# Analysis of STI/RTI Programme Performance

2009-10 & 2010-11



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**National AIDS Control Organisation** 

India's voice against AIDS Department of AIDS Control Ministry of Health & Family Welfare, Government of India www.nacoonline.org

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India's voice against AIDS Department of AIDS Control Ministry of Health & Family Welfare, Government of India www.nacoonline.org NACO acknowledges effort of all field level functionaries, clinic in-charge, counselor of designated clinic, DACO and other DAPCU staff; Programme manager, ORW, peer educators, preferred providers of the TI NGO for contributing towards generating and transmitting data from the field. We also acknowledge contribution of state focal persons at SACS (DD/AD STI, JD TI, TL TSU, PO STI, PO TI, M&E officer and all other staff) in collecting, compiling, analyzing and transferring data to us. Our thanks to all Project Directors of SACS in ensuring timely reporting of data from field and SACS.

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## Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANC	Ante Natal Care
ARD	Ano-Rectal Discharge
ART	Anti-Retroviral Treatment
ВСС	Behavior Change Communication
CMIS	Computerize Management and Information System
DSRC	Designated STI/RTI Clinic
GV	Granuloma Venerum
GUD-H	Genital Ulcer Disease – Herpetic
GUD-NH	Genital Ulcer Disease – Non Herpetic
HIV	Human Immunodeficiency Virus
HRG	High Risk Group
ICTC	Integrated Counseling and Testing Centre
IEC	Information, Education and Communication
IPC	Inter Personal Communication
LAP	Lower Abdominal Pain
NGO	Non Government Organization
PLHIV	People Living with HIV Infection
РРТСТ	Prevention of Parent To Child Transmission
RNTCP	Revised National TB Control Programme
RPR	Rapid Plasma Reagin
RTI	Reproductive Tract Infection
SACS	State AIDS Control Society
STI	Sexually Transmitted Infection
ТІ	Targeted Intervention
ТРНА	Treponema Pallidum Heamagglutination
TG	Transgender
TS	Trans Sexual
UD	Urethral Discharge
VCD	Vaginal Cervical Discharge
VDRL	Venereal Disease Research laboratory

## Analysis of STI/RTI Programme Performance

2009-10 & 2010-11

#### 1. Introduction

STI/RTI is one of the most common conditions which affect young people and causes reproductive morbidity including infertility, cervical cancer and abortion. Mode of transmission of STI and HIV infection is same and presence of STI enhances chances of acquisition and transmission of HIV infection. Prevention and control STI/RTI infection is one of the most cost effective strategies in controlling HIV transmission. Quality and standardized treatment to different sub population groups through syndromic case management is an important component of National STI/RTI control and prevention program in reducing reproductive morbidity and breaking the chain of HIV transmission.

This report highlights the STI/RTI programme performance and achievement in 2009-10 and 2010-11.

### 2. Objective of Data Analysis

To make programme managers at state and field level functionaries to understand, interpret and apply STI data for improving programme performance.

#### **Target Audience**

State level Managers: DD STI, AD STI, JD TI, PO STI, PO TI and TL in TSU.Designated Clinic: Clinic in-charge and Counselor of designated clinic.TI: Programme Manager in TI.

## Annual Report of Sexually Transmitted Infections/ Reproductive Tract Infections Control and Prevention Program - 2009-10

(Source: National consolidated data, CMIS -2009-10)

#### 3.1 Reporting status

There are 2228 units to report STI data every month (938 designated STI/RTI clinics and 1290 TI Projects). However during 2009-10 period, 2036 units ONLY reported , data from these reports is used for current analysis.

Overall reporting from STI clinics has improved (from 38% in 2008-09) to 51% in 2009-10, and it requires strengthening. While 98% of designated STI/RTI clinics are submitting reports monthly, the cause of concern is TI reporting of STI data - about 21% of TI projects are not reporting.

States with low reporting (combined DSRC and TI Projects) are – Assam, Chhattisgarh, Daman & Diu, Goa, Kerala, Karnataka, Nagaland, Meghalaya, Manipur, J&K, TN, Uttaranchal, Orissa and Maharashtra.



Figure 1: State wise reporting status (DSRC and TI combined-2009-10)

## 3.2 Utilization of STI/RTI Clinic Services

## A. Designated STI/RTI clinics

Number of patients accessing STI/RTI services is an indicator of community's awareness about service availability, sexual health seeking behavior of community, and it directly depends on accessibility, quality of services provided, referral linkages with other line departments / services and rapport between service providers and the patient community. To achieve the physical target assigned, each DSRC should be accessed by 14 individuals per each working day (with 25 working days per month and 300 days per year is considered for calculations).

State	Number of TI	Total no. of Visits by HRG	Average utilization per day	Number of DSRC	Total no. of Visits	Average utilization per day
A & N Islands	0	0	0	1	3371	11
Andhra Pradesh	123	282149	8	85	159287	6
Arunachal Pradesh	11	4138	1	12	3883	1
Assam	47	21911	2	22	18973	3
Bihar	3	13306	15	40	61704	5
Chandigarh	13	6829	2	4	3275	3
Chhattisgarh	14	1849	0	12	7119	2
D & N Haveli	0	0	0	1	3834	13
Delhi	63	55645	3	17	18027	4
Goa	13	2554	1	4	911	1
Gujarat	105	162658	5	43	602313	47
Haryana	23	19924	3	20	71662	12
Himachal Pradesh	0	0	0	15	32333	7
Jammu & Kashmir	6	0	0	17	18402	4
Jharkhand	18	9233	2	26	42853	5
Karnataka	69	79166	4	39	24958	2
Kerala	46	43789	3	20	8181	1
Madhya Pradesh	49	24108	2	54	82815	5
Maharashtra	61	8810	0	72	219368	10
Manipur	34	3997	0	4	365	0

Table 1: Average Utilization of STI/RTI Clinic Services at Government and TI facilities

State	Number of TI	Total no. of Visits by HRG	Average utilization per day	Number of DSRC	Total no. of Visits	Average utilization per day
Meghalaya	8	388	0	8	2767	1
Mizoram	37	7588	1	9	3697	1
Nagaland	50	5473	0	12	4178	1
Orissa	63	8303	0	32	77038	8
Puducherry	0	0	0	4	10725	9
Punjab	19	9424	2	46	55321	4
Rajasthan	43	28751	2	46	59502	4
Sikkim	5	1711	1	5	712	0
Tamil Nadu	0	0	0	105	526432	17
Tripura	9	6851	3	9	11060	4
Uttar Pradesh	76	38919	2	92	694382	25
Uttarakhand	18	2200	0	9	53749	20
West Bengal	70	103214	5	42	65664	5
India	1096	9,52,888	3	927	29,48,861	11

#### Inference

Nationally an average of 11 patients are accessing per each working day per government STI/RTI clinic. Except for TN, UP, Uttarakhand, and Gujarat none of the states/UTs has more than 14 attendees per each working day per clinic.

This may be due to underutilization of services or under reporting by units or poor awareness about service availability and referral linkages.

