology of HIV Sentinel Surveillance at ANC Sentinel Sites	
Sentinel site	Antenatal clinic
Sample size	400
Duration	3 months
Frequency	Once in 2 years (biennial)
Sampling method	Consecutive sampling
Eligibility	Pregnant women ages 15-49 years attending ANC clinic for the first time during the current round
Testing strategy	Linked anonymous testing
Blood specimen	Serum collected through venous blood specimen
Testing protocol	Two-test

2.2. Information Collected under HSS at ANC Sentinel Sites

HSS provides information on two bio-markers- HIV and syphilis. All blood specimens collected under HSS are tested for these two infections. When recruiting an individual in HSS, information is collected on basic demographic parameters such as age, education, occupation, spouse's occupation, and order of pregnancy. Collected information is kept minimal and restricted to those who might be asked under routine clinic procedures. During the recent rounds, a few questions were added to identify potential biases in the sample (e.g., source of referral) or to further profile the respondents with respect to their vulnerability(migration status of spouse) so that HIV prevalence estimates can be better explained and interpreted. HSS 2016-17 collects information on the following nine key demographic variables from every respondent.

1. Age: The age of the respondent is recorded in number of completed years. Since age is a part of eligibility criteria, improper recording or non-recording of age makes a sample invalid. Information on age helps identify the age groups with high HIV prevalence. In the absence of data on HIV incidence, high prevalence among younger age groups is considered a proxy for recent infections.

2. Literacy status: The literacy status of an individual has a direct bearing on the awareness levels with respect to risks of acquiring HIV and means of protecting oneself. Knowing the literacy status of the pregnant woman, helps in understanding the differentials in HIV prevalence and informs demographics about the women who are accessing services at ANC clinics. This information may also be helpful to compare and standardize the demographic profiles of two independent samples under HSS, while investigating any unusual increase or decrease in trends. Under HSS 2014-15, the literacy status of respondents was classified into five categories as defined below.

(a). Illiterate: People with no formal or non-formaleducation. **(b). Literate and till 5th standard:** People with non-formaleducation or those who joined school but did not study beyond 5thstandard. **(c). 6thto 10thstandard:** Those who studied beyond5thstandard but not beyond 10th standard. **(d).11thto graduation:** Those who studied beyond10thstandard but not beyond graduation. Includes those with technical education/diplomas,. **(e). Post-graduation:** Those who studied beyond graduation.

3. Order of current pregnancy: The order of pregnancy denotes the number of times a woman has been pregnant. It includes the number of live births, still births, and abortions. It is also referred to as gravidity. Women who are pregnant for the first time are referred to as primi-gravida. In the context of HIV, order of pregnancy indicates the duration of exposure to sexual risks. Since primi-gravida are likely to be exposed to sexual risks only recently, HIV prevalence among them is considered a proxy for new HIV infections and helps in understanding the HIV incidence in that region. The order of pregnancy is recorded as first, second, third, fourth, or more.

4. Duration of pregnancy: Duration of pregnancy is usually measured in terms of three trimesters; each of them of about three month's duration. (a) First trimester: The first trimester of pregnancy is from conception to 12th week of pregnancy. (b) Second trimester: The second trimester of pregnancy is from 13th to 27th week of pregnancy. (3) Third trimester: The third trimester of pregnancy spans from week 28 to birth.

5. Prior receipt of antenatal care services during current pregnancy : 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.

6. Source of referral to the ANC clinic: Under HSS, ANC clinic attendees are asked who referred them to the clinic for antenatal check-up. This variable was added to the data collection form to understand the various sources of referral, especially to assess if there is any specific bias in the sample because of specific referrals of HIV-positive cases from any source. Published literature indicates that there is disproportionate referral of HIV-positive cases from private sector to government hospitals. Similarly, if there are higher numbers of referrals from ICTC/ ART centres in the sample, it may bias the HIV prevalence, as those respondents are likely to be people who have been exposed to HIV risk, to have HIV risk perception or w ho are known to be HIV-positive. This variable helps assess any such phenomenon. The response categories listed in the HSS data form include: ***(a). Self-referral (b). Family/ relatives/ neighbours/ friends (c). NGO (d). Private hospital (doctors/ nurses) (e). Government hospital (including ANM/ ASHA) (f). ICTC/ ART centre.***

7. Current place of residence: HSS 2014-15 records the reported current residence of the respondent as 'Urban' or 'Rural'. If the current place of residence of the respondent i.e., the place she is living with her husband falls under Municipal Corporation, municipal council, or cantonment area, it is classified as 'urban'. Otherwise, it is recorded as 'rural'. Place of residence helps in studying the epidemic patterns in urban and rural areas separately and provides programmatic insight for implementing interventions. In the context of formerly high-prevalence states, urban rural differentials of HIV prevalence is important because HIV is known to have spread to rural areas, sometimes with higher prevalence in these states. In low-prevalence states with rising HIV trends, migration from rural areas to high prevalence destinations is likely to play a role. Therefore, studying rural epidemics is important to characterise the epidemic appropriately.

8. Current occupation of respondent: Certain occupations are associated with higher exposure and risk to HIV. It is important to understand the profile of respondents and differentials of HIV with respect to their occupation. For this purpose, HSS has categorized occupations into 13 categories ensuring that all the possible occupations are covered and the categories are relevant to the epidemiological analysis of HIV prevalence data. The occupation categories and their definitions were as follows: (a). Agricultural labourer (b). Non-agricultural labourer: includes workers at construction sites, quarries, stone crushers, road or canal works, brick-kilns. (c). Domestic servant (d). Skilled/semi-skilled worker: includes workers in small-scale or cottage industries; industrial/ factory workers; technicians such as electricians, masons, plumbers, carpenters, goldsmiths, iron-smiths, and those involved in automobile repair; artisans such as weavers, potters, painters, cobblers, shoe-makers, tailors. (e). Petty business/small shop: includes vendors selling vegetables, fruits, milk, and newspapers; pan shop operators. (f). Large business/self-employed: includes professionals and business people. (g). Service (govt/pvt): those working on salary basis in government, private, or institutional sector; excludes drivers and hotel staff. (h). Student (i). Truck drivers/helpers (j). Local transport workers (auto/ taxi drivers, handcart pullers, rickshaw pullers, etc.) (k). Hotel staff (l). Agricultural cultivators/ landholders (m). Housewife (in order to be consistent with the occupation codes for spouse of respondent, housewife is Code 14).

9. Current occupation of spouse: Occupation of spouse is an important epidemiological variable that may help identify population groups that are at higher risk of acquiring HIV. HSS used the same occupational categories as those used for the respondent. The two differences are that the category 'unemployed' (Code13) is used in the place of 'housewife' and there is an additional category: 'Not applicable (never married/widow/divorced/separated)' (Code 99).

10. Migration status of spouse: Analyses of drivers of the emerging epidemic in some low-prevalence states points to migration from these states to high-prevalence destinations (NACO Annual Report 2013-14, Chapter 2. Current Epidemiological Scenario of HIV/AIDS, pg.12). In order to assess the effects of migration status of spouse on HIV prevalence among ANC clinic attendees, respondents in HSS were asked whether spouse resides alone in another place/town away from wife for work for longer than 6 months. This question is not applicable to respondents who were never married/widowed/ divorced/separated.

11. HIV Testing History: This refers to the HIV testing history of pregnant women.

12. Time of last HIV Testing: This question aims to understand the timing of last HIV testing of respondents in reference to current pregnancy.

13. Result of last HIV test: This refers to the result of the last HIV test of the ANC respondent.

14. Management of HIV infections: This refers to the enrolment of HIV positive respondents in HIV care, either for pre-ART or ART services, at the time of surveillance.

15. ART Uptake: This refers to the current uptake of 'Antiretroviral therapy' by HIV positive respondents.

2.3. Implementation Structure of HIV Sentinel Surveillance in India

HIV sentinel surveillance has a robust structure for planning, implementation, and review at national, regional, and state levels. The structure and key functions of involved agencies are shown in Figure 1.

National level: The National AIDS Control Organisation (NACO) is the nodal agency for strategy formulation and commissioning for each round of HSS. The Technical Resource Group on Surveillance and Estimation, comprised of experts from the fields of epidemiology, demography, surveillance, biostatistics, and laboratory services, advises NACO on the broad strategy and

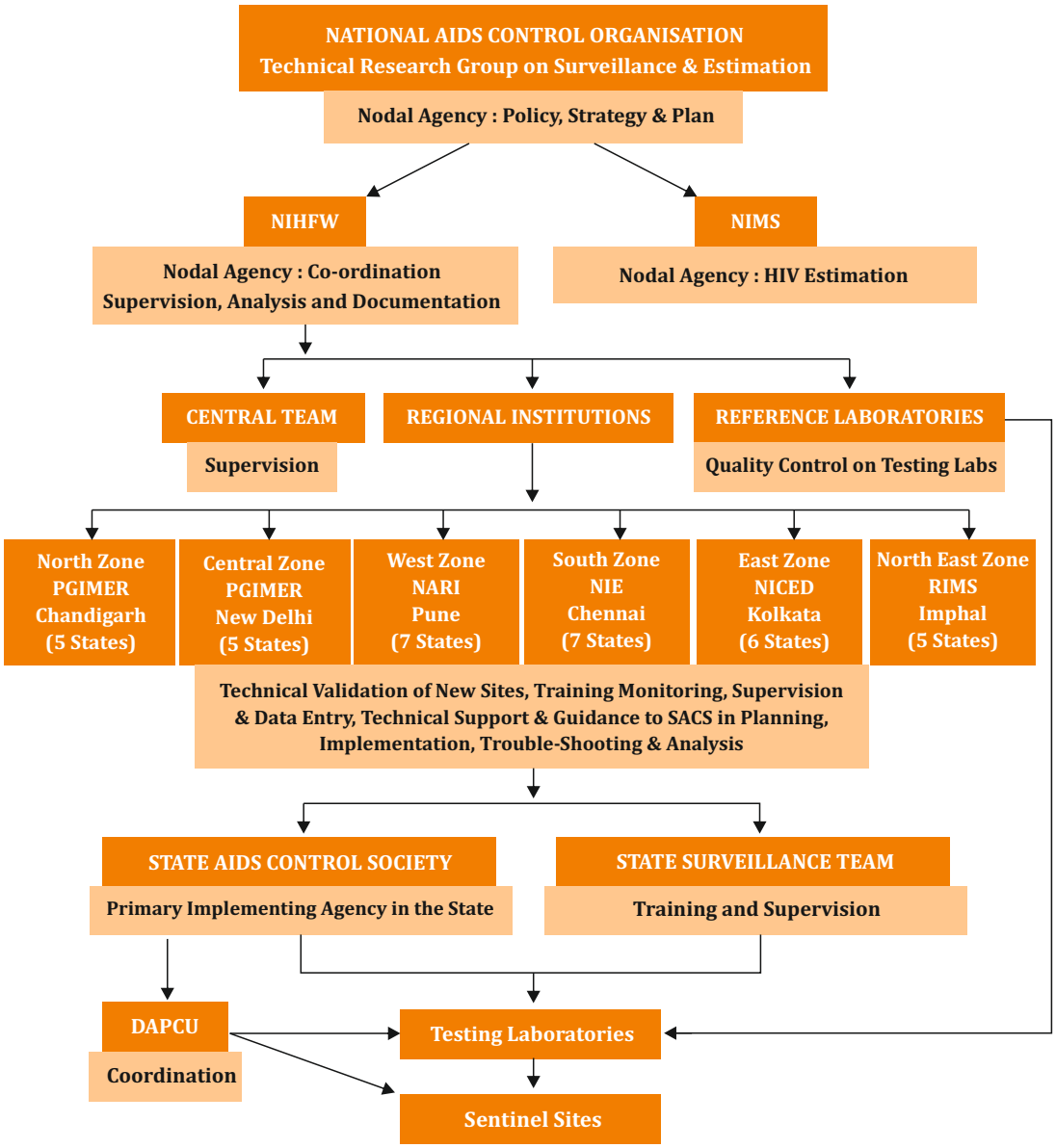


Figure : Implementing Structure of HIV Sentinel Surveillance in India

The main goal of implementing structure of HSS is for performing the assessment of the implementation plans of HSS and reviews the outcomes of each round. Two national institutes—National Institute of Health and Family Welfare (NIHFW) and ICMR- National Institute of Medical Statistics (ICMR- NIMS)—supports national level activity planning and coordination. In addition, the central team, which is coordinated by NIHFW, New Delhi and is comprised of experts from the Centres for Disease Control and Prevention (CDC), World Health Organisation (WHO),The Joint United Nations Programme on HIV and AIDS (UNAIDS), medical colleges, and other national and international agencies, provide support in training and supervision.

Regional level: Since 2006, NIE has been identified as regional institutes (RIs) for HSS to provide technical support to the State AIDS Control Societies (SACS) for all HSS activities in southern zone, starting with identification of new sites, training, monitoring and supervision, and improving quality of the data collection and their analysis. Data entry is another function performed by RIs. The team at each RI is comprised of two epidemiologists/public health experts and one micro-biologist, which are supported by one project coordinator, two research officers, one computer Assistant/data manager, and between four and ten data entry operators, depending on the volume of data entry. The names of the six regional institutes and the distribution of states among them are in Table 2.

State level: SACS is the primary agency responsible for implementation of HSS and NACO has appointed state epidemiologists at the SACS to support the activities and promote data analysis. In addition to these, every state has a surveillance team comprised of public health experts and microbiologists who support SACS in thetraining, supervision, and monitoring of the personnel involved in sentinel surveillance. State surveillance teams (SSTs) are formed by RIs in consultation with SACS. All activities are coordinated by RIs.

District level: In districts with functional district AIDS Prevention and Control Units (DAPCUs), theDAPCU staffs are involved in the coordination of HSS activities at the sentinel sites and the associated testing labs. Laboratory network Laboratory support is provided by a network of testing and reference labs. There are 117 state reference laboratories (SRLs) that conduct primary testing of blood specimens collected under HSS. Thirteen national reference laboratories (NRLs) provide external quality assurance to the SRLs through repeat testing of all HIV-positive blood specimens and 5 % of HIV negative specimens.

Table 2: Regional Institutes for HIV Sentinel Surveillance and their State Allocation

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

2.4. Key Initiatives during HIV Sentinel Surveillance 2016-17:

In response to key issues identified in the implementation of HSS during the previous rounds and to improve the quality and timeliness of the surveillance process in the 14through, several new initiatives were implemented as part of continuous quality improvement.

SACS checklist for preparatory activities:

This was developed to monitor the planning process for HSS in each state (Annex 3). All the preparatory activities were broken into specific tasks with clear time lines and 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 time lines.

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:

These were 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 2016-17:

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 yoursentinel site” exercise, which helped participants identify the routine practices that could affect the implementation of surveillance at their sites andrecommended 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 site sfor supervisory visits.
5. Training reports for each batch were submitted in standard formats at the end of the each training.

Details of trainings :

1. Trainings started with two batches of national pre-surveillancemeetings with about 90 personnel from regional institutes and SACS to discuss the critical aspects of planning for HSS 2016-17 and to clearly under stand 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 @ 8-10sites 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 form icrobiologists 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-chargesurveillance, Epidemiologists, and M&E officers;280 state surveillance team members; 260laboratory personnel including microbiologists and lab technicians from the designated test inglabs; and more than 3,000 sentinel site personnel including medical officers, nurse/counsellors, and lab technicians were trained under HSS 2016-17.

Laboratory system: For HSS 2016-17, the laboratory system was strengthened by limiting the testing of specimens to designated SRLs. Real-time monitoring of the quality of blood specimens and laboratory processes was achieved through introduction of web based reporting through the SIMS application for HSS. Efforts were made to standardize quality assurance aspects of sample testing under HSS and to streamline responses in case of discordant test results between testing lab and reference lab through the SIMS application.

Supervisory mechanisms for HSS 2016-17: 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-orientedsupervision, 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 2016-17.

1. 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.

2. Data were supervised by data managers at RIsto monitor the quality of data collection and transportation using the SIMS module.

3. 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

1. An integrated supervision plan for each state was developed by RIs, SACS, and NIHFW to avoid duplication in monitoring coverage, there by facilitating maximum coverage of surveillance sites.

2. 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.

SMS-based daily reporting from sentinel sites

This was piloted in last round and implemented in this round as an approach of daily reporting of the number of samples collected a teach sentinel site through a group SMS from a registered mobile number to a central server. The system automatically compiled and displayed site-wise data on an Excel format on a real-time basis. Access to this web-based application was given to SACS, RIs, and DAC and facilitated identification of sites with poor performance and enabled initiation of corrective action at sites that initiated HSS late; where sample collection was too slow or too fast; and where there were large gaps in sample collection.

CHAPTER 3

PROFILE OF RESPONDENTS

Data was collected from each respondent on key fourteen socio-demographic variables. 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. The Chapter-3 deals with the profile of respondents of HIV surveillance survey 2016-17 of Telangana.

