



## ASSESSMENT OF FUNCTIONING OF RTI-STI CLINICS ASSOCIATED WITH A TERTIARY CARE CENTRE, JAIPUR

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**Financial Support:** None declared  
**Conflict of interest:** None declared  
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### How to cite this article:

Kapoor P, Rathore M, Kashyap A, Agrawal A, Baig VN. Assessment of Functioning of RTI-STI Clinics associated with A Tertiary Care Centre, Jaipur. Ntl J of Community Med 2015; 6(3):334-339.

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**Date of Submission:** 17-04-15

**Date of Acceptance:** 03-08-15

**Date of Publication:** 30-09-15

## ABSTRACT

**Introduction:** Objective of the study was to assess Patient load, no. of cases counseled with all seven components of counseling and services, adequacy of staff and training status of staff of these clinics.

**Method:** This is a Hospital based observational, Descriptive study. Following Study variables were collected on a structured Performa - patients load, profile of cases, seven components of counselling and services like provision of condoms, conduction of RPR tests, managing positive cases, partner notification, partner management, referral to ICTC, confirming suspected HIV cases among reported RTI/STI cases, adequacy of staff and training status of staff.

**Results:** There was a sharp rise of cases from 232 to 2481 within a year of start of clinic in year 2008 and this trend continued till 2011 in Mahila chikitsalaya clinic. Majority of patients in all three clinics was in the age group 25-44 year. Commonest complain was lower abdominal pain followed by vaginal/cervical discharge. Majority reported and counselled for first time. Very few repeat visits were seen.

**Conclusion:** More female reported to these clinics than male. Condoms provision was practiced most regularly. Other components of counselling and services were not practiced consistently. Partner treatment and revisits were particularly lacking. Consistent presence of counsellor at clinic is vital for functioning of clinics.

**Key Words:** RTI- STI clinic, Tertiary Care, assessment, functioning, Jaipur

## INTRODUCTION

Sexually transmitted infections (STIs) present a large burden of disease and debility.<sup>1</sup> A country-wide Rapid Assessment Survey (RAS) indicates that 12% of female clients and 6% of male clients attend the PHC OPD for complaints related to STI/RTI.<sup>2</sup> STI/RTI causes increased reproductive morbidity, infertility and increases the chances of acquiring HIV many folds<sup>3,4,5</sup>.

The third phase of National AIDS Control Programme (NACP) specially focus on providing

good quality STI and RTI services through public facilities and by partnership with private providers.<sup>6</sup> In leu of this, Govt. of India started RTI/STI counseling program and later on HIV is also merged with this. NACO and RCH under NRHM have developed a joint implementation plan to take forward the activities for STI/RTI convergence at national, state and district levels.<sup>7</sup> Currently all PHCs, CHCs, District hospitals and medical colleges have dedicated RTI/STI clinics.

STI/RTI services are provided through 1112 designated STI/ RTI clinics branded as SURKSHA CLINICS<sup>8</sup>.

Standard RTI/STI clinics should have facility for counseling the patients, proper equipments, proper staff, syndromic diagnosis, drug kits, testing kits, other services, proper referral, documentations and reporting.<sup>9</sup> Ideally all seven components of counseling and services i.e. (a) provision of condoms, b) conduction of RPR tests, c) managing cases with positive results, d) partner notification, e) partner management, f) referral to ICTC, g) confirming suspected HIV cases among reported RTI/STI cases are to be provided to patients. Establishment of clinics is a preliminary requirement for controlling RTI/STI but optimum functioning of these clinics is vital for effective outcomes. Assessing working of these clinics to find out the gaps provides an opportunity for rectifying them through facilitative supervision. Objective of the study was to assess Patient load, no. of cases counseled with all seven components of counseling and services, adequacy of staff and training status of staff of these clinics.

## METHODS

This Hospital based observational study was done for assessment of functioning of three RTI/STI clinics associated with a teaching hospital, Jaipur i.e. Mahila chikitsalay, Zanana hospital, SMS hospital. Study was done between three months period i.e. 15 July to 15 Oct 2014.

Study was done at three RTI-STI clinics attached with Tertiary care hospitals attached with a Medical College. 1) Mahila chikitsalya: is a tertiary care center attached to SMS Medical College, Jaipur with a load of 1,28,298 outdoor and 43,641 indoor patient (2013) annually<sup>10</sup>. RTI/STI clinic was established in this hospital in year 2008. 2) Zanana Hospital: the annual (2013) patient load of this hospital is 154089 in outdoor and 51032 in indoor. 3) SMS hospital: the patient load in outdoor was 2526597 and indoor was 168701 annually (2013)<sup>10</sup>. The clinics in these hospitals are running under supervision of one senior faculty.

Data were collected on a structures proforma. Quantitative assessment was done in terms of 1) patient load 2) no. of cases counseled with completeness of counseling and services: completeness of counseling was assessed by observing, whether all seven components of counseling and services were considered during counseling pa-

tients or not i.e. a) provision of condoms b) conduction of RPR tests, c) observing and managing cases with positive/reactive results d) partner notification e) partner management f) referral to ICTC, g) confirming suspected HIV cases among reported RTI/STI cases 3) profile of cases 4) adequacy of staff and 5) training status of staff was also considered.