#### **Action points**

SACS has to ensure getting reports regularly from every reporting unit and from both STI and RTI clinics of the facility.

SACS to monitor regularly the cross referrals between STI/RTI clinics and ICTC/RNTCP/ANC/ ART/TI centers.

#### Inference

Nationally an average of 3 HRG are accessing per each working day per TI. 13 states/UTs not reported STI data from TI sites; this is a cause of concern.

This gross under utilization of services may have many reasons, few of the key reasons could be - poor accessibility of services or under reporting by units or poor outreach in motivating HRG to avail services and probably lack of awareness about the availability of services. It may also be due to judgmental attitude and gender of provider.

#### **Action points**

SACS has to ensure getting reports regularly from every TI project.

SACS to monitor regularly PE wise outreach planning and outcome, emphasis should be placed on new entrants.

## 3.3 Age and sex distribution of STI/RTI clinic attendees, 2009-10

*Figure 2:* shows age distribution of 29, 48,861 total attendees at designated STI clinics and 9, 52,888 total attendees to TI projects in the country during the reporting period 2009-10.

#### Inference

Access for services by adolescents(15%) at government facilities seems to be low. Majority of attendees (70%) were in sexually active age group 20-44 at government facilities.

#### **Action points**

DSRC to promote adolescent friendly services as this group is known for their sexual adventurism, wide spread myths and misconception and their behavior can be modified by good interpersonal communication.



Figure 2: Age wise distribution of total attendees - DSRC (2009-10)

#### Inference

Young HRG are known to have more clients and more at risk in acquiring STI and HIV, but just 5% of HRG aged less than 20years are accessing services. Even 20-24 year age group also comprised just 22%, while majority were in 25-44 years age, most of them are less volume HRG hence at lower risk for acquiring STI/ HIV.



#### **Action points**

SACS to ensure young age HRG are covered by clinical and condom services

During 2009-10, cumulatively 29, 48,861 individuals accessed the DSRC. Of these total attendees; 36% were males, 63.8% were females and 0.2% were TS/TG.



Figure 3: Sex wise distributions of attendees in % of total attendees to DSRC in 2009-10.



During 2009-10, cumulatively 9, 52, 888 individuals accessed the TI STI/RTI clinics. Of these total attendees; 37% were males, 62% were females and 1% were TS/TG.

Figure 4: Sex wise distributions of attendees in % of total attendees to TI Projects in 2009-2010.

#### Inference

In two thirds of attendees purpose of visit to STI/RTI clinics is without symptoms, follow up visits is very low, about only 10% and TS/TG are accessing services is very minimal.

44% & 16% of TS/TG are diagnosed with some STI/RTI at designated & TI STI/RTI clinics respectively.

#### **Action points**

The above observation underscores the need for capacity building of providers skills in syndromic case management of STI/RTIs.

Counselors at STI/RTI clinics should be effectively used in addressing the stigma/ discrimination in utilizing the services, especially by TS/TG and in follow up. Without follow up and compliance to treatment, and the results of treatment will not be known.

The IEC, BCC and IPC components relating to STI/RTI should be strengthened; all the STI/ RTI facilities should be branded as 'Suraksha' clinics. All these will enhance the awareness about service availability within community.

## 3.4 Proportion of symptomatic patients among total new attendees at STI/RTI Clinics

Observing the proportion of symptomatic among the new attendees reflects how well the clinic is oriented towards STI/RTI services and the skills of providers in syndromic case management of patients attending the clinics.

The national average of symptomatic patients among total new attendees at government STI/RTI Clinics is 30 percent, while it was 26% at TI STI/RTI clinics.

Designated STI/RTI clinics at Manipur, Goa, Meghalaya, Sikkim, Tripura, Madhya Pradesh, and Jammu & Kashmir, has reported more than 75 percent of clinic attendees were symptomatic; while Maharashtra, UP, TN and Gujarat reported less than national average of 30%.

TI STI/RTI clinics in 21 states have reported more than 26% of clinic attendees were symptomatic while 6 states reported less than national average. TIs at three UTs (Puducherry, ANI, and DNH) and three states (TN, HP and J&K) have not reported STI data during 2009-10.

#### Inference

The wide variation between states could be due to selective reporting or poor quality of data.

#### Action point

The program person (STI & TI focal persons) should regularly review the data for its completeness, correctness and provide feedback to clinics with broad analysis focusing on the quality of data reported and where each clinic stand in comparison to rest of others in the state.



Figure 5: Propotion of symptomatics out of total attandees, 2009-10 (DSRC)



Figure 6: Propotion of symptomatics out of total attandees, 2009-10 (TI STI/RTI clinics)

# 3.4.1 Number of symptomatic Male attendees accessing designated STI/RTI Clinics

The number of male STI/RTI clinic attendees has been shown to be sensitive indicator of sexual transmission & behavior trends. Male STI/RTIs are typically of acute onset and frequently symptomatic and mostly STIs. Male patients frequently report contact with sex workers, thus male STI incidence is an indirect measure of the rate at which STIs occurring in the given area and indicates about the pool of infection in the area, chiefly within core groups.

TI clinics					
	Male attendees with symptoms	% of males with symptomatic			
Andaman & Nicobar Islands	0	0			
Dadra & Nagar Haveli	0	0			
Himachal Pradesh	0	0			
Jammu & Kashmir	0	0			
Pondicherry	0	0			
Tamil Nadu	0	0			
Chhattisgarh	49	3			
Kerala	1811	4			
Karnataka	3624	5			
Andhra Pradesh	13799	5			
Tripura	494	7			
Assam	1585	7			
Rajasthan	2080	7			
Delhi	4273	8			
Bihar	1077	8			
Jharkhand	845	9			
Sikkim	168	10			
Punjab	937	10			
Manipur	487	12			
Gujarat	19856	12			
Haryana	2480	12			
India	49874	13			
Uttar Pradesh	4927	13			
Nagaland	721	13			
Arunachal Pradesh	551	13			
West Bengal	14331	14			
Madhya Pradesh	3696	15			
Uttaranchal	339	15			
Meghalaya	60	15			
Maharashtra	1499	17			

#### Table 3: Symptomatic Male STI/RTI clinic attendees for the period 2009-10 at TI STI clinics.

TI clinics				
Orissa	1414	17		
Mizoram	1367	18		
Chandigarh	1481	22		
Goa	629	25		

### Table 4: Symptomatic Male STI/RTI clinic attendees for the period 2009-10 at DSRCs.

DSRCs				
	Male attendees with	% of males with		
	symptoms	symptomatic		
Gujarat	18356	7		
Dadra & Nagar Haveli	78	10		
Maharashtra	16713	20		
Haryana	6167	22		
Tamil Nadu	36706	22		
Jharkhand	4535	23		
India	284838	27		
Uttar Pradesh	61229	27		
West Bengal	7082	28		
Delhi	3028	28		
Kerala	1130	29		
Himachal Pradesh	3461	31		
Pondicherry	662	36		
Bihar	6343	37		
Chandigarh	289	38		
Andaman & Nicobar Islands	602	45		
Orissa	19009	50		
Uttaranchal	2795	53		
Mizoram	1006	54		
Rajasthan	9791	59		
Andhra Pradesh	40758	62		
Chhattisgarh	2070	64		
Karnataka	5566	65		
Manipur	83	66		