Table 3: Profile of Respondents at State Level, Telangana HSS 2016-17

Age (N-11575)	Number	%
15-24	8006	69.2
25-34	3495	30.2
35-44	74	0.6
45-49	0	0.0
literacy Status (N-11564)		
Illiterate	1994	17.2
Literate and till 5th standard	1223	10.6
6th to 10th standard	4571	39.5
11th to Graduation	3393	29.3
Post Graduation	383	3.3
Order of current pregnancy (N11569)		
First	4812	41.6
Second	4888	42.3
Third	1549	13.4
Fourth or more	320	2.8
Duration of current pregnancy (N11568)		
First trimester	2262	19.6
Second trimester	4815	41.6
Third trimester	4491	38.8
Received ANC service during current pregnancy (N11557)		
Yes	9017	78.0
NO	2540	22.0

Source of referral to the ANC clinic (N11562)		
Self Referral	1568	13.6
Family/ Relatives/ Neighbors/ Friends	2753	23.8
NGO	5	0.0
Private (Doctor/ Nurses)	87	0.8
Govt (including, ASHA/ ANM)	7149	61.8
ICTC / ART Centre	0	0.0
Current place of residence (N11487)		
Urban	2778	24.2
Rural	8709	75.8
Current occupation of the respondent (N11570)		
Truck driver/Helper	0	0.0
Local transport Worker (auto/taxi driver, hand cart pullers, rickshaw pullers etc)	2	0.0
Hotel staff	8	0.1
Large Business/Self employed	15	0.1
Petty business / small shop	65	0.6
Domestic Servant	72	0.6
Student	98	0.8
Service (Govt./Pvt.)	184	1.6
Skilled / Semiskilled worker	496	4.3
Agricultural cultivator/	622	5.4
Non-Agricultural Labourer	927	8.0
Agricultural Labourer	1473	12.7
Housewife	7608	65.8
Current occupation of the spouse (N11567)		
Domestic Servant	3	0.0
Not Applicable	20	0.2
Unemployed	30	0.3
Student	72	0.6
Large Business/Self employed	159	1.4
Hotel staff	185	1.6

Truck driver/Helper	594	5.1
Petty business / small shop	671	5.8
Local transport worker (auto/taxi driver, hand cart pullers, rickshaw pullers etc)	833	7.2
Agricultural cultivator/	1320	11.4
Skilled / Semiskilled worker	1325	11.5
Agricultural Labourer	1906	16.5
Service (Govt./Pvt.)	2050	17.7
Non-Agricultural Labourer	2399	20.7
Spouse resides alone in another place/town from wife for work for longer than6 months (N11552)		
Yes	123	1.1
No	11409	98.8
Not Applicable	20	0.2
Ever Been tested for HIV (N11573)		
Yes	7309	63.2
No	4264	36.8
If ever tested HIV, When was the last tested-(N1558)		
Tested during current pregnancy	4832	41.8
Tested before current pregnancy	2462	21.3
NA (For never tested)	4264	36.9
Result of respondent's last HIV test result-(N134)		
Positive	17	0.2
Negative	6829	61.3
Did not collect the last result	17	0.2
No response	7	0.1
NA (For never tested)	4264	38.3
If previous HIV test positive, taking ART medication-(N139)		
Yes	9	0.1
No	8	0.1
NA (never tested or Not positive when last tested)	11522	99.9
HIV (N11575)		
Negative	11537	99.67
Positive	38	0.33
Syphilis (N11575)		
Negative	11569	99.9
Positive	6	0.1

3.1. Age

Age in completed years is recorded for every respondent at the time of recruitment into HSS. The majority of respondents (69.2%) belonged to the age group of 15-24 years and 30.2% were in the age group of 25-34 years. Only 0.6% of respondents belonged to the age group of 35-44 years and no one has registered in the 45-49 years age group.

Figure 2: Percentage (%) Distribution of respondents by age group

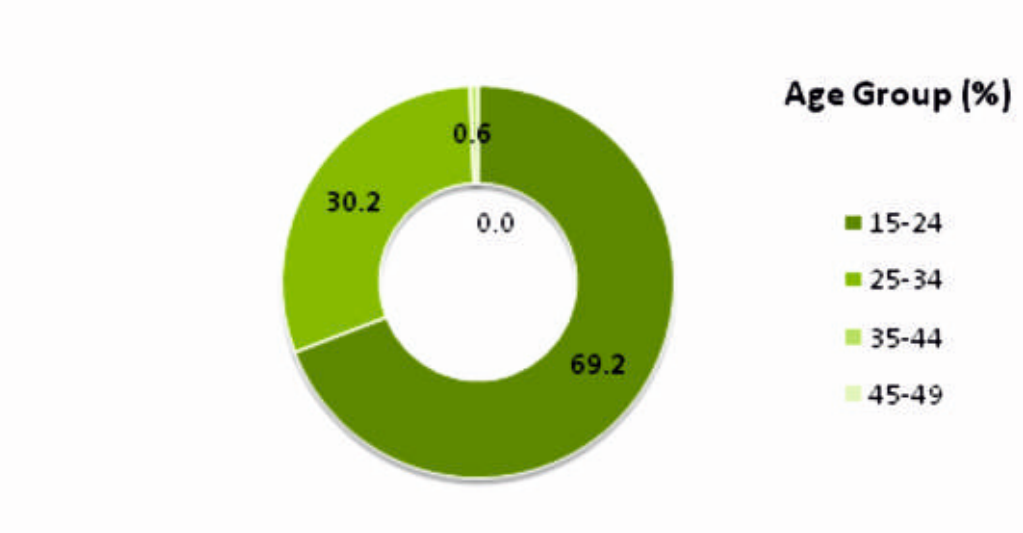


Table 4: Percentage (%) Distribution of respondents by age group and district, HSS 2016-17

Age Group	15-24	25-34	35-44	45-49	Grand Total
Telangana	69.17	30.19	0.64	0.00	11575
Adilabad	70.58	28.42	1.00	0.00	1200
BhadradriKothagudem	80.67	19.25	0.08	0.00	1200
Hyderabad	57.25	41.38	1.38	0.00	800
Jagitial	61.65	36.84	1.50	0.00	399
Jangaon	75.00	23.50	1.50	0.00	400
JayashankarBhoopalpally	72.25	27.50	0.25	0.00	400
JogulambaGadwal	72.75	27.00	0.25	0.00	400
Kamareddy	56.08	43.40	0.52	0.00	576
Karimnagar	61.25	38.50	0.25	0.00	400
Khammam	83.00	17.00	0.00	0.00	400
KomaramBheemAsifabad	56.75	42.50	0.75	0.00	400
Macherial	67.00	32.25	0.75	0.00	400
Mahbubnagar	74.25	25.00	0.75	0.00	400
Medak	81.50	18.50	0.00	0.00	400
Nalgonda	75.00	24.25	0.75	0.00	400

Nizamabad	53.17	45.00	1.83	0.00	600
Peddapalli	70.00	29.25	0.75	0.00	400
Sangareddy	68.50	31.38	0.13	0.00	800
Siddipet	75.00	24.50	0.50	0.00	400
Vikarabad	57.50	41.75	0.75	0.00	400
Warangal (Urban)	73.75	26.25	0.00	0.00	400
YadadriBhuvanagiri	79.25	20.75	0.00	0.00	400

3.2. Literacy Status

Under HSS 2016-17, respondent literacy status was classified into five categories:

1. Illiterate: people with no formal or non-formal education.
2. Literate and till 5th standard: people with non-formal education or those who joined school but had not studied beyond 5th standard.
3. 6th to 10thstandard: people who studied beyond 5th standard but not beyond 10th standard.
4. 11th to graduation: people who studied beyond 10th standard but not beyond graduation. Includes those with technical education/diplomas.
5. Post-graduation: people who studied beyond graduation.

At the state level,17.2% of respondents had no formal education. Around 10.6% of respondents studied up to fifth standard and the highest proportion of respondents (39.5%) were studied between sixth and tenth standards. Around 29.3% of the respondents reported to have studied beyond 10th standard and up to graduation, while another about 3.3% had studied beyond graduation.

Figure 3: Percent Distribution of respondents by educational status

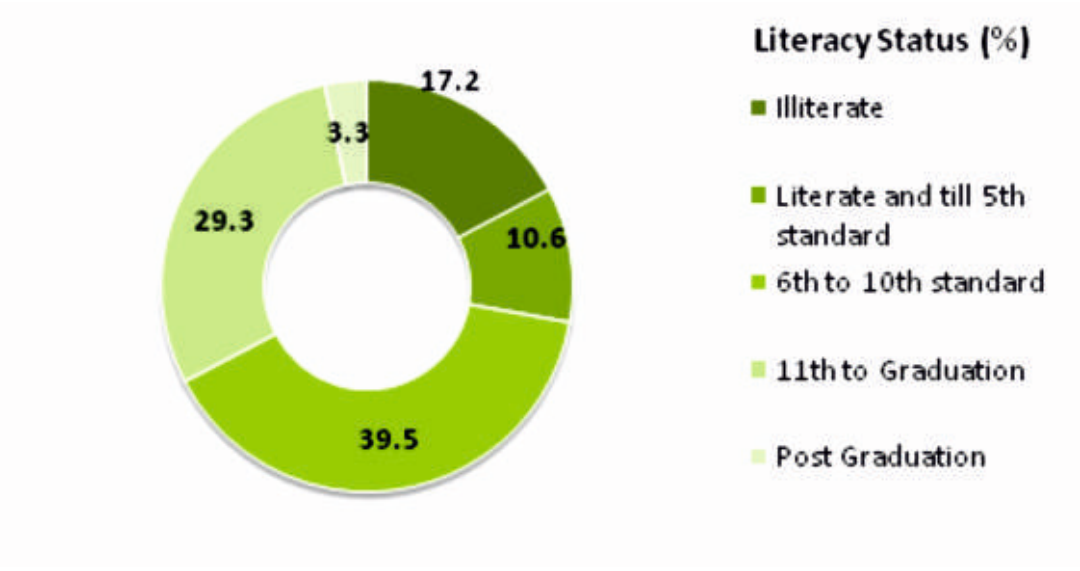


Table 5: Percent Distribution of respondents by education and districts in Telangana, HSS 2016-17

State/District	Illiterate	Literate and till 5th standard	6th to 10th standard	11th to Graduation	Post Graduation	Number
Telangana	17.2	10.6	39.5	29.3	3.3	11564
Adilabad	25.5	11.9	37.1	24.4	1.2	1197
BhadradriKothagudem	11.8	17.2	41.3	26.0	3.8	1200
Hyderabad	5.6	5.3	44.7	36.0	8.4	799
Jagitial	16.3	9.5	42.9	28.6	2.8	399
Jangaon	9.3	2.0	41.1	43.6	4.0	399
JayashankarBhoopalpally	14.3	15.0	34.6	34.1	2.0	399
JogulambaGadwal	52.8	6.8	24.8	14.8	1.0	400
Kamareddy	9.6	17.9	36.7	32.7	3.1	575
Karimnagar	11.5	5.0	39.0	34.8	9.8	400
Khammam	17.5	7.3	44.1	28.8	2.3	399
KomaramBheemAsifabad	9.3	15.0	55.8	19.0	1.0	400
Macherial	11.8	7.8	34.8	40.5	5.3	400
Mahbubnagar	26.3	10.8	38.8	23.0	1.3	400
Medak	11.8	12.3	48.3	27.8	0.0	400
Nalgonda	12.5	16.8	47.4	23.3	0.0	399
Nizamabad	10.0	27.7	42.0	16.7	3.7	600
Peddapalli	7.0	3.5	42.3	40.5	6.8	400
Sangareddy	48.6	5.1	27.3	17.9	1.1	799
Siddipet	8.0	4.8	34.5	47.5	5.3	400
Vikarabad	26.3	5.5	47.4	20.6	0.3	399
Warangal (Urban)	8.0	3.8	34.0	49.0	5.3	400
YadadriBhuvanagiri	7.8	5.3	39.5	42.3	5.3	400

3.3. Order of Pregnancy

The order of pregnancy denotes the number of times a woman has become pregnant. It includes the number of live births, still births and abortions. It is also referred to as 'gravida'. As noted earlier in the context of HIV, order of pregnancy indicates the duration of exposure to sexual risks, so HIV prevalence among primi-gravida is considered as a proxy for new HIV infections and is an indicator of state HIV incidence.

At the state level, around 41.6% of the respondents reported being pregnant for the first time, while close to 42.3%of the respondents was pregnant for the second time and 13.4% of respondents reported that it was their third pregnancy. Only 2.8% of respondents were pregnant for the fourth or more time.

Figure 4: Percent Distribution of respondents by order of pregnancy in Telangana, HSS 2016-17

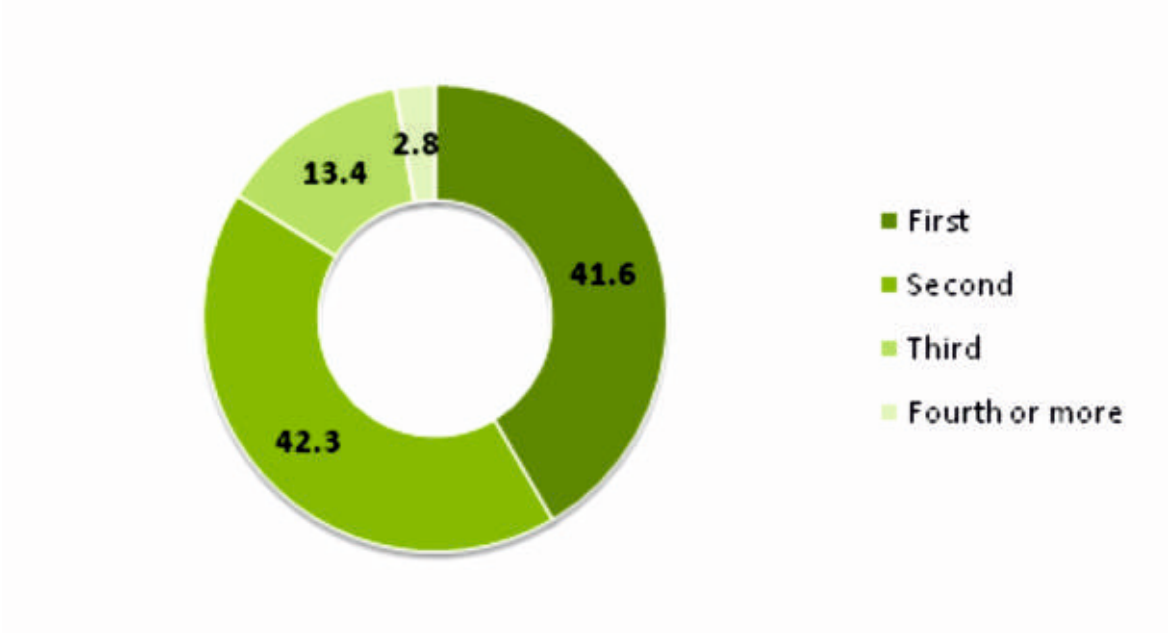


Table 6: District-wise % Distribution of respondents by Order of Pregnancy in Telangana, HSS 2016-17

State/District	First	Second	Third	Fourth or more	N
Telangana	41.59	42.25	13.39	2.77	11569
Adilabad	43.75	41.17	11.50	3.58	1200
BhadradriKothagudem	41.37	43.79	12.93	1.92	1199
Hyderabad	42.18	37.17	16.77	3.88	799
Jagitial	38.10	47.37	12.28	2.26	399
Jangaon	48.75	41.25	9.25	0.75	400
JayashankarBhoopalpally	46.23	42.71	10.05	1.01	398
JogulambaGadwal	35.34	39.85	17.04	7.77	399
Kamareddy	42.88	41.49	13.54	2.08	576
Karimnagar	42.25	43.00	13.75	1.00	400
Khammam	41.25	50.50	7.75	0.50	400
KomaramBheemAsifabad	43.00	43.25	11.25	2.50	400
Macherial	38.00	52.25	9.00	0.75	400
Mahbubnagar	42.25	39.00	15.00	3.75	400
Medak	44.25	41.00	13.50	1.25	400

Nalgonda	42.75	41.25	13.75	2.25	400
Nizamabad	39.73	36.73	17.70	5.84	599
Peddapalli	40.75	45.50	11.25	2.50	400
Sangareddy	35.88	38.63	21.88	3.63	800
Siddipet	42.50	41.00	12.75	3.75	400
Vikarabad	40.25	43.00	13.75	3.00	400
Warangal (Urban)	42.00	42.75	12.50	2.75	400
YadadriBhuvanagiri	43.25	47.75	8.00	1.00	400

3.4. Duration of current Pregnancy

Duration of pregnancy is usually measured in terms of three trimesters; each of them of about three month's duration.

i. First trimester: The first trimester of pregnancy is from conception to 12th week of pregnancy.

ii. Second trimester: The second trimester of pregnancy is from 13th to 27th week of pregnancy.

iii. Third trimester: The third trimester of pregnancy spans from week 28 to birth.

At the state level, the majority of respondents (44.1%) belonged to the third trimester. Around 40% of respondents belonged to the second trimester, while another about 16% respondents were belonged to the first trimester.

Figure 5: Percent Distribution of respondents by duration of current pregnancy

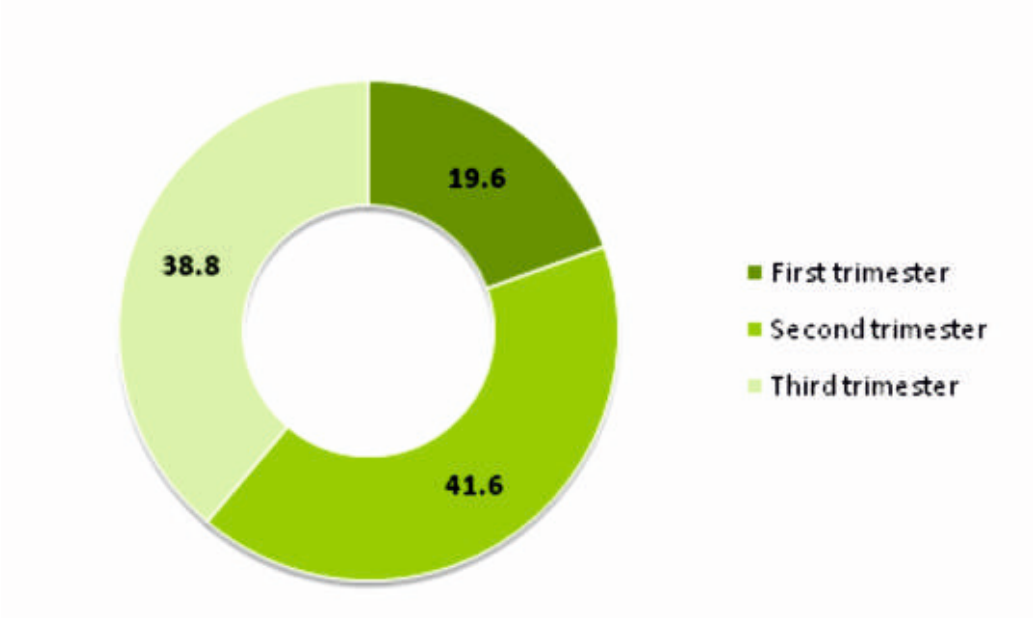


Table 7: District-wise % Distribution of respondents by Duration of pregnancy in Telangana, HSS 2016-17

State/District	First trimester	Second trimester	Third trimester	N
	%	%	%	
Telangana	19.55	41.62	38.82	11568
Adilabad	31.42	37.42	31.17	1200
BhadradriKothagudem	19.27	43.87	36.86	1199
Hyderabad	26.78	40.68	32.54	799
Jagitial	2.26	26.82	70.93	399
Jangaon	10.75	33.25	56.00	400
JayashankarBhoopalpally	8.25	32.75	59.00	400
JogulambaGadwal	14.25	44.00	41.75	400
Kamareddy	23.44	41.49	35.07	576
Karimnagar	17.00	42.50	40.50	400
Khammam	10.75	41.75	47.50	400
KomaramBheemAsifabad	18.50	62.00	19.50	400
Macherial	17.79	40.60	41.60	399
Mahbubnagar	15.50	67.00	17.50	400
Medak	16.25	49.75	34.00	400
Nalgonda	17.29	36.09	46.62	399
Nizamabad	26.33	43.00	30.67	600
Peddapalli	14.00	33.75	52.25	400
Sangareddy	14.43	44.29	41.28	797
Siddipet	14.00	44.25	41.75	400
Vikarabad	10.50	59.75	29.75	400
Warangal (Urban)	56.25	21.75	22.00	400
YadadriBhuvanagiri	14.75	30.50	54.75	400

3.5. Prior receipt of antenatal care services during current pregnancy

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.