DSRCs				
	Male attendees with symptoms	% of males with symptomatic		
Punjab	8139	67		
Nagaland	1150	68		
Assam	3399	68		
Arunachal Pradesh	823	69		
Sikkim	82	74		
Madhya Pradesh	13874	74		
Jammu & Kashmir	5437	76		
Meghalaya	615	82		
Tripura	3508	87		
Goa	352	91		

#### Inference

Average of 13% (range 3-25%) and 27% (range 7-91%) of males attending STI clinics at TI sites and government hospitals were symptomatic. None of the TI sites reported more than 25% male symptomatic attendees while 18 states reported more than 50% of male symptomatic attendees in designated clinic. Andhra Pradesh, Chattisgarh, Punjab, Karnataka, J&K, MP and Assam have highest number of new male symptomatic attendees at designated STI/ RTI clinics in country. Interestingly all these states except for MP have low number of symptomatic male attendees at TI sites.

#### **Action Point**

Trends of number of male symptomatic is more important rather than one time data, hence SACS must monitor regularly these numbers to understand the changing trends of sexual transmission dynamics.

Less number of male symptomatic by TI sites also warrants to explore the skill levels of service providers in diagnosing STI syndromes among males.

Large number of male symptomatic at designated STI clinics also indicates poor STI coverage at TI sites especially core groups and necessitates for strengthening STI service delivery to HRGs

Syndrome	DSRC	TI
VCD	58.37	76.86
PID	22.55	26.00
UD	19.91	39.66
GUD-NH	7.10	8.88
GUD-H	4.28	3.77
SS	3.75	6.47
GW	2.15	2.91
IB	8.38	1.68
ARD	1.02	2.67
Other STIs	21.60	11.19
PLHIV	3.55	1.82

# 3.5 Syndromic distributions (%) of STI /RTI clinic attendees at DSRC and TI clinics

#### Inference

58% & 77% of female attendees at DSRC and TI clinics respectively reported to be having VCD, such high prevalence of VCD syndrome suggest significant reproductive morbidity among females and also favors for capacity building of STI service providers in conducting detailed physical examination including speculum examination. Then only one can understand what proportion of these women had cervical infection (which signifies infection with gonococci and Chlamydia).

23% & 26% of female attendees at DSRC and TI clinics respectively reported to be having Lower abdominal pain syndrome, which is a complication of untreated cervical infection. Unless every woman who attends the clinic with complaints of genital discharge are subjected for internal examination, cases of cervical infection can't be diagnosed and treated which leads to complications like LAP. There is tendency for over diagnosis of this syndromes among female attendees, and this should be discouraged through prescription audit, and looking for number of the females treated for LAP have visited on day 3 of treatment to ensure that there is clinical improvement. Any diagnosis made on history without internal examination to be considered as poor quality of service.

SACS to monitor the number of PLHIV getting treatment for STI/RTIs and the nature of STI/ RTI reported among them; especially at TI sites regularly. If they are bacterial then there is a need to promote consistent and correct condom usage and counseling on safer sex practices. If it is due to herpes, then the time intervals of reporting for treatment to be looked into as well, promote consistent and correct condom usage. Cases of discordant couples with one partner having viral ulcers are to be monitored carefully by providers as there is higher chances of transmission of HIV among them.

High bacterial STIs also underscore the need for strong referral linkage with ICTC.

Low levels of ARD reporting may also suggest poor skills of providers in conducting proctoscopic examination, unwillingness of attendees for proctoscopic examination, lack of equipment and/or facilities to conduct examination and poor counseling of patients. That ARD is not limited to ONLY males is to be emphasized to providers and counselors and they should elicit history of anal sex, especially unprotected and communicate the same to provider so that an internal examination can be done for both males and females.

22% of attendees are reported to be having other STIs, this necessitates for regular prescription audit by supervisory teams.

## 3.6 Ratio of Non-Herpetic vs. Herpetic Genital Ulcer – DSRC data

**Figure 7** shows the ratio of Non Herpetic Genital Ulcer (bacterial genital ulcer) Vs Herpetic Genital ulcer (Viral ulcer) for all the states and union territories of India. National average shows more bacterial than viral a genital ulcer which is typical of low HIV prevalence settings. The trends of GUD-NH to GUD-H are not showing declining trend, curable bacterial genital ulcers are still predominantly seen in India.

AP, Chandigarh, Delhi, Goa, J&K, Kerala, Maharashtra, Punjab, Manipur, and DNH show the higher level of viral genital ulcers among government STI/RTI clinic attendees. WB, Uttaranchal, UP, Tripura, TN, Orissa, MP, Jharkhand, HP, Bihar, Assam, Arunachal Pradesh show high levels of bacterial genital ulcers, Meghalaya tops the list with six bacterial genital ulcers for every one viral genital ulcer.

### 3.7 Ratio of Non-Herpetic Vs Herpetic Genital Ulcer – TI data

**Figure 8** shows the pattern of ratio of Non Herpetic Genital Ulcer (bacterial genital ulcer) Vs Herpetic Genital ulcer (Viral ulcer) among HRGs, of all the states and union territories of India. National average shows more bacterial than viral genital ulcer even among the HRG population, which is typical of low HIV prevalence settings. The curable bacterial genital ulcers are still predominantly seen in India both in HRGs and among those attending government STI/RTI clinics. NACO started capturing STI data from TI sites in a systematic manner from 2009-10 onwards.



Figure 7 Ratio of GUD-NH: GUD-H-DSRC Data (combined Males, Females & TS/TG; National consolidated data, 2009-10)

On an average at country level, among HRGs there are 2.4 curable bacterial genital ulcers for every one viral genital ulcer; this is more than what is reported by government STI clinics for the same period.

13 states reported higher bacterial genital ulcers among HRGs of them, Chandigarh, Jharkhand and Chattisgarh are showing maximum number, and AP, Arunachal Pradesh, Assam, Bihar, Goa, Gujarat, Haryana, Kerala, MP, and Tripura states reported more than national average of 2.4 among HRGs. While Delhi, Manipur, Mizoram, Nagaland, Orissa, Sikkim, UP, Uttaranchal and West Bengal reported less than national average of 2.4.



Figure 8: Ratio of GUD-NH : GUD-H-TI data (Male, Female and TS/TG combind, National consolidated data, 2009-10)

HP, J&K, Meghalaya, Tamil Nadu states and ANI, DNH, Puducherry, UTs have reported 'zero' genital ulcers during the period. Punjab reported almost 1:1 ratio of bacterial to viral genital ulcers among HRGs during the period.

#### Inference

More genital ulcers enhance acquisition and transmission risk of HIV, hence control and prevention of genital ulcers is an important prevention activity. In an area where HIV prevalence is more, the viral STIs are also reported more. Hence, SACS should identify the areas where more viral STIs are reported and conduct field visit to understand the real situation. The diagnosis also relates to skills of service providers, quality of recording and reporting by facilities.

Nevertheless, at country level, there are no declining trends of bacterial genital ulcers in the last 8 years, meaning we need to strengthen STI service delivery, build capacities of staff, ensure drug and condom availability and monitor regularly for quality service delivery. For the first time, STI data from TI projects are captured and analyzed. The data suggests at national level, even among HRGs bacterial ulcers are more, in fact they are more than what is reported by government clinics. Except Punjab, all the states/UTs reported more bacterial genital ulcers, while at Punjab the ratio is almost equal numbers of bacterial to viral genital ulcers and one need to look into the HIV prevalence in the state, more viral ulcers indicate widely prevalent HIV.

Four states and 3 UTs have not reported STI data from TI sites.

#### **Action Point**

SACS should ensure regular reporting by all facilities and TI sites.

Need to focus attention on quality coverage of HRG with STI services.

Need to conduct field visit to the areas where more viral ulcers are getting reported, and understand the reasons for such phenomenon.

Need to ensure drug and condom availability at all facilities.

Need to ensure compliance to treatment, promote early STI treatment seeking behavior by effectively utilizing the counselors.

States/UTs where pattern is different between DSRC and TI projects, there is a need to understand the skill of providers in private sector, and build their skills by partnering with IMA/ other professional associations.

## 3.8 Ratio of Non-Herpetic Genital Ulcer-Male VS. Urethral Discharge-Male – DSRC data

**Figure 9 & 10** highlights the ratio of Non-Herpetic Genital Ulcer Vs Urethral Discharge among male attendees in STI/RTI clinics in different states and UTs. The national average is 0.4 at TI sites and 0.7 at DSRCs meaning more urethral discharge than genital ulcers among male attendees to STI/RTI clinics.

STIs in men are more significant and indicate true STIs; hence regular tracking of STI syndromes among men throws light towards transmission dynamics and sexual behaviour patterns of the region under study. They facilitate in prioritization of areas to be focused for field visits and on areas where attention is needed. This also indicate the results of our prevention efforts (IEC/IPC/BCC/Condoms/TI STI services).

The UD syndrome among males is the shortest incubating syndrome (3 to 6 days) hence can be used to monitor incidence of STIs in the area, if tracked regularly. Apart from that it also suggests presence of a reservoir of infected persons in the area and indirectly reflects



(TI sites, National consolidated data, 2009-10)



Figure 10: State wise ratio between GUD-NH and among males (DSRC, National consolidated data, 2009-10)

condom usage patterns of male community. The common causes of this syndrome are – Gonococci & Chlamydia.

The GUD-NH syndrome in males can have varying incubation period ranging from 3 to 90 days, and strongly correlates with STI and past unprotected sexual encounter. The common causes of this syndrome are – Syphilis, Chancroid, GV.

The ratio between GUD-NH and UD syndrome among males is a reliable indicator of recent transmission of STIs in the region, and of condom usage among males and STI coverage of core group through targeted intervention projects in the region. Hence study of trends of this indicator, throws insight to STI control status of the region.

The indicator suggests low condom usage by males (general/bridge and core groups) Rest of the states showed high prevalence of short incubating urethral discharge than bacterial genital ulcers.

Meghalaya is the only state where the TIs reported more bacterial genital ulcers than discharges. Bihar reported equal number of ulcers and discharges among male attendees at TI sites.

While DSRCs from TN, WB, Rajasthan, Orissa, Kerala states and Chandigarh, ANI UTs reported more genital ulcers than discharges among males attendees; DSRCs from TN reported highest number.

## How to interpret this indicator

- The value of the indicator can be less than 1, it can be 1 or it can be more than 1.
- When the value of indicator is less than 1 :
  - Genital Ulcer Diseases Non Herpetic is more than Urethral Discharge syndrome among the male attendees of STI clinics.

The possible reasons for this type of scenario are -

- Active private sector, especially unskilled providers
- Self treatment
- Low levels of gonococcal and chlamydial infectious pool among the core group.
- Latent genital ulcers among the core group
- Low levels of syphilis screening and treatment
- Condom usage rates at or about 50%
- When the value of indicator is more than 1 :

There is more Urethral Discharge than Genital Ulcer Diseases Non Herpetic among the male attendees of STI clinics.

The possible reasons for this type of scenario are -

- Untrained private sector different regimens of treatment
- Prevalence of Drug resistant gonococcal strains
- Poor diagnosis
- High levels of gonococcal and Chlamydia infectious pool among the core group.
- High levels of in-migration in the area
- Low levels of syphilis, Chancroid, GV in core groups, due to may be long standing intervention in the area.
- Condom usage rates could be less than 50%.
- When the value of indicator is equal to 1 :

Prevalence of Genital Ulcer Diseases Non Herpetic is equal to that of Urethral Discharge syndrome among the male attendees of STI clinics. It is more important to look into absolute numbers and trends of changes in them over the period. The possible reasons for this type of scenario are –

- Stabilizing trends and situation
- Active private sector
- Wide spread usage of antibiotics
- Low levels of syphilis, Chancroid, GV, gonococci and Chlamydia in core groups, due to may be long standing intervention in the area.
- Correct and consistent Condom usage rates could be more than 60%.

#### Inference

This means low condom usage, strong reservoir pool among core groups, probably with poor coverage for clinical services.

#### **Action Point**

SACS to ensure on quality coverage of HRG with STI services.

Need to conduct field visit to the areas where more genital ulcers are getting reported, to understand the reasons for such phenomenon.

Need to ensure drug and condom availability at all facilities. Strong IEC on condom usage and safe sex to be implemented.

Need to ensure compliance to treatment, promote early STI treatment seeking behavior by effectively utilizing the counselors.

# 3.9 A Syphilis screening and reactivity among STI/RTI clinic attendees

## DSRC data

584114 attendees of the total attended (22.13%) ONLY were screened for syphilis during the reporting period 2009-10 across the country at DSRCs. Of those who were screened, 2.6% of screened were found to be reactive for syphilis. Among those tested for syphilis 1.9% reported to be having as high titer syphilis (>1:8); of these 11.3% were further confirmed with TPHA.

## TI data

203192 attendees of the total attended **(23.3%) ONLY** were screened for syphilis. Of those who were screened, number found to be reactive for syphilis is 4509 (2.2%). Among those tested for syphilis 3.1% reported to be having as high titer syphilis (>1:8); of these 33% were further confirmed with TPHA.

#### Inference

The data analysis shows that at national level there is still significant prevalence of curable syphilis. This also correlates with higher genital ulcer prevalence in country.

The cause of concern is about nearly  $2/3^{rd}$  of attendees are missing screening for syphilis both at DSRC and TI sites. Early diagnosis and treatment of syphilis facilitates in reducing

neonatal syphilis, morbidity among pregnant women and reduces HIV transmission risks. Henceforth, all SACS should regularly review syphilis screening of STI/RTI clinic attendees at government health facilities and TI sites.