At the state level, about 78% of respondents were received ANC services during current pregnancy whereas 22% of respondents were not received antenatal care services.

Figure 6: Percent Distribution of respondents by ANC service uptake

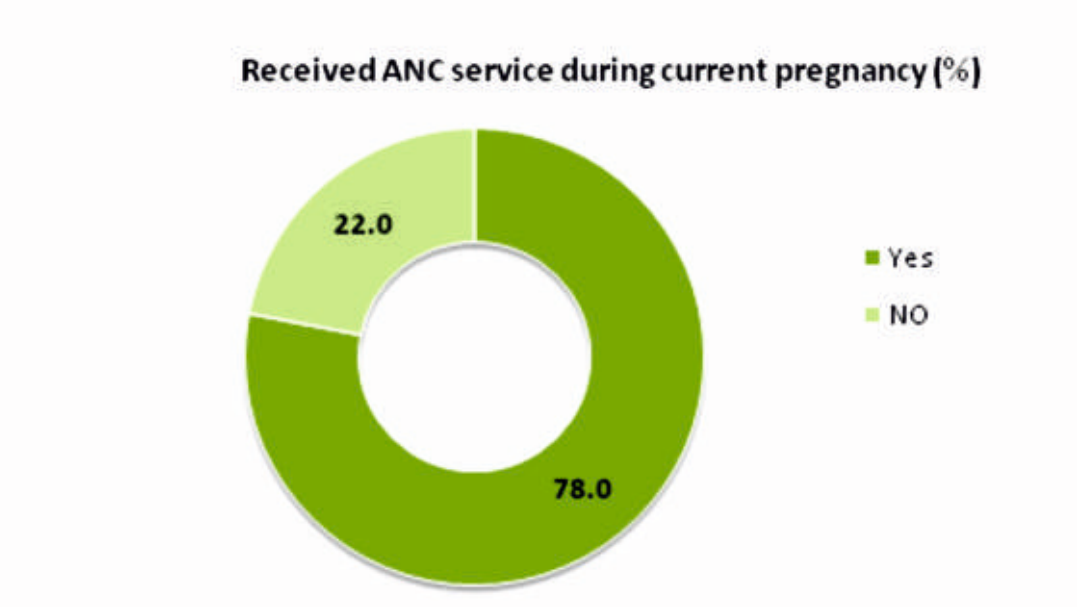


Table 8: District-wise % Distribution of respondents by Prior receipt of antenatal care services during current pregnancy in Telangana, HSS 2016-17

State/District	YES	NO	N
	%	%	
Telangana	78.0	22.0	11557
Adilabad	86.4	13.6	1200
BhadradriKothagudem	81.4	18.6	1198
Hyderabad	49.4	50.6	796
Jagitial	100.0	0.0	399
Jangaon	95.5	4.5	400
JayashankarBhoopalpally	98.5	1.5	400
JogulambaGadwal	16.5	83.5	400
Kamareddy	94.1	5.9	576
Karimnagar	100.0	0.0	400
Khammam	99.7	0.3	398
KomaramBheemAsifabad	99.0	1.0	400
Macherial	100.0	0.0	400
Mahbubnagar	31.3	68.7	399
Medak	100.0	0.0	400

Nalgonda	27.5	72.5	400
Nizamabad	66.8	33.2	596
Peddapalli	100.0	0.0	400
Sangareddy	99.5	0.5	797
Siddipet	97.0	3.0	399
Vikarabad	99.5	0.5	400
Warangal (Urban)	47.0	53.0	400
YadadriBhuvanagiri	9.3	90.7	399

3.6 Source of Referral to the ANC Clinic

This variable illuminates the various sources of referral, and helps identify if a specific bias is being introduced in the sample due to specific referrals of HIV-positive cases from any source. The response categories listed in the HSS data form include self-referral; family/relative/ neighbour/friend; NGO; private hospital (doctor/nurse); government hospital (including ANM/ASHA); and ICTC/ ART centre. Government health care providers include ANM, ASHA, doctors/nurses at PHC, and CHC.

At the state level, Govt. service providers (including ASHA/ANM) was identified as the major source of referral to ANC clinics, accounting for 61.8% of respondents, followed by family/relatives/neighbor/friends (23.8%) and self referral (13.6%).

Figure 7: Percent Distribution of respondents by source of referral

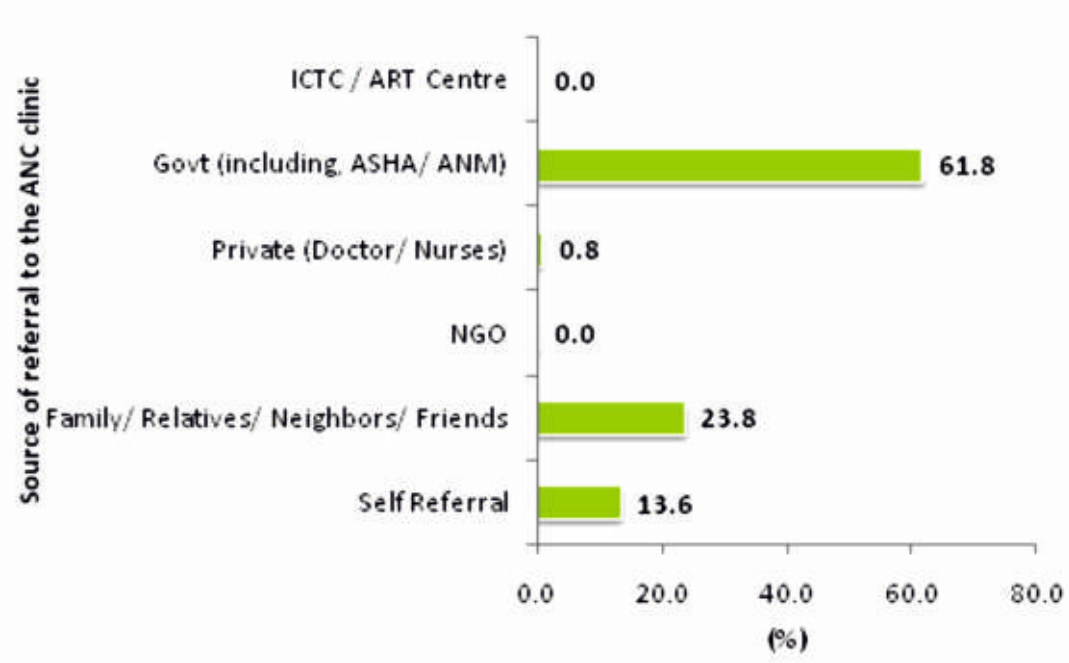


Table 9: District-wise % Distribution of respondents by source of referral and district in Telangana, HSS 2016-17

State/District	Self Referral	Family/ Relatives/ Neighbors/ Friends	NGO	Private (Doctor/ Nurses)	Govt (including, ASHA/ ANM)	ICTC / ART Centre	N
	%	%	%	%	%	%	
Telangana	13.56	23.81	0.04	0.75	61.83	0.00	11562
Adilabad	36.95	27.61	0.00	0.08	35.36	0.00	1199
Bhadradri Kothagudem	4.59	39.57	0.00	0.00	55.84	0.00	1198
Hyderabad	45.31	43.80	0.00	3.13	7.76	0.00	799
Jagitial	40.20	0.00	0.00	0.00	59.80	0.00	398
Jangaon	0.00	22.50	0.00	0.00	77.50	0.00	400
JayashankarBhoopalpally	2.26	0.00	0.00	0.00	97.74	0.00	398
Jogulamba Gadwal	8.50	47.00	0.00	2.00	42.50	0.00	400
Kamareddy	6.25	7.29	0.00	0.00	86.46	0.00	576
Karimnagar	43.00	8.50	0.00	0.00	48.50	0.00	400
Khammam	1.00	22.00	0.00	0.00	77.00	0.00	400
KomaramBheemAsifabad	2.25	0.00	0.25	1.25	96.25	0.00	400
Macherial	10.25	22.75	0.00	0.00	67.00	0.00	400
Mahbubnagar	36.84	14.54	0.00	0.00	48.62	0.00	399
Medak	0.00	0.00	0.00	0.00	100.00	0.00	400
Nalgonda	9.52	90.48	0.00	0.00	0.00	0.00	399
Nizamabad	4.00	18.67	0.50	6.33	70.50	0.00	600
Peddapalli	0.00	0.00	0.00	0.00	100.00	0.00	400
Sangareddy	2.76	65.83	0.13	1.13	30.15	0.00	796
Siddipet	0.00	1.25	0.00	0.00	98.75	0.00	400
Vikarabad	0.00	0.75	0.00	0.00	99.25	0.00	400
Warangal (Urban)	0.00	0.00	0.00	0.00	100.00	0.00	400
YadadriBhuvanagiri	3.00	0.50	0.00	0.25	96.25	0.00	400

3.7. Current Place of Residence

2016-17 records the reported current residence of the respondent as urban or rural. If the current place of residence of the respondent was Municipal Corporation, municipal council, or cantonment area, it was classified as urban. Otherwise, it was recorded as rural.

At the state level, 75.8% of the respondents are reported to be currently residing in rural areas and the rest (24.2%) are reported to be currently residing in urban areas. However, there were inter-district variations

Figure 8: Percent Distribution of respondents by current place of residence

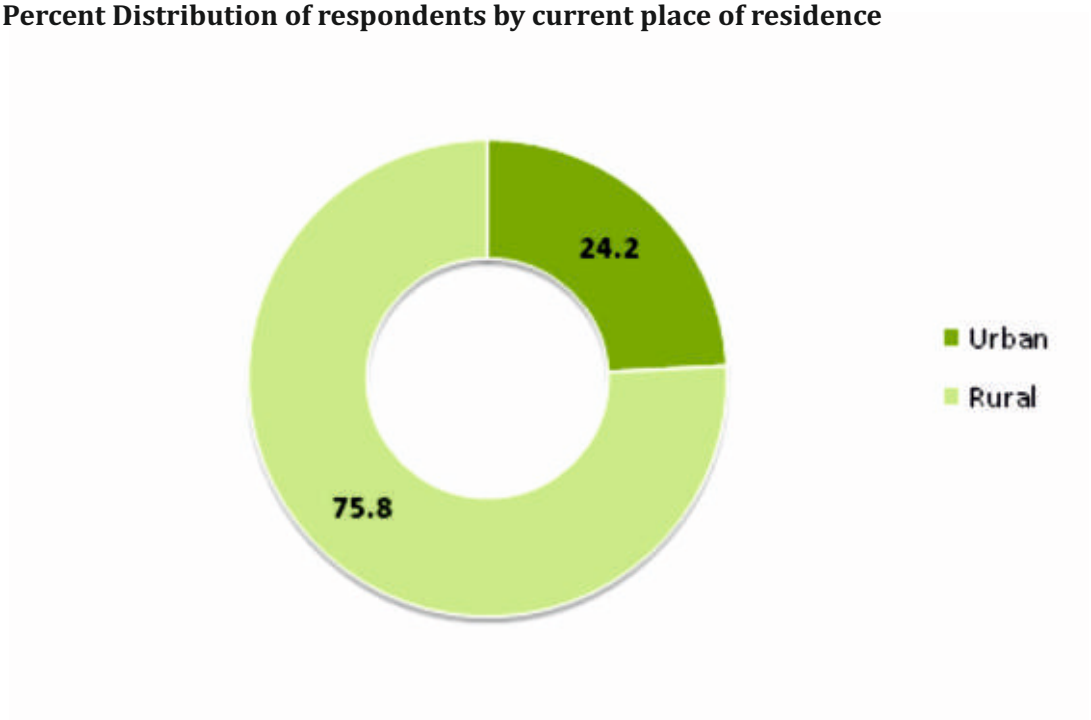


Table 10: District-wise % Distribution of respondents by Current Place of residence and district in Telangana, HSS 2016-17

State/District	Urban %	Rural %	N
Telangana	24.2	75.8	11487
Adilabad	23.6	76.4	1198
BhadradriKothagudem	27.8	72.2	1192
Hyderabad	94.8	5.2	785
Jagitial	12.1	87.9	398
Jangaon	14.5	85.5	400
JayashankarBhoopalpally	2.3	97.7	392
JogulambaGadwal	15.3	84.7	399
Kamareddy	10.6	89.4	573
Karimnagar	20.4	79.6	398
Khammam	22.6	77.4	372
KomaramBheemAsifabad	52.6	47.4	397
Macherial	30.8	69.3	400
Mahbubnagar	13.3	86.7	399
Medak	0.0	100.0	400
Nalgonda	13.3	86.7	390
Nizamabad	42.1	57.9	598
Peddapalli	24.5	75.5	400
Sangareddy	6.5	93.5	800
Siddipet	24.1	75.9	399
Vikarabad	5.8	94.3	400
Warangal (Urban)	14.1	85.9	397
YadadriBhuvanagiri	1.0	99.0	400

3.8. Current Occupation of the Respondent

Certain occupations are associated with higher exposure and risk to HIV. It is important to understand the profile of respondents with respect to their occupation. For this purpose, HSS has categorized 13 occupations, as detailed in an earlier chapter.

At the state level, the majority of the respondents (65.8%) were housewives, and 12.7% of respondents reported to be agricultural labourer and non-agricultural labourer were accounted for 8% of respondents followed by Agricultural cultivator (5.4%), Skilled/ Semiskilled worker (4.3%), Service (Govt./Pvt.) (1.6%), student (0.8%), domestic servant (0.6%), Petty business/small shop (0.6%), large business/self employed (0.1%) and hotel staff (0.1%).

Figure 9: District-wise % Distribution of respondents by Occupation

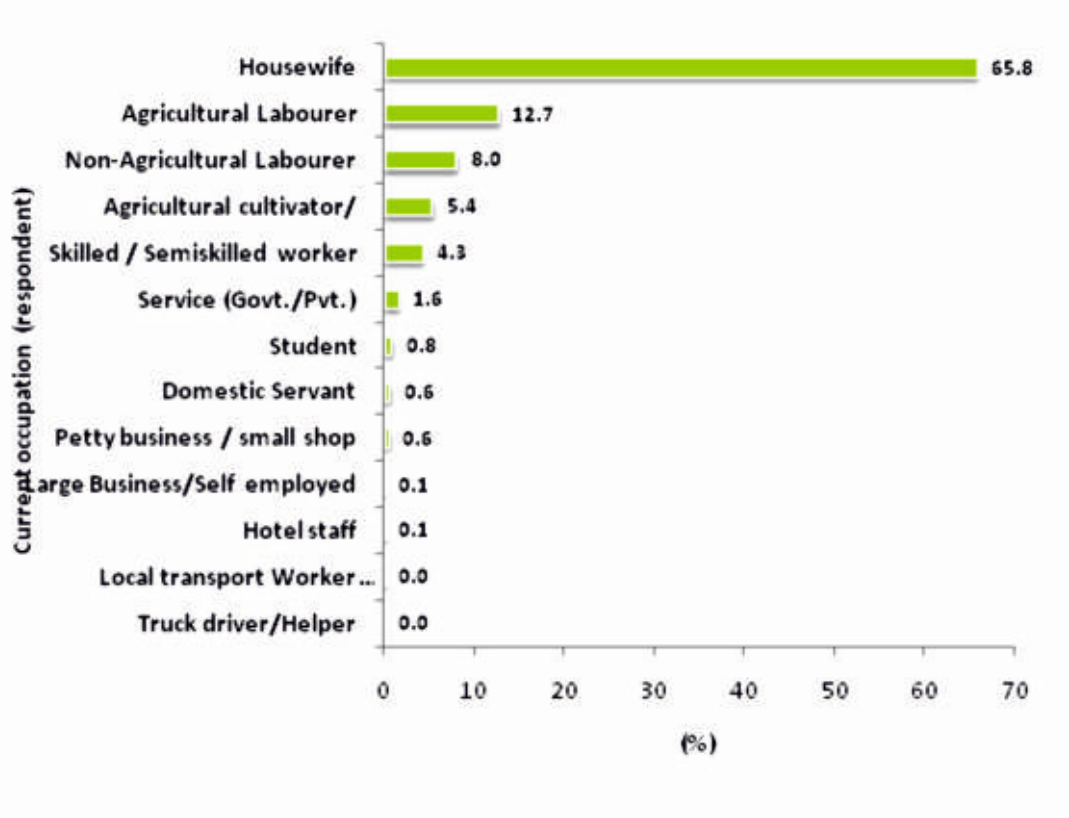


Table 11: District-wise % Distribution of respondents by Occupation in Telangana, HSS 2016-17