## 3.9 B Syphilis screening and reactivity among Pregnant women

During the reporting period 2009-10, number of pregnant women registered for ANC services is 13, 68,376 (this constitutes 5.2% of estimated pregnancies in India).

853501 pregnant women of the total registered (62.4%) ONLY were screened for syphilis. Of those who were screened, number found to be reactive for syphilis is 5365 (0.6%). The national consolidated data shows that more number of pregnant women who were found reactive for syphilis are said to be confirmed with TPHA (10230 against 5365 tested reactive with RPR) similarly number of syphilis infected pregnant women treated for syphilis is more than the number tested reactive (11389 were treated against 5365 tested reactive).

#### Inference

This shows data inconsistency and lack of monitoring by program person/s at SACS.

The states where the discrepancy of data is observed most are- AP, Chattisgarh, JK, Karnataka, MP, Maharashtra, Mizoram, Rajasthan, Sikkim ,TN, Manipur, Haryana and UK. Karnataka report has shown maximum discrepancy followed by TN, AP, Maharashtra and Sikkim.

The only way to reach large majority of pregnant women is through convergence with NRHM, screening of pregnant women in rural areas also helps in reducing the syphilis prevalence among pregnant women in the country and paves way for looking forward for elimination of congenital syphilis. This also facilitates us to achieve MDG goals.

# 3.10 STI/RTI services to HRG at Government and TI STI/RTI clinics

The national consolidated data from government STI/RTI clinics for 2009-10 shows that 4% of total attendees at government STI/RTI clinics are from high risk group. Of the 4% HRG attendees- 38% were males, 61% were females and 1% was TS/TG.

The cumulative report from TI STI clinics at national level shows that 43% of HRG are attending TI STI/RTI clinics. Of the 43% HRG attendees- 49% were males, 49% were females and 2% was TS/TG.

76155 males, 150681 females and 3549 TS/TG were administered PT during the reporting period at both at DSRC and TI sites.

215203 males, 526615females and 11120 TS/TG attended STI/RTI clinics (DSRC and TI) for Regular Medical Checkup during the reporting period as per national consolidated data for 2009-10.

## 3.11 Referral linkages with ICTC

The cumulative report at country level shows that 1374594 attendees were referred to ICTC by both Government (68%) and TI STI (32%) clinics during the 2009-10 reporting period. This constitutes 35% of total attendees. Of the tested, 14398 were HIV sero-reactive out of Government clinics referrals (3.2%) and 5920 were HIV sero-reactive out of TI Clinics referrals (13%); total number of HIV sero-reactives detected by linking with ICTC during the 2009-10 were 20318.

#### Inference

There is lot of missed opportunities, as per the national consolidated data, both at DSRC and TI sites referral linkages to ICTC are poor and in need of strengthening, nearly 65% of attendees are missing referral to ICTC.

#### **Action points**

The linkages between DSRC / TI and ICTC need strengthening. Referral linkages with ICTC helps to detect undetected HIV infected individuals and bring them under care and support service. This also helps to counsel the individual for positive prevention and timely ART initiation.

SACS to establish functional referral linkages between counselors and TI NGOs, Hot spot wise linkages to be established and each counselor to be given certain hot spots for linking. The end objective should be free walking of HRG to ICTC through rapport development between counselor and HRG.

SACS to ensure regular referrals between STI /RTI clinics and ICTC; STI/RTI clinics and ART centres; RNTCP centres and ICTC; ANC clinics and ICTC; ART centres and RNTCP centres and all those who are tested HIV reactive should be linked with ART centre and RNTCP centre and if the reactive happens to be pregnant woman then linking her with PPTCT centre.

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(Source: National consolidated data, CMIS -2010-11)

#### 4.1 Reporting status

This analysis is based on monthly CMIS reporting by Designated STI/RTI clinics (DSRC) and TI projects (2909 units were registered in CMIS for the states and Union territories of India for the period April 2010-March 2011. The number of reporting unit increased from 2228 in 2009-10 to 2909 in 2010-11; reporting units includes 1033 DSRCs and 1876 NGO STI Clinics including Donor funded TI projects. Overall reporting has improved from 51 % during 2009 - 10 to 74. 6% during 2010-11.

From 14 states which were reporting less than 50% during 2009-10 has reduced to two states (Bihar and Chattisgarh) in 2010-11. More than 80% reporting by units is observed at 16 states.



Figure 4.1 State wise reporting status in CMIS in 2010-11.

### 4.2 Utilization of STI/RTI Services

There is significant improvement in number of clients accessing the STI/RTI clinical services from both DSRC and TI Projects. During 2009-10, a total of 39, 01,749 client accessed services while during 2010-11 a total of 47, 07,366 client accessed services.

Majority of patients who availed the STI/RTI clinic services are from Andhra Pradesh, Assam, Delhi, Gujarat, Karnataka, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

State	Total no. of Visits by the patients	First clinic visits (Symptomatic)	First clinic visits Asymptomatic)	Repeat visits to clinic (Symptomatic)
A & N Islands	4,586	661	3,906	19
Andhra Pradesh	740,285	216,641	462,374	61,270
Arunachal Pradesh	7,200	4,610	1,858	732
Assam	64,511	26,185	27,948	10,378
Bihar	174,156	56,065	101,850	16,241
Chandigarh	13,570	7,651	3,155	2,764
Chhattisgarh	25,390	10,625	13,036	1,729
Dadra & Nagar Haveli	5,251	3,342	536	1,373
Daman & Diu	426	265	148	13
Delhi	145,668	30,491	91,798	23,379
Goa	16,297	3,539	12,104	654
Gujarat	474,467	77,661	381,862	14,944
Haryana	84,814	43,405	22,299	19,110
Himachal Pradesh	46,760	20,195	25,316	1,249
Jammu & Kashmir	28,023	19,633	6,655	1,735
Jharkhand	89,156	45,554	38,303	5,299
Karnataka	385,606	112,384	251,592	21,630

#### Table 4.1: Utilization of STI/RTI Clinic Services

State	Total no. of Visits by the patients	First clinic visits (Symptomatic)	First clinic visits Asymptomatic)	Repeat visits to clinic (Symptomatic)
Kerala	127,883	11,932	109,826	6,125
Madhya	193,534	111,086	69,592	12,856
Pradesh				
Maharashtra	451,569	131,717	285,595	34,257
Manipur	27,847	9,190	14,395	4,262
Meghalaya	6,258	3,052	2,959	247
Mizoram	36,556	6,658	28,772	1,126
Nagaland	24,696	7,135	14,973	2,588
Odisha	122,010	79,226	30,907	11,877
Puducherry	3,480	2,505	186	789
Punjab	78,212	46,784	19,688	11,740
Rajasthan	160,525	91,155	58,613	10,757
Sikkim	3,418	1,771	1,583	64
Tamil Nadu	439,742	124,611	206,096	109,035
Tripura	29,985	17,317	7,360	5,308
Uttar Pradesh	424,151	183,849	169,303	70,999
Uttarakhand	59,645	20,326	34,179	5,140
West Bengal	211,689	59,278	135,286	17,125
India	4,707,366	1,586,499	2,634,053	486,814

Average number of patients availing STI/RTI services from TI NGO per day has improved from 3 in 2009-10 to 5 in 2010-11 but in designated clinic total number of patient availing STI/RTI services is 8 per day in 2010 -11 than 11 in 2009-10.

#### **Action Point**

The SACS, Designated clinic in-charge and counselor should ensure referral linkages with Gynecology department, ICTC, ART centers.

SACS should ensure timely reporting from all the designated clinic and TI NGO.

**Figure 4.2** shows age wise distribution of attendees - Out of total 47,07,366 patients who availed the STI/RTI services , highest (62 percent) were in the age-group of 25-44 years followed by 21 percent of them were in the age-group of 20-24 years while 8 & 9 percent

each were in the age-group of under 20 years and over 44 years respectively.

There is an reduction in service uptake by adolescents and young people (Below 20 years) from 15% in 2009 -10 to 9% in 2010-11 however there is increase in clinic attendees in 25-44 age group in 2010-11.



Figure 4.2 Age wise Distribution of Visits

#### **Action Point**

SACS should promote Adolescent Friendly STI/RTI services at the designated clinics and popularize the services in the general community by using local and mid media.



Figure 4.3 Category-wise visits by the patients to STI/RTI clinics with quarter-wise distribution for the period April 2010-March 2011

**Figure 4.3** and **4.4** shows the analysis of purpose of visits made by clients to STI/RTI clinic services in the reporting period April, 2010 to March, 2011. During the year the 34% sought services with symptoms, 56% of attendees were asymptomatic and 10% attended for follow up.

There is a gradual increase in number of clients seeking services without symptoms in comparison to clients seeking services with symptoms.



*Figure 4.4:* Category-wise visits by the patients to STI/RTI clinics for the period April 2010-March 2011 (National consolidated)

# 4.3 Proportion of symptomatic patients among total new attendees at STI/RTI Clinics

Not every STI/RTI clinic attendee has an STI/RTI, many have phobia (Venerophobia) and seek consultation. The visit to clinics is utilized to create awareness and educate the clients on STI/RTI also on HIV/AIDS and about safer sexual practices and facilitates in reduction of self treatment and treatment by quack.

The utilization of services is in direct proportion to quality of services offered by clinic. Monitoring proportion of symptomatic among the new attendees reflects how well the clinic is oriented towards STI/RTI services. The national average of symptomatic tends to be about 40 % (2003-06) and slowly it is declining and currently it is 34% in 2010-11.

The quality of services and reporting has improved significantly. States /UTs like, Jammu & Kashmir, Odisha, Arunachal Pradesh, Punjab, Puducherry, DNH, and Daman and Diu reported more than 60% of attendees were symptomatic. It could be due to selective reporting.



#### Figure 4.5 Proportion of Symptomatic out of New attendees state wise.

tManipur, Bihar, AP, Maharashtra, Karnataka, Nagaland, Tamil Nadu , West Bengal, Goa, Delhi, Mizoram, Gujarat, Andaman Nicobar and Kerala reported less than national average (34%) of symptomatic patients during the period .

### 4.4 Sex wise Distribution of attendees at Clinics

The number of new male and female STI/RTI clinic attendees has been shown to be sensitive indicator of sexual transmission trends.

Male STI/RTIs are typically of acute onset and frequently symptomatic. Male STI/RTI patients frequently report contact with sex workers, thus male STI/RTI incidence is an indirect measure of the effectiveness of targeted intervention efforts.

More number of females is availing STI/RTI services than males; about 60% of the total attendees are females.
State	New male attendees	New female attendees
A & N Islands	2,355	2,212
Andhra Pradesh	208,330	466,883
Arunachal Pradesh	1,709	4,751
Assam	9,876	44,254
Bihar	43,268	114413
Chandigarh	3,495	7311
Chhattisgarh	6,571	17078
Dadra & Nagar Haveli	1,509	2369
Daman & Diu	146	267
Delhi	44,013	76483
Goa	9,289	6351
Gujarat	273,060	176825
Haryana	23,581	41696
Himachal Pradesh	14,089	31392
Jammu & Kashmir	9,021	17057
Jharkhand	33,594	50253
Karnataka	86,737	273822
Kerala	54,047	67705
Madhya Pradesh	53,030	127442
Maharashtra	212,920	199434
Manipur	11,199	12024
Meghalaya	2,478	3526
Mizoram	26,704	8726
Nagaland	14,496	7575
Odisha	49,566	59441
Puducherry	775	1916
Punjab	18,543	47921
Rajasthan	31,957	117732
Sikkim	1,348	2006
Tamil Nadu	132,021	195117
Tripura	5,510	19133
Uttar Pradesh	145,674	206131

### Table 4.2 Male and female attendees for the period April, 2010- March, 2011

State	New male attendees New female attendees	
Uttarakhand	10,652	43712
West Bengal	62,045	132238
India	1,603,608	2,585,196

Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Tamil Nadu, Uttar Pradesh and West Bengal has highest number of male symptomatic attendees. Similarly states like Andhra Pradesh, Bihar, Gujarat, Karnataka, MP, Maharashtra, Tamil Nadu, Rajasthan, WB and Uttar Pradesh has highest number of symptomatic female attendees.

#### **Action Points**

SACS should ensure male participation in the programme and should promote services for males.

**Figure 4.6** below shows gender and quarter wise distribution of patient coming to STI/RTI clinics. Over the period patients availing the STI/RTI services have steadily increased. More females are availing the services then males.



## **4.5 Syndromic Distribution of STI amongst Males and Female Attendees**

**Figure 4.7** shows syndromic distribution of STI in females. The most common syndrome in females is vaginal cervical discharge (63%), significant proportion of the reported VCD may be due to candida infection of vagina and Bacterial Vaginosis. 21% of the female were diagnosed and treated for LAP. The ratio between VCD to LAP is observed to be 3. About 5% of the females were treated for the Genital Ulcer disease syndrome, the ratio between Non-Herpetic to Herpetic ulcer (3/2) is 1.5. It is more than 1 suggesting significant prevalence of bacterial genital ulcer. It is also seen that 1% of the females were treated for genital warts.



**Figure 4.8** Shows syndromic distribution of STI amongst male attendees. About 50% of the syndrome treated in males is due to Urethral Discharge syndrome, 29% of the male clients were treated for genital ulcer disease (GUD) syndrome (GUD- Non Herpetic – 16% and GUD-Herpetic 13%). Ratio between bacterial to viral genital ulcer is 1.23 suggesting



preponderance of bacterial curable genital ulcers. The UD to GUD ratio is 1.7 suggesting uninterrupted active transmission of short incubating bacterial STI (gonococci and Chlamydia). 6% of the males were treated for Genital warts.

The pattern of syndromic distribution of STI/RTI in males and female in 2010-11 is almost similar to 2009-10. In both the year there was more reproductive morbidity is reported in females.