State/District	Agricultural Labourer	NonAgricultural 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	N
	%	%	%	%	%	%	%	%	%	%	%	%	%	
Telangana	12.73	8.01	0.62	4.29	0.56	0.13	1.59	0.85	0.07	0.00	0.02	5.38	65.76	11570
Adilabad	19.67	16.08	0.00	4.25	0.00	0.08	1.33	0.00	0.00	0.00	0.00	0.67	57.92	1200
BhadradriKothagudem	7.92	3.00	0.00	0.17	0.50	0.00	1.17	0.50	0.00	0.00	0.00	0.08	86.67	1200
Hyderabad	0.13	0.38	1.00	0.75	0.38	0.00	3.88	1.38	0.00	0.00	0.00	0.25	91.86	799
Jagitial	7.77	11.03	0.00	27.07	1.00	0.00	0.75	0.75	0.00	0.00	0.00	5.51	46.12	399
Jangaon	9.50	6.75	0.00	1.75	1.75	0.00	1.50	1.00	0.00	0.00	0.00	0.00	77.75	400
JayashankarBhoopalpally	37.34	3.26	0.00	0.75	0.50	0.25	2.01	0.50	0.00	0.00	0.00	12.78	42.61	399
JogulambaGadwal	13.75	1.00	0.00	3.50	0.75	0.50	1.00	1.00	0.00	0.00	0.00	51.00	27.50	400
Kamareddy	9.38	23.26	0.00	26.22	0.17	0.17	2.08	1.39	0.00	0.00	0.00	0.00	37.33	576
Karimnagar	6.50	19.50	0.00	4.50	1.50	0.00	5.25	1.50	0.00	0.00	0.25	4.25	56.75	400
Khammam	25.06	1.75	2.76	1.25	0.75	1.50	3.01	1.25	0.00	0.00	0.25	7.27	55.14	399
KomaramBheemAsifabad	12.50	0.50	0.00	0.50	0.25	0.00	0.25	0.00	0.00	0.00	0.00	0.00	86.00	400
Macherial	2.00	1.25	0.00	0.25	0.50	0.00	0.50	0.25	0.00	0.00	0.00	0.00	95.25	400
Mahbubnagar	35.25	9.00	0.00	0.50	0.50	0.00	1.25	0.25	0.00	0.00	0.00	0.00	53.25	400
Medak	3.75	1.00	0.00	1.25	1.50	0.00	1.75	0.25	0.00	0.00	0.00	41.25	49.25	400
Nalgonda	22.50	0.50	0.25	0.25	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	75.50	400
Nizamabad	14.02	15.86	3.67	6.68	1.17	0.17	1.67	2.84	0.00	0.00	0.00	0.67	53.26	599
Peddapalli	11.25	8.50	0.00	0.25	0.25	0.00	0.50	0.00	0.00	0.00	0.00	2.25	77.00	400
Sangareddy	5.50	20.25	2.88	1.63	0.75	0.00	1.00	1.25	1.00	0.00	0.00	9.00	56.75	800
Siddipet	5.25	4.50	0.00	15.75	0.00	0.25	2.75	2.00	0.00	0.00	0.00	9.00	60.50	400
Vikarabad	44.00	3.00	1.25	0.50	1.25	0.50	1.25	0.25	0.00	0.00	0.00	0.00	48.00	400
Warangal (Urban)	3.25	4.50	0.50	0.00	0.00	0.00	1.25	1.50	0.00	0.00	0.00	0.50	88.50	400
YadadriBhuvanagiri	0.25	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	99.25	399

3.9. Current Occupation of Spouse

The respondents were also asked about the current occupation of their spouses. Occupation of spouse is an important epidemiological variable that may help identify population groups at higher risk of acquiring HIV. HSS used the same occupational categories as those used for the respondent. The two differences were that the category 'unemployed' (Code 13) is used in the place of 'housewife' and there is an additional category 'not applicable' (for never married/widowed/divorced/ separated)' (Code 99).

Figure 10: % Distribution of respondents by the Occupation of spouse

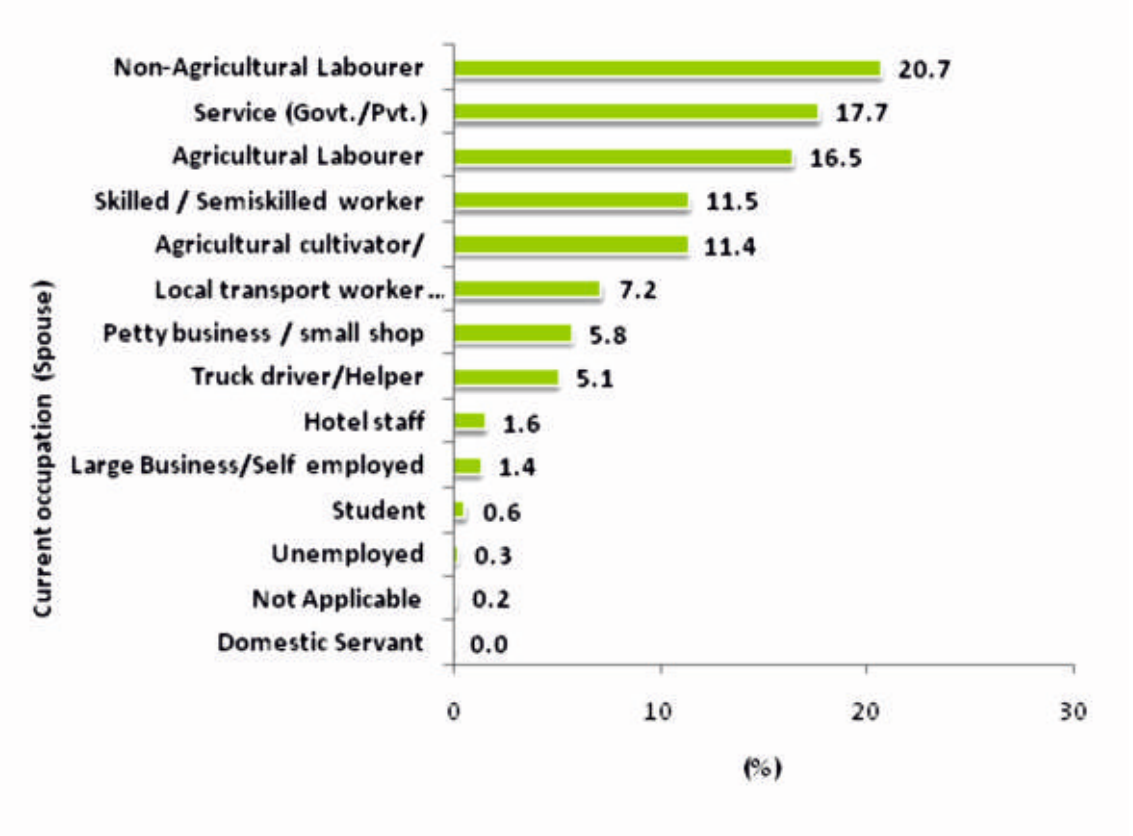


Table 12: District-wise % Distribution of respondents by the Occupation of spouse in Telangana, HSS 2016-17

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	Unemployed	Not Applicable	N
	%	%	%	%	%	%	%	%	%	%	%	%	%	99	
Telangana	16.5	20.7	0.0	11.5	5.8	1.4	17.7	0.6	1.6	5.1	7.2	11.4	0.3	0.2	11567
Adilabad	7.5	25.4	0.0	7.0	7.3	2.5	15.8	0.2	1.6	2.5	9.0	20.9	0.4	0.0	1199
BhadradriKothagudem	33.3	20.7	0.0	9.8	6.5	0.5	14.4	0.5	0.3	5.7	6.0	2.1	0.3	0.0	1200
Hyderabad	0.3	9.4	0.0	16.0	10.5	3.6	41.7	0.3	2.4	1.8	13.1	0.8	0.0	0.3	799
Jagitial	16.3	17.5	0.0	16.8	6.0	0.0	8.3	0.5	0.0	7.5	5.0	21.8	0.3	0.0	399
Jangaon	25.1	18.3	0.0	18.0	7.0	0.3	17.5	0.8	0.0	3.0	10.0	0.0	0.0	0.0	399
JayashankarBhoopalpally	42.5	7.8	0.0	5.8	3.8	1.0	11.1	0.8	0.0	2.3	5.5	18.6	0.5	0.5	398
JogulambaGadwal	11.0	8.0	0.0	8.5	3.5	3.0	8.3	0.8	0.8	4.0	3.3	48.5	0.5	0.0	400
Kamareddy	14.4	38.5	0.0	23.4	2.6	0.7	10.9	0.7	0.3	5.4	0.9	1.9	0.2	0.0	576

Karimnagar	10.0	22.1	0.0	14.3	6.0	0.5	18.5	0.8	1.3	11.8	6.0	8.8	0.0	0.0	399
Khammam	19.0	10.5	0.0	24.8	2.8	0.5	13.5	0.5	1.0	2.8	9.5	15.3	0.0	0.0	400
KomaramBheemAsifabad	23.5	15.0	0.0	6.8	14.5	2.0	24.8	0.0	0.5	2.3	8.5	1.8	0.5	0.0	400
Macherial	3.3	32.5	0.0	4.3	4.0	1.5	26.8	0.0	0.3	3.0	8.8	14.5	1.3	0.0	400
Mahbubnagar	33.8	31.5	0.0	5.8	6.0	0.5	8.0	0.5	0.8	0.5	12.5	0.3	0.0	0.0	400
Medak	3.8	7.5	0.0	5.0	5.8	0.5	32.3	0.3	0.8	0.5	9.0	34.5	0.0	0.3	400
Nalgonda	12.0	12.0	0.0	15.3	2.0	0.3	12.8	2.5	0.0	23.5	0.0	19.5	0.3	0.0	400
Nizamabad	20.9	34.9	0.0	4.8	6.5	2.0	10.2	1.2	1.3	3.5	11.9	1.3	0.2	1.3	599
Peddapalli	15.0	34.8	0.0	6.0	5.0	0.5	17.3	0.0	0.5	2.3	11.5	7.0	0.0	0.3	400
Sangareddy	6.0	23.4	0.1	20.5	4.8	0.9	13.5	0.4	12.8	2.6	3.5	10.6	0.4	0.5	799
Siddipet	9.5	20.8	0.3	2.0	4.3	2.3	26.3	1.0	0.5	5.3	8.0	19.8	0.3	0.0	400
Vikarabad	44.3	17.0	0.0	10.5	1.8	4.0	10.0	0.3	0.5	3.5	5.3	2.5	0.3	0.3	400
Warangal (Urban)	7.3	19.8	0.3	8.0	3.8	1.0	18.5	2.0	0.8	8.5	8.3	21.3	0.5	0.3	400
YadadriBhuvanagiri	14.0	13.8	0.0	15.3	6.3	0.0	27.3	1.5	0.3	21.8	0.0	0.0	0.0	0.0	400

3.10. Migration Status of Spouse

In order to assess the relationship between spousal migration status and HIV prevalence among ANC clinic attendees, respondents in HSS were asked whether spouse resides in another place/town away from wife for work for longer than 6 months. This question was not applicable to those respondents who were never married/widowed/divorced/separated.

At the state level, around 1.1% of the respondents reported that their spouses were migrants, though there were significant inter-district variations.

Figure 11: Percentage of respondents with migrant spouse

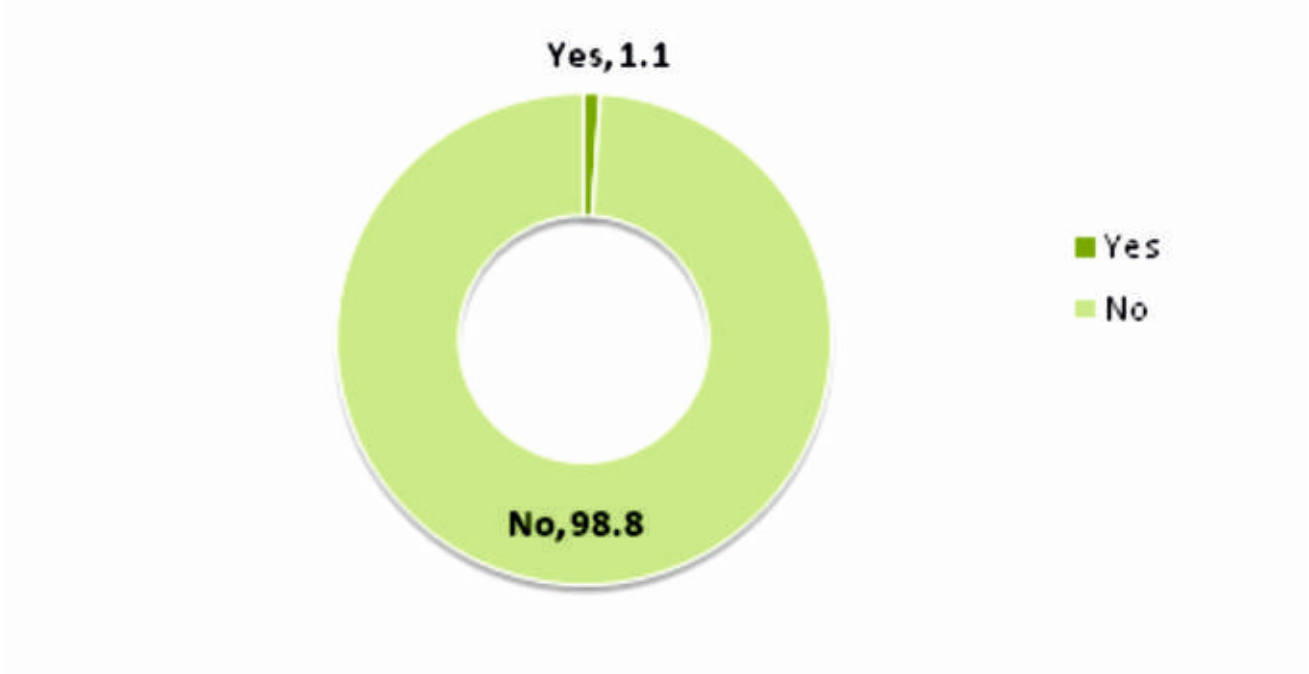


Table 13: District-wise percentage of respondents with migrant spouse in Telangana, HSS 2016-17

State/District	YES	No	Not Applicable	N
	%	%	%	
Telangana	1.1	98.8	0.2	11552
Adilabad	0.3	99.8	0.0	1200
BhadradriKothagudem	0.3	99.7	0.0	1199
Hyderabad	2.9	96.9	0.3	799
Jagitial	2.8	97.2	0.0	399
Jangaon	0.3	99.7	0.0	399
JayashankarBhoopalpally	0.3	99.2	0.5	398
JogulambaGadwal	1.0	99.0	0.0	400
Kamareddy	0.9	99.1	0.0	566
Karimnagar	0.0	100.0	0.0	400
Khammam	1.3	98.7	0.0	398
KomaramBheemAsifabad	0.3	99.8	0.0	400
Macherial	0.0	100.0	0.0	400
Mahbubnagar	0.8	99.3	0.0	400
Medak	0.5	99.3	0.3	400
Nalgonda	0.3	99.8	0.0	400
Nizamabad	4.3	94.3	1.3	600
Peddapalli	1.5	98.3	0.3	400
Sangareddy	0.8	98.7	0.5	798
Siddipet	0.5	99.5	0.0	399
Vikarabad	3.0	96.8	0.3	400
Warangal (Urban)	0.3	99.5	0.3	400
YadadriBhuvanagiri	1.8	98.2	0.0	397

3.11. HIV Testing History

This refers to the HIV testing history of pregnant women. At the state level, 63.2% of respondents were reported that they were previously tested for HIV.

Figure 12: Percent Distribution of respondents by HIV testing history

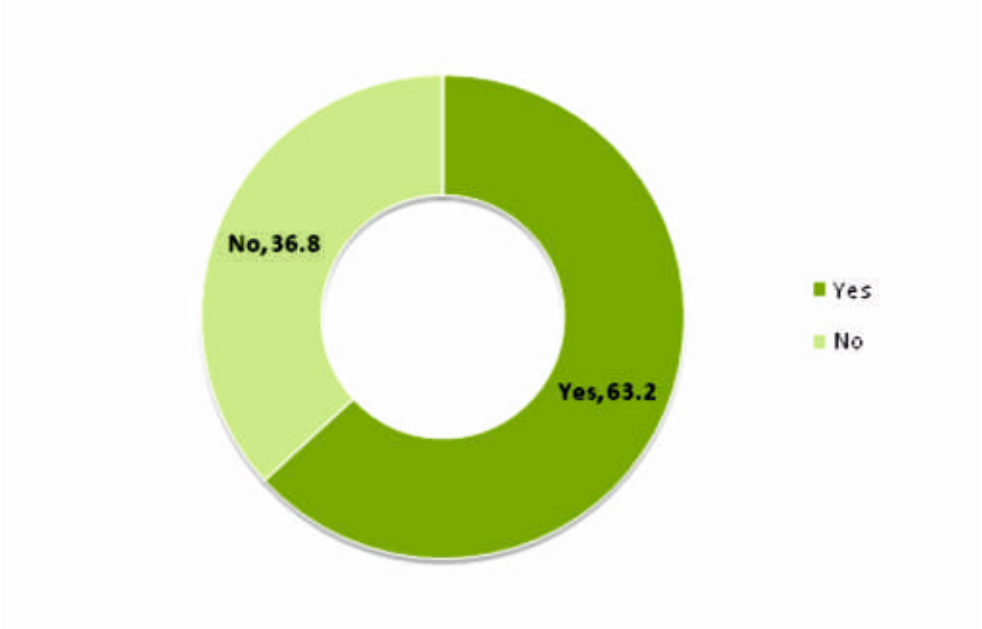


Table 14: District-wise percentage of respondents with HIV testing history in Telangana, HSS 2016-17

State/District	Yes	No	Grand Total
	%	%	
Telangana	63.2	36.8	11573
Adilabad	68.8	31.3	1200
BhadradriKothagudem	69.7	30.3	1198
Hyderabad	77.1	22.9	800
Jagitial	97.7	2.3	399
Jangaon	95.5	4.5	400
JayashankarBhoopalpally	50.0	50.0	400
JogulambaGadwal	2.8	97.3	400
Kamareddy	54.2	45.8	576
Karimnagar	27.5	72.5	400
Khammam	93.0	7.0	400
KomaramBheemAsifabad	47.8	52.3	400
Macherial	95.3	4.8	400
Mahbubnagar	43.3	56.8	400

Medak	96.8	3.3	400
Nalgonda	11.5	88.5	400
Nizamabad	60.2	39.8	600
Peddapalli	87.0	13.0	400
Sangareddy	24.8	75.3	800
Siddipet	90.0	10.0	400
Vikarabad	70.5	29.5	400
Warangal (Urban)	34.5	65.5	400
YadadriBhuvanagiri	97.5	2.5	400

3.12. Time of last HIV Testing

This question aims to understand the timing of last HIV testing of respondents in reference to current pregnancy. At the state level, majority of the respondents (41.8%) were tested for HIV during current pregnancy, whereas 21.3% of respondents were tested before current pregnancy. Around 36.9% of the respondents were reported as never tested for HIV.