Most of the females were having discharge STI/RTI (63%) than ulcerative STI (5%). The ratio between Discharges to Ulcer is 12.6 discharges to 1 ulcer. The risk of HIV transmission is more with Genital ulcer disease than Discharge, hence lower ulcer prevalence suggest low risk of HIV transmission.

Large number of discharges in female may be due candia infection and Bacterial Vaginosis which suggests RTI. Providers should ensure all the discharge cases are subjected to speculum examination to determine the site of discharge; cervical infection suggests infection with gonococci and Chlamydia.

Large proportion of LAP (21%) suggest missed opportunity in providing early diagnosis and treatment , complication of untreated or partially treated cervical infection, poor health care seeking behavior on the part of the patient and skills of providers in over diagnosing LAP syndrome. There is tendency amongst clinician in over diagnosing this condition, patients complaining lower abdominal pain should not be diagnosed only by history but should be subjected to physical and internal examination.

About half of the reported STI syndrome in males is due Urethral discharge syndrome, large number of UD suggests high prevalence of short incubating STI like gonococci and Chlamydia, low condom usages, pool of infectious source (especially core group) and poor targeted intervention.

The ratio between Discharge to Genital ulcer (both Herpetic and Non Herpetic) is 1.7. Genital ulcer facilitates more transmission of HIV infection and hence controlling genital ulcer is key in preventing HIV infection.

## 4.5 Ratio of Non-Herpetic Vs Herpetic Genital Ulcer

**Figure 4.9** shows the ratio of Non Herpetic Genital Ulcer (bacterial genital ulcer) Vs Herpetic Genital ulcer (Viral ulcer) for all the states and union territories of India. National average shows even now significant cases of bacterial genital ulcers are seen than viral ulcers which is typical of low HIV prevalence settings. States like AP, Maharashtra, Delhi, Punjab, Odisha, Meghalaya, Kerala, Rajasthan and J&K are showing high viral ulcers than bacterial

ulcers. While states like Haryana, Tripura, Mizoram, Assam, TN, UP, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Jharkhand, Goa, Gujarat, Nagaland, Manipur, Chandigarh and Chattisgarh are showing more bacterial genital ulcers.

Karnataka, WB, Puducherry, Sikkim and Bihar reported equal proportion of bacterial to viral genital ulcers.

The overall proportion between bacterial to viral GUDs has reduced from 1.6:1.0 in 2009-10 to 1.4:1.0 in 2010-11 a reduction of about 12.5% GUD morbidity among attendees. It is primarily due to widespread implementation of syndromic case management of STI/RTIS.



Figure 4.9 State wise distribution of Non Herpetic ulcer Vs Herpetic Ulcers.

# 4.6 Ratio of Non-Herpetic Genital Ulcer-Male vs. Urethral Discharge-Male

**Figure 4.10** highlights the ratio of Non-Herpetic Genital Ulcer Vs Urethral Discharge among new male attendees in STI/RTI clinics in different states with national average of 0.3 in

2010-11. In 2009-10 national average was 0.55.

It means for every 3 cases of UD there is one case of GUD-NH in males. It implies a significant increase in UD cases than GUD-NH among males from 2009-10 to 2010-11 period.

The graph shows that expect Puducherry no other state / UT has more bacterial genital ulcers than urethral discharge among males. Rest all states and UTs showed high prevalence of short incubating urethral discharge than bacterial genital ulcers.



Figure 4.10: State wise distribution of Non-herpetic Genital Ulcer in Males Vs Urethral Discharge syndrome in Males.

# 4.7 Proportion of Females suffering from Vaginal Cervical Discharge out of the total new females attending STI/RTI Clinic

Table 4.3 shows the proportion of new female patients suffering from Vaginal Cervical discharge for the period April, 2010 - March, 2011. 63% of new female attendees are suffering with VCD during the reporting period.

Table 4.3 Vaginal cervical discharge among the new female attend	dees for the period
April, 2010 - March, 2011	

State	New attendees- Female	Vaginal cervical discharge	Ratio	
A & N Islands	221 97		0.4	
Andhra Pradesh	136,940	87,021	0.6	
Arunachal Pradesh	3,196	1,145	0.4	
Assam	20,880	15,953	0.8	
Bihar	42,706	29,871	0.7	
Chandigarh	4,855	2,951	0.6	
Chhatisgarh	6,394	2,592	0.4	
D & N Haveli	2,354	867	0.4	
Daman & Diu	171	170	1.0	
Delhi	22,610	14,808	0.7	
Goa	1,841	1,280	0.7	

State	New attendees- Female	Vaginal cervical discharge	Ratio	
Gujarat	53,211	39,267	0.7	
Haryana	30,587	17,256	0.6	
Himachal Pradesh	14,380	7,318	0.5	
Jammu & Kashmir	13,027	2,960	0.2	
Jharkhand	29,381	18,237	0.6	
Karnataka	92,427	64,931	0.7	
Kerala	9,048	5,896	0.7	
Madhya Pradesh	90,663	62,041	0.7	
Maharashtra	72,154	49,656	0.7	
Manipur	4,483	3,589	0.8	
Meghalaya	2,298	1,860	0.8	
Mizoram	3,196	1,957	0.6	
Nagaland	3,154	1,827	0.6	
Odisha	43,894	23,091	0.5	
Puducherry	1,831	577	0.3	
Punjab	35,395	22,412	0.6	
Rajasthan	74,127	32,303	0.4	
Sikkim	1,443	952	0.7	
Tamil Nadu	79,923	55,056	0.7	
Tripura	12,977	8,858	0.7	
Uttar Pradesh	115,551	64,536	0.6	
Uttaranchal	14,595	7,055	0.5	
West Bengal	40,622	27,919	0.7	
All India	1,080,535	676,309	0.6	



Figure 4.11 State wise distribution of Vaginal Cervical Discharge syndrome

## 4.8 Syphilis screening and Positivity amongst STI Attendees

A total of 1561648 STI/RTI attendees from TI and DSRC were screened for syphilis by VDRL/ RPR test, which is 33% of the total attendees in 2010-11. There is increase in syphilis screening form 2009-10 where 22% of the STI/RTI was screened.

Of those screened 1.6% was tested reactive for syphilis and 64% of them were found to be having titer more than 1:8. Of these 17% were confirmed with TPHA test. In 2009—10 the syphilis reactivity was 2.6%. More than two third of the patients missed syphilis screening.

Syphilis mostly remains asymptomatic and significantly increases risk of HIV transmission; hence all STI/RTI attendees should be screened for syphilis. Syphilis is a curable infection and is easily treated by penicillin. Early diagnosis and treatment of syphilis reduces neonatal transmission, maternal morbidity, lower HIV transmission risk and helps in achieving goal of congenital syphilis elimination.

### **Action Point**

The clinic in-charge and counselor of the designated clinic should encourage all the STI/RTI attendees to undergo syphilis testing.

SACS should ensure that all ICTC at the designated clinic should provide syphilis and HIV screening from the same centre.