Figure 13: Percent Distribution of respondents by Time of last HIV Testing

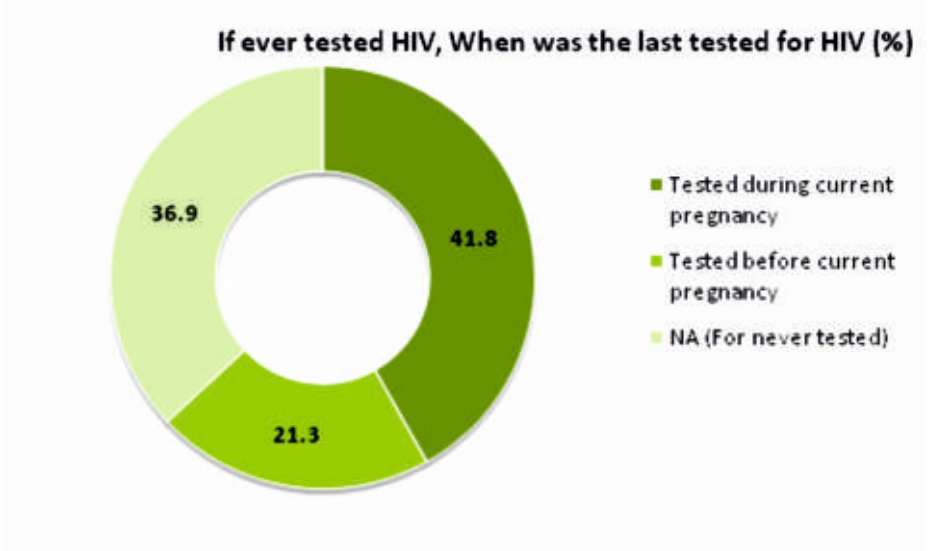


Table 15: District-wise percentage of respondents with Time of last HIV Testing in Telangana, HSS 2016-17

(Only the respondent whom tested for HIV test previously)			
State/District	**Tested during current pregnancy**	**Tested before current pregnancy**	N
	%	%	
Telangana	**66.2**	**33.8**	**7294**
Adilabad	54.9	45.1	825
BhadradriKothagudem	78.1	21.9	832
Hyderabad	50.7	49.3	617
Jagitial	99.7	0.3	390
Jangaon	86.4	13.6	382
JayashankarBhoopalpally	80.0	20.0	200
JogulambaGadwal	0.0	100.0	11
Kamareddy	12.9	87.1	309
Karimnagar	20.2	79.8	109
Khammam	98.9	1.1	366
KomaramBheemAsifabad	1.6	98.4	190
Macherial	84.5	15.5	381
Mahbubnagar	21.4	78.6	173
Medak	96.1	3.9	387
Nalgonda	89.1	10.9	46
Nizamabad	59.4	40.6	360
Peddapalli	75.6	24.4	348
Sangareddy	13.6	86.4	198
Siddipet	85.8	14.2	360
Vikarabad	30.5	69.5	282
Warangal (Urban)	36.2	63.8	138
YadadriBhuvanagiri	99.7	0.3	390

3.13. Result of last HIV test

This refers to the result of the last HIV test of the ANC respondent. At the state level, around 0.2% of the respondents were reported that their last HIV test result was Positive. The majority of respondents (61.3%) were reported as HIV negative. Whereas 38.3% of respondents reported that they were never tested for HIV.

Figure 14: Percent Distribution of respondents by Result of last HIV test

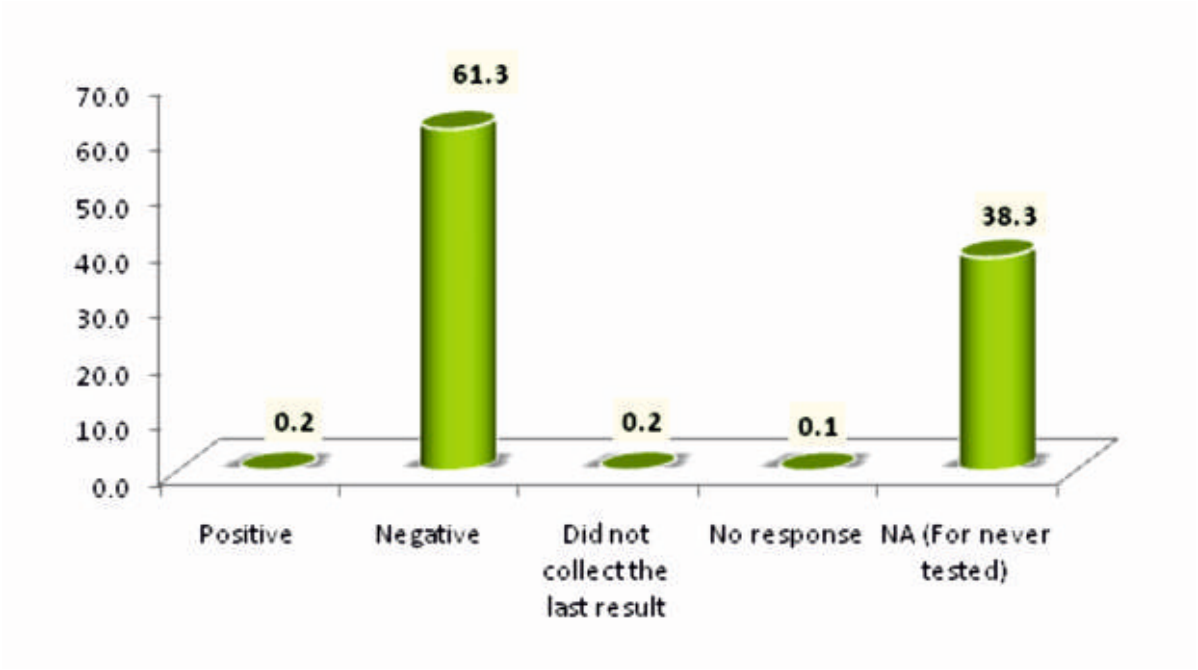


Table 16: District-wise percentage of respondents with Result of last HIV test in Telangana, HSS 2016-17

(Only the respondent whom tested for HIV test previously)					
State/District	Positive	Negative	Did not collect the test result	No Response	N
	%	%	%	%	
Telangana	0.25	99.40	0.25	0.10	6870
Adilabad	0.12	99.76	0.00	0.12	823
BhadradriKothagudem	0.24	99.76	0.00	0.00	834
Hyderabad	0.81	96.92	2.27	0.00	616
Jagitial	0.51	99.49	0.00	0.00	390
Jangaon	0.26	99.74	0.00	0.00	382
JayashankarBhoopalpally	0.00	100.00	0.00	0.00	197
JogulambaGadwal	0.00	100.00	0.00	0.00	11
Kamareddy	0.00	100.00	0.00	0.00	304
Karimnagar	0.00	100.00	0.00	0.00	110
Khammam	0.30	99.70	0.00	0.00	335
KomaramBheemAsifabad	0.53	99.47	0.00	0.00	189
Macherial	0.00	100.00	0.00	0.00	381
Mahbubnagar	0.00	100.00	0.00	0.00	172

Medak	0.00	100.00	0.00	0.00	387
Nalgonda	0.00	100.00	0.00	0.00	43
Nizamabad	0.00	99.72	0.00	0.28	356
Peddapalli	0.00	100.00	0.00	0.00	348
Sangareddy	0.00	100.00	0.00	0.00	195
Siddipet	0.00	100.00	0.00	0.00	360
Vikarabad	0.35	99.65	0.00	0.00	282
Warangal (Urban)	1.45	92.75	2.17	3.62	138
YadadriBhuvanagiri	5.88	94.12	0.00	0.00	17

3.14. Management of HIV infections

This refers to the enrolment of HIV positive respondents in HIV care, either for pre-ART or ART services, at the time of surveillance. At the state level, 47% (n=8) of the respondents whom with HIV positive results were taking care from Government hospital/ART centres.

Table 17: District-wise percentage of respondents with Management of HIV infections in Telangana, HSS 2016-17

(If respondent whom say Positive for privious HIV test and their current HIV management)

	(1) ART	(2) NGO	(3) PVt	(4)Pharmacist/Chemist	(5) Alternative/non Allopathic	(6) Any other type	(7) Not seeking taking for HIV management	(1)+(2)	(1)+(3)	(1)+(2)+(3)	(1)+(2)+(3)+(6)	(1)+(2)+(6)	No Answer	total
Telangana	47.1	0	5.88	0	0	5.88	23.5	0	5.88	0	0	5.88	5.88	17
Adilabad	100	0	0	0	0	0	0	0	0	0	0	0	0	1
BhadradriKothagudem	100	0	0	0	0	0	0	0	0	0	0	0	0	2
Hyderabad	20	0	0	0	0	20	60	0	0	0	0	0	0	5
Jagitial	50	0	50	0	0	0	0	0	0	0	0	0	0	2
Jangon	0	0	0	0	0	0	0	0	0	0	0	100	0	1
Khammam	100	0	0	0	0	0	0	0	0	0	0	0	0	1
KomaramBheemAsifabad	0	0	0	0	0	0	0	0	100	0	0	0	0	1
Vikarabad	0	0	0	0	0	0	100	0	0	0	0	0	0	1
Warangal (Urban)	100	0	0	0	0	0	0	0	0	0	0	0	0	2
YadadriBhuvanagiri	0	0	0	0	0	0	0	0	0	0	0	0	100	1

3.15. ART Uptake

This refers to the current uptake of 'Antiretroviral therapy' by HIV positive respondents (N=31). At the state level, 52.9% of the respondents with HIV positive were currently taking ART.

Table 18: District-wise percentage of HIV positive respondents with ART uptake in Telangana, HSS 2016-17

State/District	Yes	No	
	%	%	N
Telangana	52.9	47.1	17
Adilabad	100.0	0.0	1
BhadradriKothagudem	100.0	0.0	2
Hyderabad	20.0	80.0	5
Jagitial	50.0	50.0	2
Jangaon	100.0	0.0	1
Khammam	100.0	0.0	1
KomaramBheemAsifabad	0.0	100.0	1
Vikarabad	0.0	100.0	1
Warangal (Urban)	100.0	0.0	2
YadadriBhuvanagiri	0.0	100.0	1

CHAPTER 4

LEVELS OF HIV PREVALENCE AMONG ANC CLINIC ATTENDEES

HIV prevalence is the proportion of respondents who are found HIV positive at a given point of time in a specified geographic area. It indicates the burden of the epidemic in different population groups.

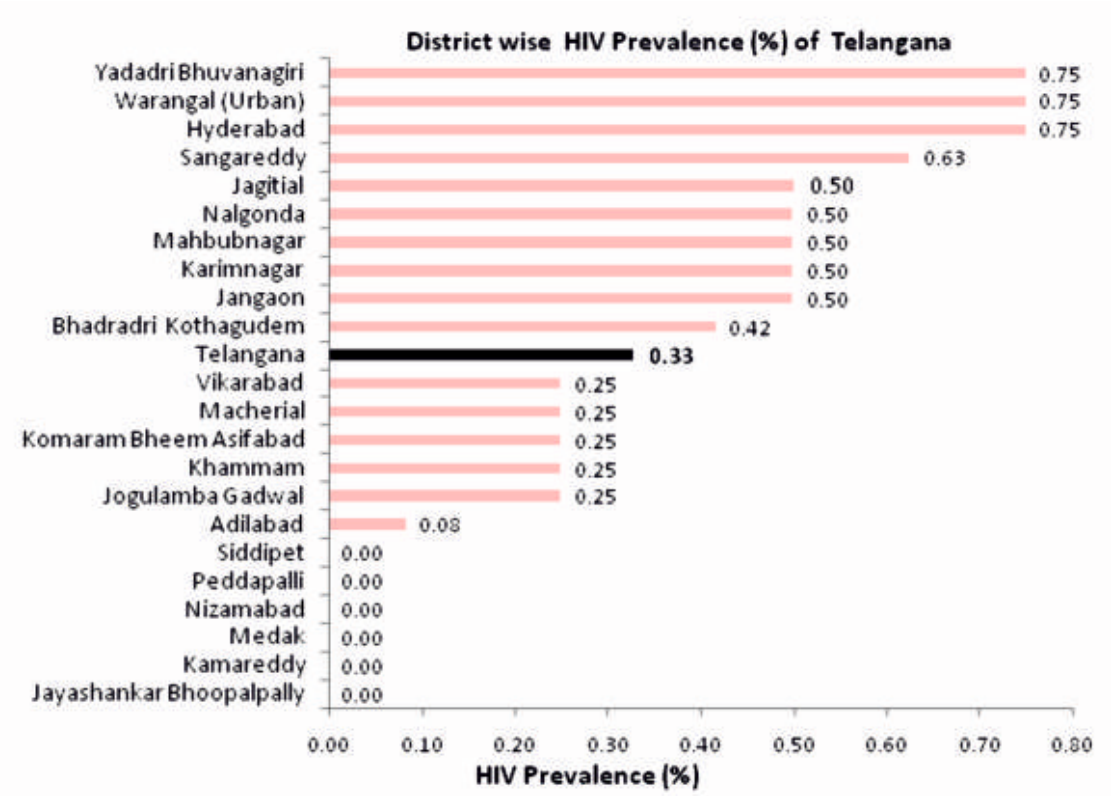
HIV prevalence among ANC clinic attendees is considered as proxy for HIV burden in general population. HIV prevalence of 1% or more among ANC clinic attendees is considered as high level, 0.5 - 0.99% is considered as moderate level and less than 0.5% is considered as low HIV prevalence for the analysis purpose in this report. This chapter describes the levels of HIV prevalence among ANC clinic attendees at state and district level.

4.1. HIV Prevalence at State District Level

Table 19: HIV Prevalence at State & District Level

District	Positive (%)	Grand Total
JayashankarBhoopalpally	0.00	400
Kamareddy	0.00	576
Medak	0.00	400
Nizamabad	0.00	600
Peddapalli	0.00	400
Siddipet	0.00	400
Adilabad	0.08	1200
JogulambaGadwal	0.25	400
Khammam	0.25	400
KomaramBheemAsifabad	0.25	400
Macherial	0.25	400
Vikarabad	0.25	400
Telangana	0.33	11575
BhadradriKothagudem	0.42	1200
Jangaon	0.50	400
Karimnagar	0.50	400
Mahbubnagar	0.50	400
Nalgonda	0.50	400
Jagitial	0.50	399
Sangareddy	0.63	800
Hyderabad	0.75	800
Warangal (Urban)	0.75	400
YadadriBhuvanagiri	0.75	400

Figure 15: HIV Prevalence among (%) among ANC Clinic Attendees by district, HSS 2016-17



CHAPTER 5

HIV PREVALENCE AMONG ANC CLINIC ATTENDEES BY BACKGROUND CHARACTERISTICS

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.

This chapter gives details about HIV/AIDS prevalence as observed against the key fourteen demographic and socio-economic variables which were recorded for each respondent. Fully acknowledging that several factors work in tandem or individually to either cause or prevent HIV, hence we do not suggest any evident causation by projecting the key variables vis a vis the HIV prevalence, as risk factors for acquiring HIV. However, this sort of detailed analysis will help the programme and policy makers to understand the risk factors associated with transmission of HIV/AIDS with particular demographic characteristics. This chapter presents cross tabulations of demographic variables with HIV/AIDS positivity amongthe ANC clinic attendees. A detailed state-wise analysis will be needed to understand region wise variations, applying local knowledge about vulnerabilities and risk factors.