## 4.9 Syphilis Screening, Confirmation and Treatment among Pregnant Women

Table 4.4 shows the total ANC Registration of Pregnant women, number of women who underwent RPR/VDRL screening, Number of RPR/VDRL reactive confirmation with TPHA and treatment for syphilis for the period April 2010-March, 2011. It is evident from the figure that about 65% of the registered ANC women are undergoing syphilis testing at the designated STI/RTI clinic and 35% of pregnant women is are missing syphilis testing. The syphilis positivity rate amongst the pregnant women is 2.5%, this is an outlier as states like AP (11%), UP (2.7%), Delhi (3.6%) and Maharashtra (7.6%) reported higher positivity rates shifting national average towards higher side. Necessary field level correction of the data was done and the national average positivity for syphilis among pregnant women is 0.8%, moreover there is also a discrepancy between pregnant found positive for syphilis and treated for syphilis. In 2009-10, 62% of the pregnant women were tested and 0.6% was positive for syphilis.

State	Total ANC Regis- tration	No. of RPR/ VDRL Test Performed	No. of RPR/VDRL reactive	No. of RPR/VDRL reactive confirmed with TPHA	No. of Pregnant Women treated for syphilis
A & N Islands	1,854	2	2	-	-
Andhra Pradesh	226,334	86,097	9,593	60	661
Arunachal Pradesh	2,709	2,634	56	3	41
Assam	59,119	32,270	231	3	331
Bihar	27,898	11,865	80	2	943
Chandigarh	16,694	13,858	28	-	121
Chhattisgarh	17,191	11,255	53	12	416
D & N Haveli	4,875	4,775	7	3	5
Daman & Diu	752	562	2	-	-
Delhi	72,272	63,527	2,328	82	466
Goa	5,840	5,049	5	-	-
Gujarat	127,576	121,514	530	114	112

Table 4.4 ANC Registration, Syphilis Screening, Confirmation and Treatment amongPregnant Women

State	Total ANC Regis- tration	No. of RPR/ VDRL Test Performed	No. of RPR/VDRL reactive	No. of RPR/VDRL reactive confirmed with TPHA	No. of Pregnant Women treated for syphilis
Haryana	70,238	66,882	86	3	1,395
Himachal Pradesh	16,664	19,036	175	2	516
Jammu & Kashmir	9,547	6,952	13	-	52
Jharkhand	11,636	5,363	15	1	23
Karnataka	106,206	65,508	1,190	16	2,723
Kerala	19,969	14,343	18	7	3
Madhya Pradesh	121,682	57,591	122	4	56
Maharashtra	241,101	180,323	13,637	24	1,068
Manipur	758	938	10	-	9
Meghalaya	11,912	5,327	107	3	61
Mizoram	2,019	2,333	89	2	1
Nagaland	4,828	3,650	143	13	47
Odisha	50,495	24,743	220	67	53
Pondicherry	10,683	4,624	2	-	-
Punjab	35,945	30,697	186	33	24
Rajasthan	68,082	50,919	566	71	536
Sikkim	5,220	4,443	6	-	554
Tamil Nadu	180,041	180,426	209	603	160
Tripura	4,988	4,626	12	-	259
Uttar Pradesh	293,980	114,051	2,861	43	958
Uttaranchal	31,463	11,541	12	4	170
West Bengal	158,281	91,864	254	37	19
All India	2,018,852	1,299,588	32,848	1,212	11,783

### **Action Point**

SACS should ensure that all the pregnant women should be subjected to syphilis treating during ANC visits.

The counselor should ensure that each of the syphilis sero- positive ANC attendee and partner is treated for syphilis.

SACS should analyze data for its correctness and completeness and should provide feedback to the reporting unit. Errors found in the data should be corrected.

## 4.10 Linkages of STI attendees to ICTC for HIV testing

A total of 1658843 STI/RTI attendees were referred to ICTC for HIV testing which is about 35% of the total STI/RTI attendees in year 2010-11. Of those referred about 1.6% of them were found to be sero positive for HIV. In 2009-10 also about 35% STI/RTI attendees were referred for HIV testing. More than 65% of the attendees are not referred for HIV screening. There are strong linkages between STI and HIV infection; screening all STI patients for HIV will lead to detection of undiagnosed HIV infection.

#### **Action Point**

Clinic incharge and physicians of the designated clinic and TI programme should refer all STI/RTI attendees for HIV testing.

The counselor should counsel and encourage the STI/RTI attendees to undergo HIV screening.

SACS focal person to ensure that HIV and syphilis screening is done from same window of ICTC so that double prick in the patients is avoided.

# Key action points relating to STI program implementation for SACS

- SACS to ensure that every reporting unit is registered in CMIS and submits timely reports. The program person should review at least 25% of reports for their completeness, correctness before they ar te uploaded into CMIS and it SHOULD NOT BE LEFT TO M& E division.
- SACS to use data analysis for reviews, providing feedback and in prioritizing their activities.
- SACS to ensure effective utilization of STI clinics both at government health facilities and TI NGO sites by establishing cross referral linkage between ICTC, RNTCP, ART, ANC/PPTCT and TI NGO projects.
- 4. There is discrepancy in terms of accessing to services by young age individuals to STI clinics at Government and at TI. More young individuals accessing DSRCs the reasons for the same to be explored by conducting some FGD with youth. The observation may also mean early sexual activity in adolescent population and/or wide spread prevalence of myths on sex and sexuality which underscores the need for effective counseling for behavior change along with condom provision. The DSRCs should implement youth friendly services and counselors to be used to achieve this. While young HRGs are at highest risk for acquiring STI/HIV but their accessing services is observed to be poor, this should be monitored regularly by STI and TI focal persons. Every TI NGO should have prioritization of HRGs and the highest priority HRG to be tracked regularly by outreach.
- 5. Very insignificant number of TS/TG attending STI clinics both at government and TI run clinics, it may mean high levels of stigma/discrimination, poor outreach by NGOs and both the comments require attention.
- 6. Higher proportion of females among attendees also indicates significant reproductive morbidity among females. This fact when coupled with high levels Urethral discharge syndromes among males also suggest that significant proportion of these females may have been harboring bacterial STIs and silently transmitting the infection to their spouses. Henceforth partner management should be strengthened and counselors should be entrusted in partner notifications and management.

- 7. 74% of male patients attending the STI clinic without any symptoms indicate widely spread myths or venerophobia (fear of STDs) or poor diagnosing skills of STI service providers. This warrants for an effective IEC to promote awareness on STI symptoms and effective counseling to reduce myths. Regular capacity building of service providers.
- High levels of bacteria genital ulcers, and genital discharges indicate low levels of condom usage and underscore the need for strong IEC response and strengthening of STI service delivery to HRG populations.
- Significant proportion of pregnant women and STI clinic attendees were missing syphilis screening and there are significant levels of syphilis sero-reactivity among those tested need urgent attention by SACS.
- 10. Significant proportion of STI clinic attendees were not referred to ICTC, coupled with 3% and 13% sero-reactivity among general clients and HRGs for HIV highlights the need for strengthening referral linkages between STI clinics and ICTC by SACS.



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