The following sections present the findings for each of these background characteristics:

1. Age

2. Literacy status

3. Order of current pregnancy

4. Duration of Pregnancy

5. ANC service uptake

6. Source of referral to the ANC clinic

7. Current place of residence

8. Current occupation of

9. Current occupation of spouse

10. Migration status of spouse

5.1. HIV Prevalence among ANC Clinic Attendees by Age

Figure 16: HIV Prevalence among ANC Clinic Attendees by Age, HSS 2016-17, Telangana

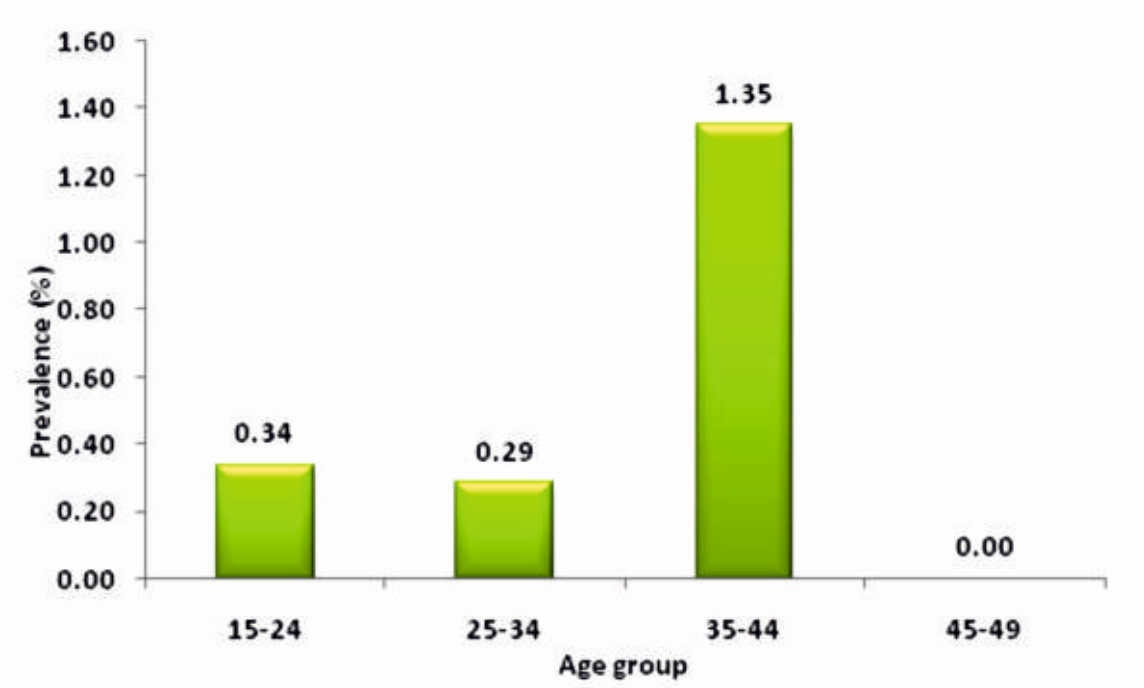


Table 20 HIV Prevalence among ANC Clinic Attendees by Age

	15-24		25-34		35-44		45-49		Grand Total
State/Districts	%	Total	%	Total	%	Total	%	Total	N
Telangana	0.34	8006	0.29	3495	1.35	74	0	0.00	11575
Adilabad	0.00	847	0.29	341	0.00	12	0	0.00	1200
BhadradriKothagudem	0.41	968	0.43	231	0.00	1	0	0.00	1200
Hyderabad	0.87	458	0.60	331	0.00	11	0	0.00	800
Jagitial	0.81	246	0.00	147	0.00	6	0	0.00	399
Jangaon	0.00	300	1.06	94	16.67	6	0	0.00	400
JayashankarBhoopalpally	0.00	289	0.00	110	0.00	1	0	0.00	400
JogulambaGadwal	0.00	291	0.93	108	0.00	1	0	0.00	400
Kamareddy	0.00	323	0.00	250	0.00	3	0	0.00	576
Karimnagar	0.82	245	0.00	154	0.00	1	0	0.00	400
Khammam	0.30	332	0.00	68	0.00	0	0	0.00	400
KomaramBheemAsifabad	0.44	227	0.00	170	0.00	3	0	0.00	400
Macherial	0.37	268	0.00	129	0.00	3	0	0.00	400

Mahbubnagar	0.67	297	0.00	100	0.00	3	0	0.00	400
Medak	0.00	326	0.00	74	0.00	0	0	0.00	400
Nalgonda	0.33	300	1.03	97	0.00	3	0	0.00	400
Nizamabad	0.00	319	0.00	270	0.00	11	0	0.00	600
Peddapalli	0.00	280	0.00	117	0.00	3	0	0.00	400
Sangareddy	0.73	548	0.40	251	0.00	1	0	0.00	800
Siddipet	0.00	300	0.00	98	0.00	2	0	0.00	400
Vikarabad	0.43	230	0.00	167	0.00	3	0	0.00	400
Warangal (Urban)	0.68	295	0.95	105	0.00	0	0	0.00	400
YadadriBhuvanagiri	0.63	317	1.20	83	0.00	0	0	0.00	400

5.2. HIV Prevalence among ANC Clinic Attendees by Literacy Status

Under HSS 2014-15, TELANGANA, HIV prevalence among ANC Clinic attendees the literacy status was classified into five categories:

1. **Illiterate:** people with no formal or non-formal education the HIV prevalence is 0.75%
2. **Literate and till 5th standard:** people with non-formal education or those who joined school but had not studied beyond 5th standard the HIV prevalence is 0.57%
3. **6th to 10th standard:** people who studied beyond 5th standard but not beyond 10th standard the HIV prevalence is 0.26%.
4. **11th to graduation:** people who studied beyond 5th standard but not beyond 10th standard the HIV prevalence is 0.26%.
5. **Post-graduation:** people who studied beyond graduation the HIV prevalence is zero.

Figure 17: HIV Prevalence (%) among ANC Clinic Attendees by Literacy Status, HSS 2016-17, Telangana

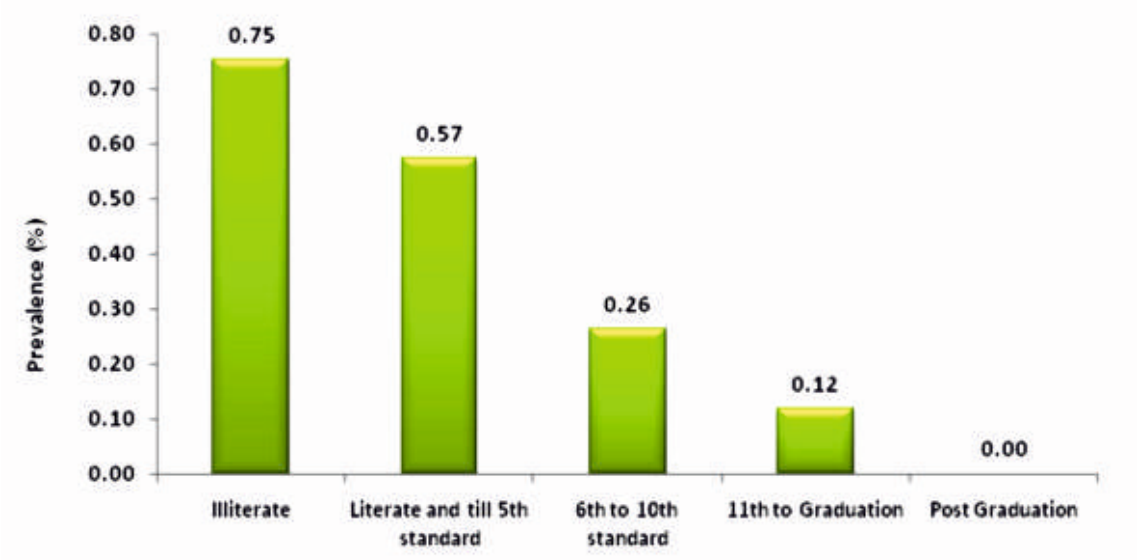


Table 21: HIV Prevalence (%) among ANC Clinic Attendees by Literacy Status and Districts, HSS 2016-17, Telangana

State/District	1. Illiterate Total		2. Literate and till 5th standard Total		3. 6th to 10th standard Total		4. 11th to Graduation Total		5. Post Graduation Total		
	%	Total	%	Total	%	Total	%	Total	%	Total	N
Telangana	0.75	1994	0.57	1223	0.26	4571	0.12	3393	0.00	383	11564
Adilabad	0.00	305	0.00	142	0.23	444	0.00	292	0.00	14	1197
BhadradriKothagudem	1.42	141	0.49	206	0.40	496	0.00	312	0.00	45	1200
Hyderabad	4.44	45	2.38	42	0.28	357	0.69	288	0.00	67	799
Jagitial	3.08	65	0.00	38	0.00	171	0.00	114	0.00	11	399
Jangaon	2.70	37	12.50	8	0.00	164	0.00	174	0.00	16	399
JayashankarBhoopalpally	0.00	57	0.00	60	0.00	138	0.00	136	0.00	8	399
JogulambaGadwal	0.00	211	0.00	27	1.01	99	0.00	59	0.00	4	400
Kamareddy	0.00	55	0.00	103	0.00	211	0.00	188	0.00	18	575
Karimnagar	4.35	46	0.00	20	0.00	156	0.00	139	0.00	39	400
Khammam	0.00	70	0.00	29	0.57	176	0.00	115	0.00	9	399
KomaramBheemAsifabad	0.00	37	0.00	60	0.45	223	0.00	76	0.00	4	400
Macherial	2.13	47	0.00	31	0.00	139	0.00	162	0.00	21	400
Mahbubnagar	0.95	105	2.33	43	0.00	155	0.00	92	0.00	5	400
Medak	0.00	47	0.00	49	0.00	193	0.00	111	0.00		400
Nalgonda	0.00	50	2.99	67	0.00	189	0.00	93	0.00		399
Nizamabad	0.00	60	0.00	166	0.00	252	0.00	100	0.00	22	600
Peddapalli	0.00	28	0.00	14	0.00	169	0.00	162	0.00	27	400
Sangareddy	0.77	388	0.00	41	0.46	218	0.70	143	0.00	9	799
Siddipet	0.00	32	0.00	19	0.00	138	0.00	190	0.00	21	400
Vikarabad	0.00	105	0.00	22	0.53	189	0.00	82	0.00	1	399
Warangal (Urban)	0.00	32	0.00	15	2.21	136	0.00	196	0.00	21	400
YadadriBhuvanagiri	3.23	31	4.76	21	0.00	158	0.59	169	0.00	21	400

5.3. HIV Prevalence among ANC Clinic Attendees by Order of Pregnancy

The order of pregnancy denotes the number of times a woman has become pregnant. It includes the number of live births, still births and abortions. It is also referred to as 'gravida'. As noted earlier in the context of HIV, order of pregnancy indicates the duration of exposure to sexual risks, so HIV prevalence among primi-gravida is considered as a proxy for new HIV infections and is an indicator of state HIV incidence.

Figure 18: HIV Prevalence (%) among ANC Clinic Attendees by Order of Pregnancy, HSS 2016-17, Telangana

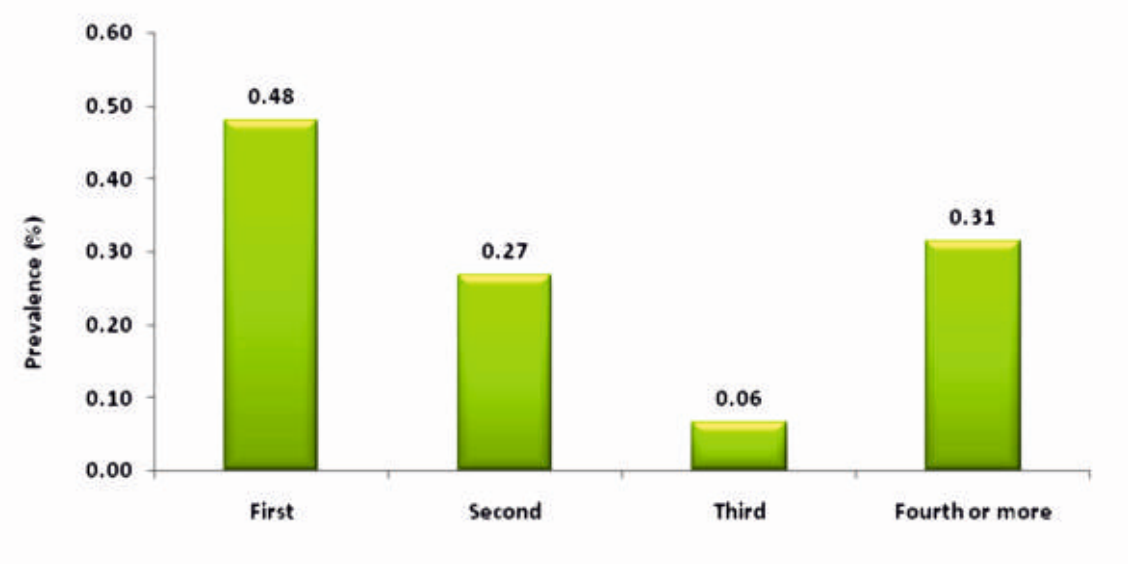


Table 22: HIV Prevalence (%) among ANC Clinic Attendees by Order of Pregnancy and districts, HSS 2016-17, Telangana

State/District	1. First		2. Second		3. Third		4. Fourthor more		
	%	N	%	N	%	N	%	N	Total
Telangana	0.48	4812	0.27	4888	0.06	1549	0.31	320	11569
Adilabad	0.00	525	0.00	494	0.00	138	2.33	43	1200
BhadradriKothagudem	0.40	496	0.57	525	0.00	155	0.00	23	1199
Hyderabad	1.48	337	0.34	297	0.00	134	0.00	31	799
Jagitial	0.66	152	0.00	189	2.04	49	0.00	9	399
Jangaon	1.03	195	0.00	165	0.00	37	0.00	3	400
JayashankarBhoopalpally	0.00	184	0.00	170	0.00	40	0.00	4	398
JogulambaGadwal	0.00	141	0.63	159	0.00	68	0.00	31	399
Kamareddy	0.00	247	0.00	239	0.00	78	0.00	12	576
Karimnagar	1.18	169	0.00	172	0.00	55	0.00	4	400
Khammam	0.61	165	0.00	202	0.00	31	0.00	2	400

KomaramBheemAsifabad	0.58	172	0.00	173	0.00	45	0.00	10	400
Macherial	0.00	152	0.48	209	0.00	36	0.00	3	400
Mahbubnagar	0.59	169	0.64	156	0.00	60	0.00	15	400
Medak	0.00	177	0.00	164	0.00	54	0.00	5	400
Nalgonda	0.58	171	0.61	165	0.00	55	0.00	9	400
Nizamabad	0.00	238	0.00	220	0.00	106	0.00	35	599
Peddapalli	0.00	163	0.00	182	0.00	45	0.00	10	400
Sangareddy	1.05	287	0.65	309	0.00	175	0.00	29	800
Siddipet	0.00	170	0.00	164	0.00	51	0.00	15	400
Vikarabad	0.62	161	0.00	172	0.00	55	0.00	12	400
Warangal (Urban)	0.60	168	1.17	171	0.00	50	0.00	11	400
YadadriBhuvanagiri	1.16	173	0.52	191	0.00	32	0.00	4	400

5.4 HIV Prevalence among ANC Clinic Attendees by Duration of Pregnancy

Figure 19: HIV Prevalence (%) among ANC Clinic Attendees by Duration of Pregnancy, HSS 2016-17, Telangana

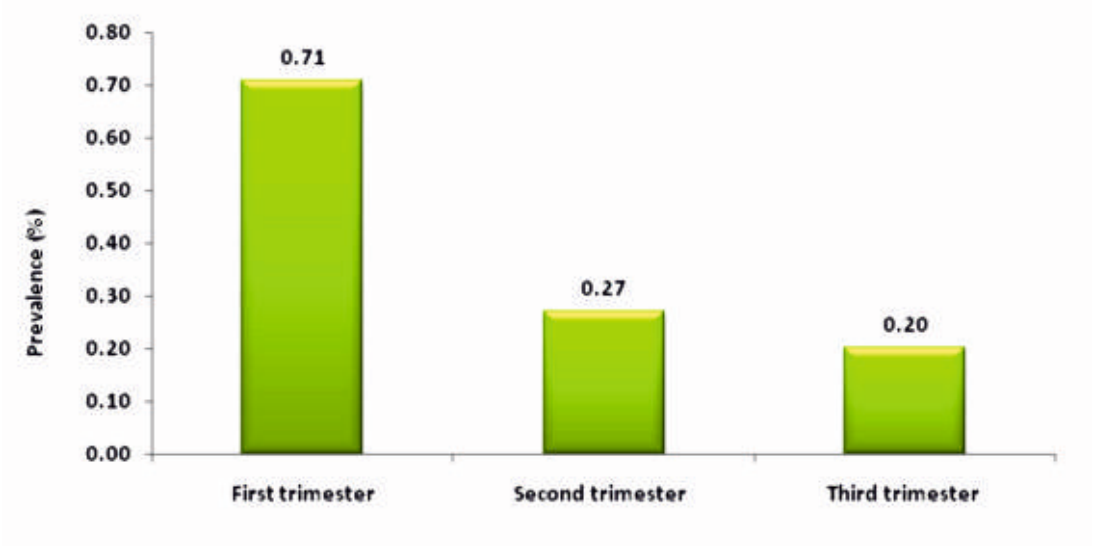


Table 23: HIV Prevalence (%) among ANC Clinic Attendees by Duration of Pregnancy and districts, HSS 2016-17, Telangana

State/District	1. First		2. Second		3. Third		Grand Total
	%	N	%	N	%	N	
Telangana	0.71	2262	0.27	4815	0.20	4491	11568
Adilabad	0.00	377	0.00	449	0.27	374	1200
BhadradriKothagudem	0.43	231	0.57	526	0.23	442	1199
Hyderabad	0.93	214	0.62	325	0.77	260	799
Jagitial	0.00	9	0.00	107	0.71	283	399
Jangaon	0.00	43	1.50	133	0.00	224	400
JayashankarBhoopalpally	0.00	33	0.00	131	0.00	236	400
JogulambaGadwal	0.00	57	0.57	176	0.00	167	400
Kamareddy	0.00	135	0.00	239	0.00	202	576
Karimnagar	0.00	68	1.18	170	0.00	162	400
Khammam	2.33	43	0.00	167	0.00	190	400
KomaramBheemAsifabad	1.35	74	0.00	248	0.00	78	400
Macherial	0.00	71	0.62	162	0.00	166	399
Mahbubnagar	3.23	62	0.00	268	0.00	70	400
Medak	0.00	65	0.00	199	0.00	136	400
Nalgonda	1.45	69	0.69	144	0.00	186	399
Nizamabad	0.00	158	0.00	258	0.00	184	600
Peddapalli	0.00	56	0.00	135	0.00	209	400
Sangareddy	1.74	115	0.28	353	0.61	329	797
Siddipet	0.00	56	0.00	177	0.00	167	400
Vikarabad	2.38	42	0.00	239	0.00	119	400
Warangal (Urban)	1.33	225	0.00	87	0.00	88	400
YadadriBhuvanagiri	3.39	59	0.00	122	0.46	219	400

5.5HIV Prevalence among ANC Clinic Attendees by ANC service uptake

Figure 20: HIV Prevalence (%) among ANC Clinic Attendees by Duration of Pregnancy and districts, HSS 2016-17, Telangana

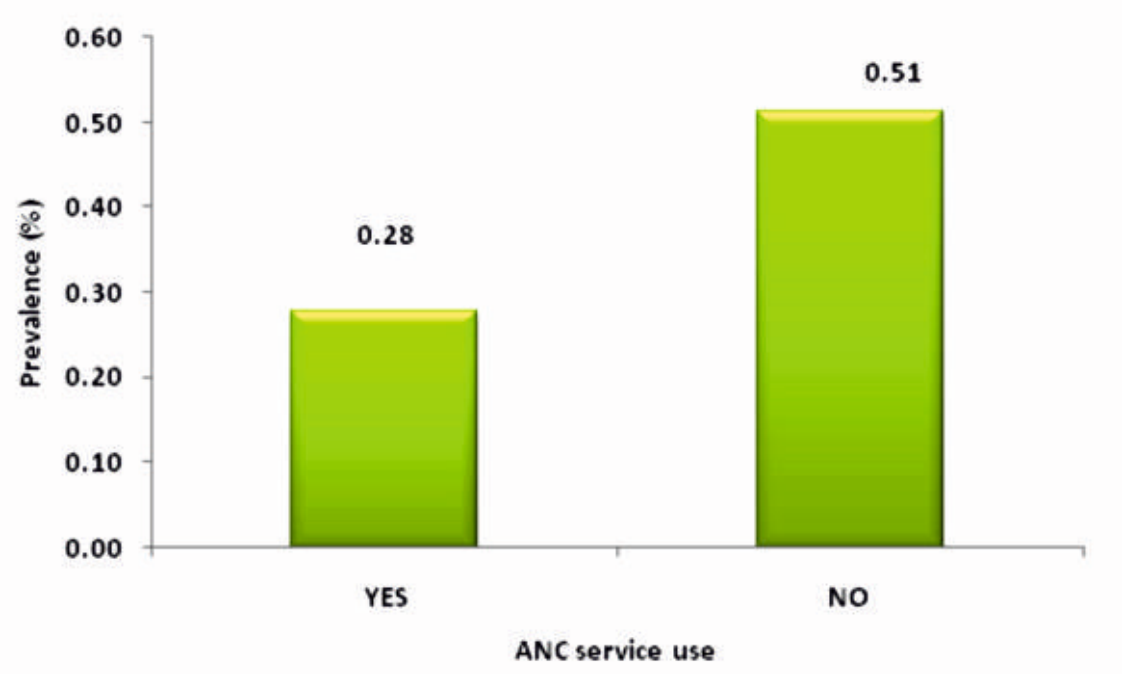


Table 24: HIV Prevalence (%) among ANC Clinic Attendees by Duration of Pregnancy and districts, HSS 2016-17, Telangana

State/District	Yes		No		Total
	%	N	%	N	
Telangana	0.28	9017	0.51	2540	11557
Adilabad	0.10	1037	0.00	163	1200
BhadradriKothagudem	0.41	975	0.45	223	1198
Hyderabad	1.02	393	0.50	403	796
Jagitial	0.50	399			399
Jangaon	0.52	382	0.00	18	400
JayashankarBhoopalpally	0.00	394	0.00	6	400
JogulambaGadwal	0.00	66	0.30	334	400
Kamareddy	0.00	542	0.00	34	576
Karimnagar	0.50	400			400
Khammam	0.25	397	0.00	1	398
KomaramBheemAsifabad	0.25	396	0.00	4	400
Macherial	0.25	400			400
Mahbubnagar	0.00	125	0.73	274	399
Medak	0.00	400			400

Nalgonda	0.00	110	0.69	290	400
Nizamabad	0.00	398	0.00	198	596
Peddapalli	0.00	400			400
Sangareddy	0.63	793	0.00	4	797
Siddipet	0.00	387	0.00	12	399
Vikarabad	0.25	398	0.00	2	400
Warangal (Urban)	0.53	188	0.94	212	400
YadadriBhuvanagiri	0.00	37	0.83	362	399

5.6. HIV Prevalence among ANC Clinic Attendees by Source of Referral

Figure 21: HIV Prevalence (%) among ANC Clinic Attendees by Source of Referral, HSS 2016-17, Telangana

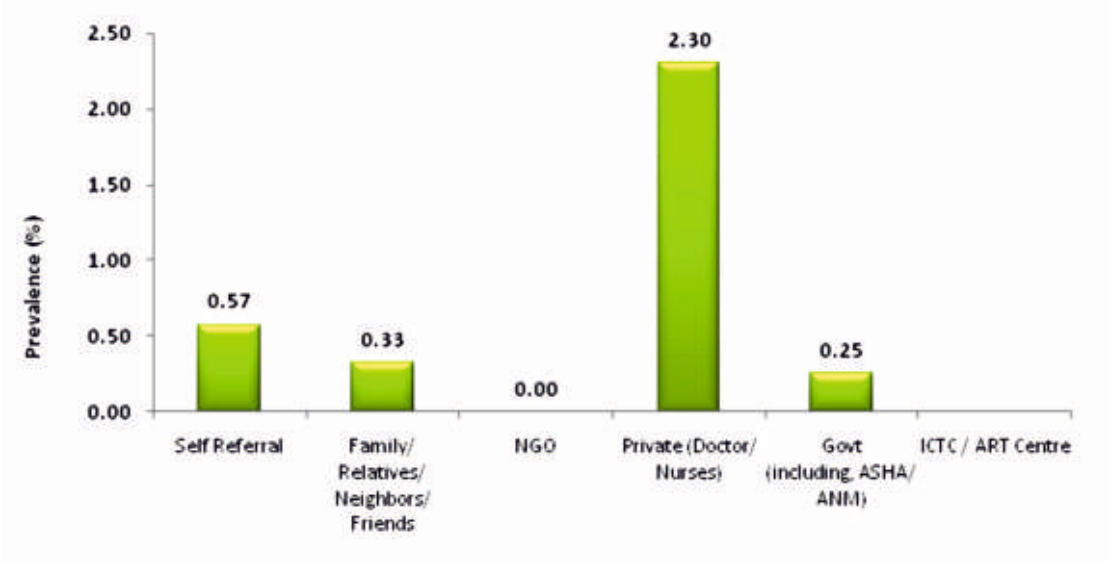


Table 25: HIV Prevalence (%) among ANC Clinic Attendees by Source of Referral, HSS 2016-17, Telangana

State/District	1. Self Referral		2. Family/ Relatives/ Neighbors/ Friends		3. NGO		4. Private (Doctor/ Nurses)		5. Govt (including, ASHA/ ANM)		6. ICTC / ART Centre		Total
	%	N	%	N	%	N	%	N	%	N	%	N	
Telangana	0.57	1568	0.33	2753	0.00	5	2.30	87	0.25	7149			11562
Adilabad	0.00	443	0.30	331			0.00	1	0.00	424			1199
BhadradriKothagudem	1.82	55	0.21	474					0.45	669			1198
Hyderabad	0.55	362	0.29	350			4.00	25	3.23	62			799
Jagitial	1.25	160							0.00	238			398
Jangaon			1.11	90					0.32	310			400
JayashankarBhoopalpally	0.00	9							0.00	389			398
JogulambaGadwal	0.00	34	0.00	188			0.00	8	0.59	170			400
Kamareddy	0.00	36	0.00	42					0.00	498			576
Karimnagar	0.58	172	2.94	34					0.00	194			400
Khammam	0.00	4	0.00	88					0.32	308			400
KomaramBheemAsifabad	0.00	9			0.00	1	20.00	5	0.00	385			400
Macherial	0.00	41	0.00	91					0.37	268			400
Mahbubnagar	1.36	147	0.00	58					0.00	194			399
Medak									0.00	400			400
Nalgonda	0.00	38	0.55	361									399
Nizamabad	0.00	24	0.00	112	0.00	3	0.00	38	0.00	423			600
Peddapalli									0.00	400			400
Sangareddy	4.55	22	0.38	524	0.00	1	0.00	9	0.83	240			796
Siddipet			0.00	5					0.00	395			400
Vikarabad			0.00	3					0.25	397			400
Warangal (Urban)									0.75	400			400
YadadriBhuvanagiri	0.00	12	0.00	2			0.00	1	0.78	385			400

5.7. HIV Prevalence among ANC Clinic Attendees by Place of Residence

Figure 22: HIV Prevalence (%) among ANC Clinic Attendees by Place of residence, HSS 2016-17, Telangana

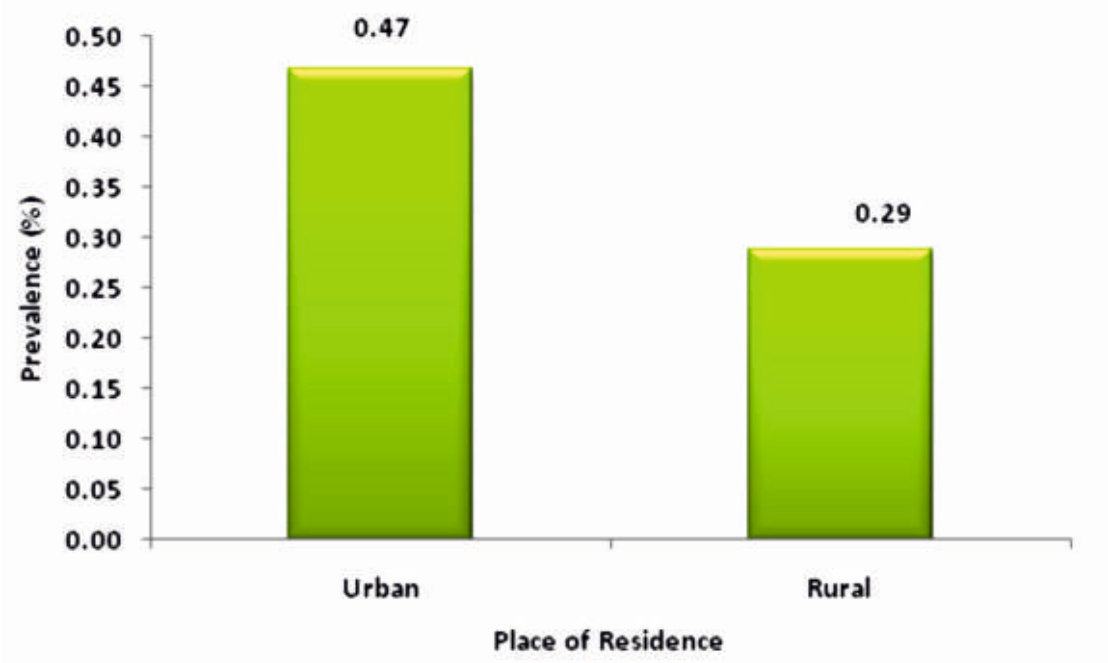


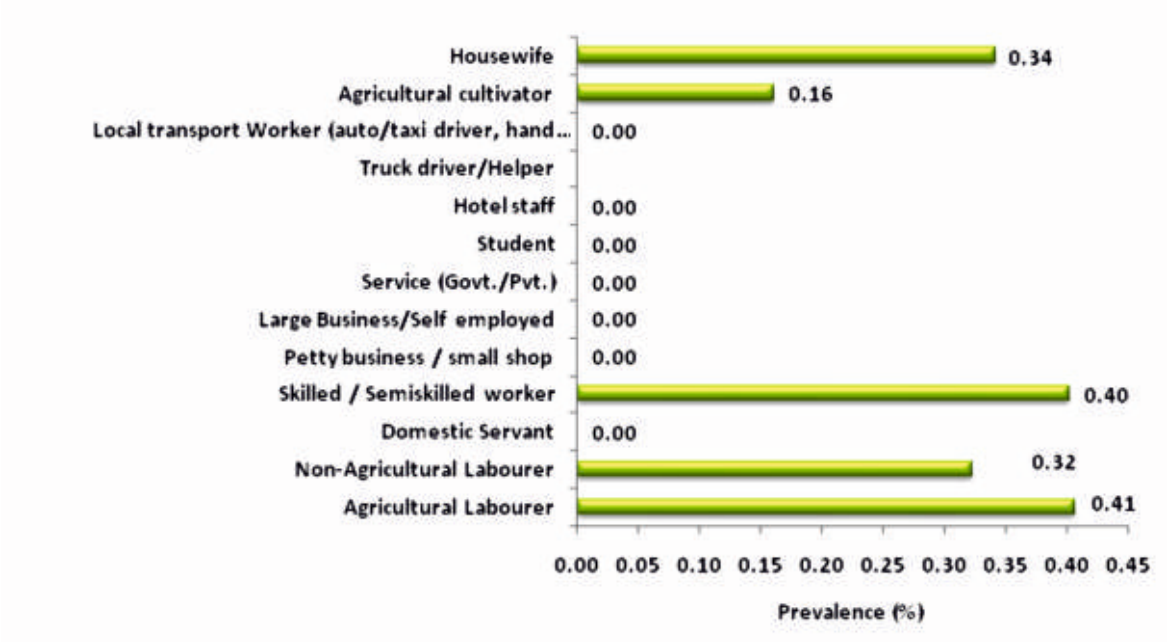
Table 26: HIV Prevalence among ANC Clinic Attendees by Place of Residence and district, HSS 2016-17

State/District	Urban		Rural		Total
	%	N	%	N	
Telangana	0.47	2778	0.29	8709	11487
Adilabad	0.35	283	0.00	915	1198
BhadradriKothagudem	0.30	331	0.46	861	1192
Hyderabad	0.81	744	0.00	41	785
Jagitial	0.00	48	0.57	350	398
Jangaon	0.00	58	0.58	342	400
JayashankarBhoopalpally	0.00	9	0.00	383	392
JogulambaGadwal	0.00	61	0.30	338	399
Kamareddy	0.00	61	0.00	512	573
Karimnagar	1.23	81	0.32	317	398
Khammam	1.19	84	0.00	288	372
KomaramBheemAsifabad	0.48	209	0.00	188	397
Macherial	0.00	123	0.36	277	400

Mahbubnagar	0.00	53	0.58	346	399
Medak	0.00		0.00	400	400
Nalgonda	0.00	52	0.59	338	390
Nizamabad	0.00	252	0.00	346	598
Peddapalli	0.00	98	0.00	302	400
Sangareddy	1.92	52	0.53	748	800
Siddipet	0.00	96	0.00	303	399
Vikarabad	4.35	23	0.00	377	400
Warangal (Urban)	0.00	56	0.88	341	397
YadadriBhuvanagiri	0.00	4	0.76	396	400

5.8. HIV Prevalence among ANC Clinic Attendees by Current Occupation of Respondent

Figure 23: HIV Prevalence (%) among ANC Clinic Attendees by Current Occupation of Respondent, HSS 2016-17, Telangana



:Table 27: HIV Prevalence among ANC Clinic Attendees by Current Occupation of Respondent, HSS 2016-17

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
	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	
Telangana	0.41	1473	0.32	927	0.00	72	0.40	496	0.00	65	0.00	15	0.00	184	0.00	98	0.00	8			0.00	2	0.16	622	0.34	7608	11570
Adilabad	0.00	236	0.00	193			0.00	51			0.00	1	0.00	16									0.00	8	0.14	695	1200
BhadradriKothagudem	0.00	95	0.00	36			0.00	2	0.00	6			0.00	14	0.00	6							0.00	1	0.48	1040	1200
Hyderabad	0.00	1	0.00	3	0.00	8	0.00	6	0.00	3			0.00	31	0.00	11							0.00	2	0.82	734	799
Jagitial	3.23	31	2.27	44			0.00	108	0.00	4			0.00	3	0.00	3							0.00	22	0.00	184	399
Jangaon	0.00	38	3.70	27			0.00	7	0.00	7			0.00	6	0.00	4									0.32	311	400
JayashankarBhoopalpally	0.00	149	0.00	13			0.00	3	0.00	2	0.00	1	0.00	8	0.00	2							0.00	51	0.00	170	399
JogulambaGadwal	0.00	55	0.00	4			0.00	14	0.00	3	0.00	2	0.00	4	0.00	4							0.49	204	0.00	110	400
Kamareddy	0.00	54	0.00	134			0.00	151	0.00	1	0.00	1	0.00	12	0.00	8									0.00	215	576
Karimnagar	3.85	26	0.00	78			0.00	18	0.00	6			0.00	21	0.00	6					0.00	1	0.00	17	0.44	227	400
Khammam	0.00	100	0.00	7	0.00	11	0.00	5	0.00	3	0.00	6	0.00	12	0.00	5					0.00	1	0.00	29	0.45	220	399
KomaramBheemAsifabad	0.00	50	0.00	2			50.00	2	0.00	1			0.00	1											0.00	344	400
Macherial	12.50	8	0.00	5			0.00	1	0.00	2			0.00	2	0.00	1									0.00	381	400
Mahbubnagar	1.42	141	0.00	36			0.00	2	0.00	2			0.00	5	0.00	1									0.00	213	400
Medak	0.00	15	0.00	4			0.00	5	0.00	6			0.00	7	0.00	1							0.00	165	0.00	197	400
Nalgonda	0.00	90	0.00	2	0.00	1	100.00	1							0.00	4									0.33	302	400
Nizamabad	0.00	84	0.00	95	0.00	22	0.00	40	0.00	7	0.00	1	0.00	10	0.00	17							0.00	4	0.00	319	599
Peddapalli	0.00	45	0.00	34			0.00	1	0.00	1			0.00	2									0.00	9	0.00	308	400
Sangareddy	2.27	44	0.62	162	0.00	23	0.00	13	0.00	6			0.00	8	0.00	10	0.00	8					0.00	72	0.66	454	800
Siddipet	0.00	21	0.00	18			0.00	63			0.00	1	0.00	11	0.00	8							0.00	36	0.00	242	400
Vikarabad	0.00	176	0.00	12	0.00	5	0.00	2	0.00	5	0.00	2	0.00	5	0.00	1									0.52	192	400
Warangal (Urban)	0.00	13	0.00	18	0.00	2							0.00	5	0.00	6							0.00	2	0.85	354	400
YadadriBhuvanagiri	0.00	1					0.00	1					0.00	1											0.76	396	399

5.9. HIV Prevalence among ANC Clinic Attendees by Current Occupation of Spouse

At the state level, HIV Prevalence among ANC Clinic Attendees by Current Occupation of Respondent's Spouse are shown in the table 18. HIV Prevalence was high in never married/ widowed/ divorced/ separated woman (16%), followed by Truck Driver/Helper (0.91%) , Hotel staff (0.80%) , Large Business/ Self employed (0.65%), local transport worker (0.62%), Agricultural Labourer (0.5%), Petty business/ small shop (0.49), Non-Agricultural Labourer (0.39%), Agricultural Labourer (0.31%), Agricultural cultivator (0.24%) and 0% in the following categories: Students, Domestic Servant and unemployed (Figure 16).

Figure 24: HIV Prevalence among ANC Clinic Attendees by Current Occupation of Spouse, HSS 2016-17

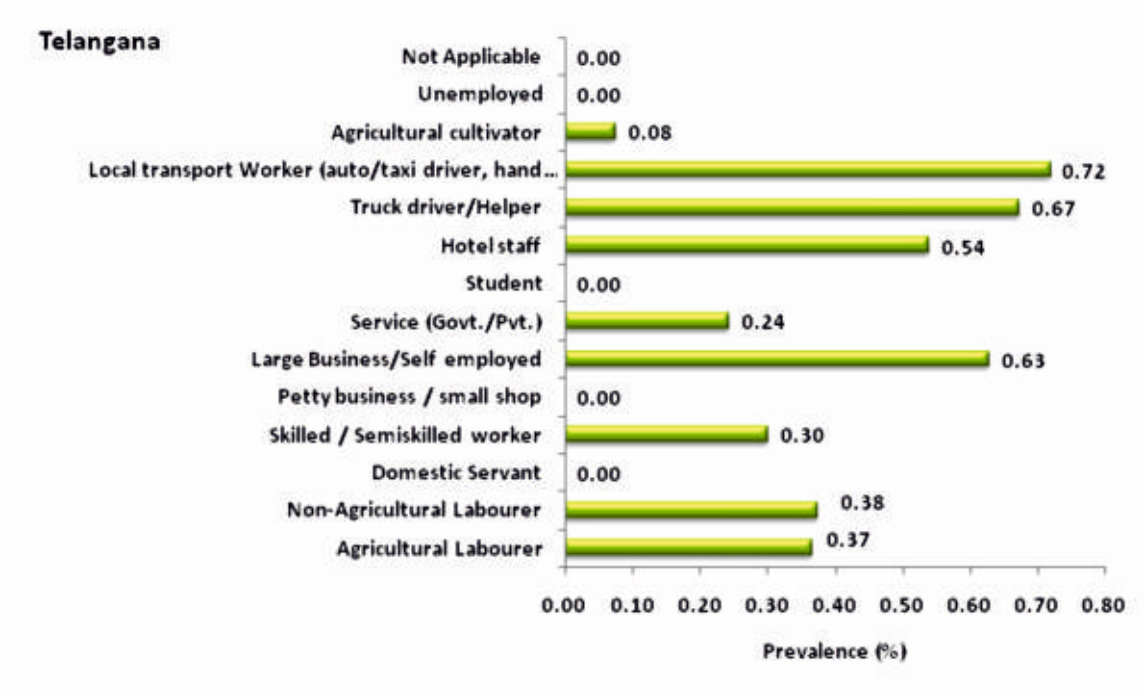


Table 28: HIV Prevalence among ANC Clinic Attendees by Current Occupation of Spouse, HSS 2016-17

State/District	Agricultural		NonAgricultural 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/		Unemployed		Not Applicable	
	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
Telangana	**0.37**	**1906**	**0.38**	**2399**	**0.00**	**3**	**0.30**	**1325**	**0.00**	**671**	**0.63**	**159**	**0.24**	**2050**	**0.00**	**72**	**0.54**	**185**	**0.67**	**594**	**0.72**	**833**	**0.08**	**1320**	**0.00**	**30**	**0.00**	**20**
Adilabad	0.00	90	0.00	304			0.00	84	0.00	88	0.00	30	0.00	189	0.00	2	0.00	19	3.33	30	0.00	108	0.00	250	0.00	5		
BhadradriKothagudem	0.50	399	0.40	248			0.00	118	0.00	78	0.00	6	0.00	173	0.00	6	0.00	4	1.47	68	1.39	72	0.00	25	0.00	3		
Hyderabad	0.00	2	1.33	75			0.78	128	0.00	84	0.00	29	0.60	333	0.00	2	0.00	19	0.00	14	1.90	105	0.00	6			0.00	2
Jagitial	0.00	65	0.00	70			0.00	67	0.00	24			0.00	33	0.00	2			3.33	30	5.00	20	0.00	87	0.00	1		
Jangaon	0.00	100	1.37	73			1.39	72	0.00	28	0.00	1	0.00	70	0.00	3			0.00	12	0.00	40						
JayashankarBhoopalpally	0.00	169	0.00	31			0.00	23	0.00	15	0.00	4	0.00	44	0.00	3			0.00	9	0.00	22	0.00	74	0.00	2	0.00	2
JogulambaGadwal	0.00	44	3.13	32			0.00	34	0.00	14	0.00	12	0.00	33	0.00	3	0.00	3	0.00	16	0.00	13	0.00	194	0.00	2		
Kamareddy	0.00	83	0.00	222			0.00	135	0.00	15	0.00	4	0.00	63	0.00	4	0.00	2	0.00	31	0.00	5	0.00	11	0.00	1		
Karimnagar	2.50	40	0.00	88			0.00	57	0.00	24	0.00	2	0.00	74	0.00	3	20.00	5	0.00	47	0.00	24	0.00	35				
Khammam	0.00	76	0.00	42			0.00	99	0.00	11	50.00	2	0.00	54	0.00	2	0.00	4	0.00	11	0.00	38	0.00	61				
KomaramBheemAsifabad	0.00	94	0.00	60			0.00	27	0.00	58	0.00	8	0.00	99			0.00	2	0.00	9	2.94	34	0.00	7	0.00	2		
Macherial	0.00	13	0.00	130			5.88	17	0.00	16	0.00	6	0.00	107			0.00	1	0.00	12	0.00	35	0.00	58	0.00	5		
Mahbubnagar	0.74	135	0.79	126			0.00	23	0.00	24	0.00	2	0.00	32	0.00	2	0.00	3	0.00	2	0.00	50	0.00	1				
Medak	0.00	15	0.00	30			0.00	20	0.00	23	0.00	2	0.00	129	0.00	1	0.00	3	0.00	2	0.00	36	0.00	138			0.00	1
Nalgonda	2.08	48	0.00	48			0.00	61	0.00	8	0.00	1	0.00	51	0.00	10			1.06	94			0.00	78	0.00	1		
Nizamabad	0.00	125	0.00	209			0.00	29	0.00	39	0.00	12	0.00	61	0.00	7	0.00	8	0.00	21	0.00	71	0.00	8	0.00	1	0.00	8
Peddapalli	0.00	60	0.00	139			0.00	24	0.00	20	0.00	2	0.00	69			0.00	2	0.00	9	0.00	46	0.00	28			0.00	1
Sangareddy	4.17	48	0.53	187	0.00	1	0.61	164	0.00	38	0.00	7	0.00	108	0.00	3	0.00	102	0.00	21	3.57	28	0.00	85	0.00	3	0.00	4
Siddipet	0.00	38	0.00	83	0.00	1	0.00	8	0.00	17	0.00	9	0.00	105	0.00	4	0.00	2	0.00	21	0.00	32	0.00	79	0.00	1		
Vikarabad	0.00	177	1.47	68			0.00	42	0.00	7	0.00	16	0.00	40	0.00	1	0.00	2	0.00	14	0.00	21	0.00	10	0.00	1	0.00	1
Warangal (Urban)	0.00	29	0.00	79	0.00	1	0.00	32	0.00	15	0.00	4	2.70	74	0.00	8	0.00	3	0.00	34	0.00	33	1.18	85	0.00	2	0.00	1
YadadriBhuvanagiri	0.00	56	3.64	55			0.00	61	0.00	25			0.92	109	0.00	6	0.00	1	0.00	87								

5.10. HIV Prevalence among ANC Clinic Attendees by Migration Status of Spouse

Figure 25: HIV Prevalence among ANC Clinic Attendees by Migration status of Spouse, HSS 2016-17

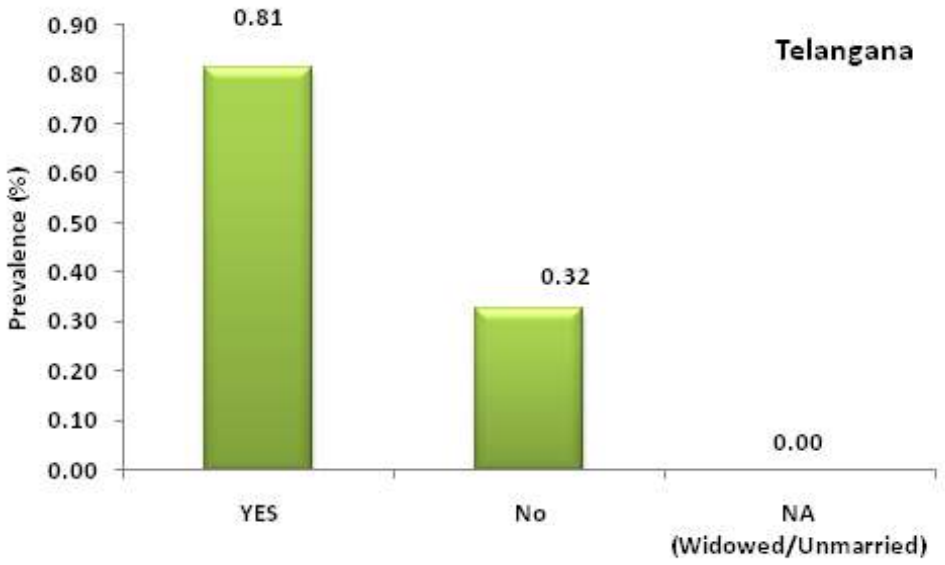


Table 29: HIV Prevalence among ANC Clinic Attendees by Migration status of Spouse, HSS 2016-17

State/District	Yes		No		Not Applicable		Grand Total
	%	N	%	N	%	N	
Telangana	0.81	123	0.32	11409	0.00	20	11552
Adilabad	0.00	3	0.08	1197			1200
Bhadradri Kothagudem	33.33	3	0.33	1196			1199
Hyderabad	0.00	23	0.78	774	0.00	2	799
Jagitial	0.00	11	0.52	388			399
Jangaon	0.00	1	0.50	398			399
JayashankarBhoopalpally	0.00	1	0.00	395	0.00	2	398
JogulambaGadwal	0.00	4	0.25	396			400
Kamareddy	0.00	5	0.00	561			566
Karimnagar			0.50	400			400
Khammam	0.00	5	0.25	393			398
KomaramBheemAsifabad	0.00	1	0.25	399			400
Macherial			0.25	400			400
Mahbubnagar	0.00	3	0.50	397			400
Medak	0.00	2	0.00	397	0.00	1	400
Nalgonda	0.00	1	0.50	399			400
Nizamabad	0.00	26	0.00	566	0.00	8	600
Peddapalli	0.00	6	0.00	393	0.00	1	400
Sangareddy	0.00	6	0.63	788	0.00	4	798
Siddipet	0.00	2	0.00	397			399
Vikarabad	0.00	12	0.26	387	0.00	1	400
Warangal (Urban)	0.00	1	0.75	398	0.00	1	400
Yadadri Bhuvanagiri	0.00	7	0.77	390			397

CHAPTER 6

HIV PREVALENCE TREND AMONG ANC CLINIC ATTENDEES

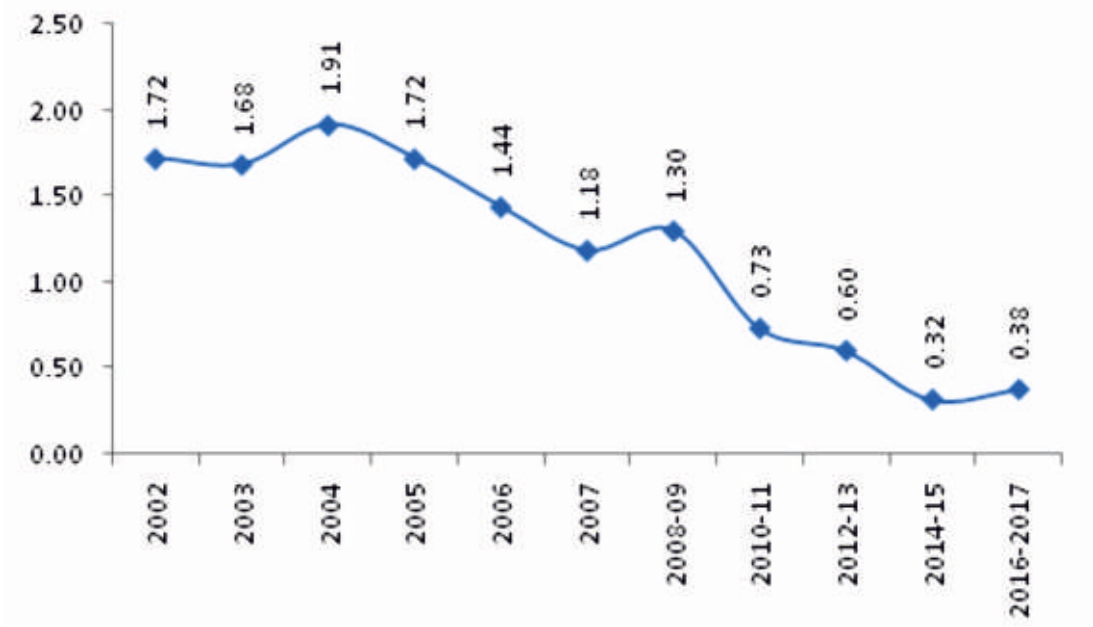
6.1 HIV Prevalence trend at State Level

The primary objective of HIV Sentinel Surveillance is to generate data on trends of HIV prevalence among various population groups in the country and state. 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 has been a critical input to the strategic planning efforts under the National AIDS Control Programme and contributed to shaping the strategies for prevention and control of HIV/AIDS in the state. This chapter presents the trends of HIV prevalence among ANC clinic attendees at state and district levels. 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. Further, in order to smoothen the sampling variations in HIV prevalence due to small sample size at sentinel site level, a three-year moving average was calculated at state/district levels and trends have been analysed using this data. All the invalid sites i.e. sites where sample size was less than 75% (300) of the target sample size of 400, were excluded from trend analysis for that year.

Though there was a clear declining trend seen in Telangana, within the state, there are variations in HIV prevalence among the districts. District level information on HIV is essential for planning district strategies in HIV prevention and control. District wise trend analysis was performed on surveillance data collected during the year 2002-2017 using moving average technique.

Figure 26: HIV prevalence trend at Telangana



CHAPTER 7

SUMMARY

- The total sample of ANC analyzed was 11575across 22 districts in Telangana. The median age of respondents were 23 years in the state and ranged between 16 and 42 years across different districts.
- State level HIV prevalence among ANC respondents (n=11575) was 0.33%.
- HIV Prevalence among the age group of 15-24was 0.34%, followed by the age group of 25-34 (0.29%). Highest prevalence of HIV (1.35%) was found in the age group of 35-44 years. Whereas age groups of 45-49 years showed zero prevalence at the state level.
- The proportion of illiterate ANC was 17.2% at the state level and the HIV prevalence among them was 0.75%. Whereas majority of respondents (39.5%) were falls under the category of 6th to 10th standard and the HIV prevalence among them was 0.26%.
- At the state level, 41.6% of the respondents reported being pregnant for the first time and 42.2% of respondents were reported being second time pregnancy.
- The state level HIV prevalence among ANC clinic attendees in primi-gravida was 0.48%, second gravida was 0.27%, third gravida was 0.06% and in fourth gravida it was 0.31%.
- At the state level, 19.5% of the respondents belonged to the First trimester followed by 41.6% were belonged to the second trimester and 38.8% of respondents were belonged to the Third trimester.
- Highest HIV prevalence (0.71%) was seen in respondents with first trimester.
- At the state level, 78% of the respondents reported that they received ANC services during their current pregnancy.
- At the state level, Govt. service providers (including ASHA/ANM) was identified as the major source of referral to ANC clinics, accounting for 61.8% of respondents, followed by family/relatives/neighbor/friends (23.8%) and self referral (13.6%).
- Highest HIV prevalence (2.30%) was seen in people referred by Private Doctor/Nurses followed by self referral(0.57%).
- At the state level, 75.8% of respondents reported to be currently residing in rural areas.
- The HIV Prevalence in Urban was 0.47% and Rural was calculated as 0.29%.
- At the state level, the majority of the respondents (65.8%) were housewives, and 12.7% of respondents reported to be agricultural labourer and non-agricultural labourer were accounted for 8% of respondents followed by Agricultural cultivator (5.4%).
- Highest HIV prevalence (0.41%) was seen in agricultural labourer category, followed by Skilled/Semiskilledworker (0.40%), and housewives (0.34%).
- At the state level, the spouses of ANC attendees accounting for 20.7% were in non-agricultural labourer, 17.7% were in service (Govt./Pvt.) and 16.5% in agricultural labourer.
- HIV Prevalence was high in the category of Local transport worker (0.72%), followed by Truck driver/Helper (0.67%), and Large Business/ Self Employed category (0.63%).
- At the state level, 1.1% of respondents reported that their spouses were migrants. HIV Prevalence among migrant was 0.81% and among non-migrants was 0.32%.
- At the state level, 41.8% of respondents were tested for HIV during current pregnancy, whereas, 21.3% were tested before current pregnancy and 36.9% of respondents were never tested for HIV previously.

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