Data regarding availability of following drug kits were also collected - Kit 1 (Grey colored) contained Tab. Azithromycin 1 g (1) and Tab. Cefixime 400 mg (1), Kit 2 (Green colored) contains Tab. Secnidazole 2 g (1) and Tab. Fluconazole 150 mg (1), Kit 3 (White colored) contains Inj. Benzathine penicillin 2.4 MU (1) and Tab. Azithromycin 1 g (1) and Disposable syringe 10 ml with 21 gauge needle (1) and Sterile water 10 ml (1), Kit 4 (Blue) Tab. Doxycycline 100 mg (30) and Tab. Azithromycin 1 g (1), Kit 5 (Red colored) Tab. Acyclovir 400 mg (21), Kit 6 (Yellow colored) Tab. Cefixime 400 mg (1) and Tab. Metronidazole 400 mg (28) and Cap. Doxycycline 100 mg (28), Kit 7 (Black colored) Tab. Doxycycline 100 mg (42) and Tab. Azithromycin 1 g (1).

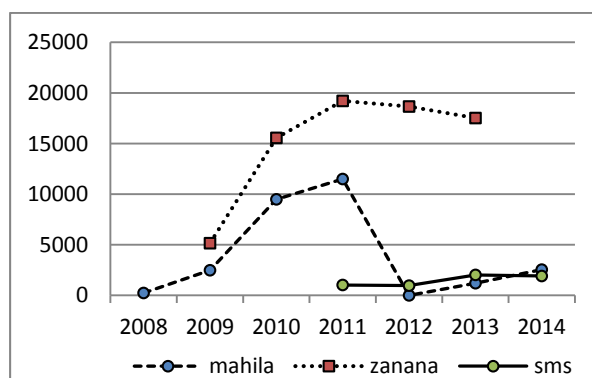
Repeat visits were considered when a patient came back for follow up within 14 days of first visit. Asymptomatic RTI-STI cases: these women were screened from Anti-natal and family planning outdoors to detect more cases. They did not have symptoms but had some form of Reproductive Tract infections. Other RTI/ STIs: Molluscum contagiosum, Pediculosis pubis, Scabies.

Both Primary and Secondary data were collected for the analysis. Secondary data were collected from Monthly reports of clinic, outdoor patient register of clinic. Primary data were collected from direct observation of process of counseling and filling checklist of supportive supervision. Continuous data were summarized in form of mean and Standard Deviation. Count data were expressed in proportions.

## RESULTS

Trends of Patient Load: RTI/STI clinic of Mahila Chikitsalay: There was a sharp rise of cases from 232 to 2481 within a year of start of clinic in year 2008 and this trend continued till 2011, as clinic was placed just adjacent to OPD hence all OPD cases could counseled, in addition, referred cases start coming from RTI/STI targeted intervention units also. The counselor left in year of 2012, hence no work, no indent, no demand of drug kits and

no reporting during this period. Counselor appointment took almost 1 year after repeated reminders to higher authorities. It took further 10 months for supply to come even after joining of new counselor in year 2013. Apart from this the clinic was relocated to a room away from OPD, hence not feasible for patients and resulted in decrease in patient load in year 2014. (graph 1) RTI/STI clinic of Zanana hospital : Here number of cases continuously increased till 2011 up to 19217 and then it started decreasing in 2012 and 2013 consecutively. In Zanana hospital only females visited to the clinic in the study period. No males reported as index cases. RTI/STI Clinic SMS hospital: There were 1025 cases reported in 2011, 966 in 2012, 1018 in 2013 and 1919 in 2014 till November. More females (95.79%) reported to these clinics then males (4.21%). (Graph 1)



**Graph 1: Year-wise patient load in three RTI/STI clinics associated with SMS medical college**

(\*vacant cell indicates non availability of data, \*\*SMS clinic data of year 2012 and Mahila chikitsalay data of year 2014 are from January to August only)

**Disease distribution:** Both in Mahila chikitsalay and SMS clinics, commonest complain was lower abdominal pain followed by vaginal/cervical discharge while in Zanana hospital commonest complain was vaginal/cervical discharge, followed by lower abdominal pain, other STIs (10.10%). Urethral discharge was present in only 0.05% of cases in Mahila chikitsalay clinic, as it has very less number of male (253/ 27446) reported.

**Number of visits:** In all the three clinics majority of the patients were reported and counseled for first time. Only very few repeat visits were seen i.e. maximum in SMS clinic (10.90%), Zanana (2.01%) and minimum in mahila chikitsalay (1.29%). Mahila chikitsalay’s counselor mistakenly mentioned ANC cases in column of asymptomatic RTI/STI cases which was corrected during facilitative supervision.

**Table 1a: Age-wise distribution of cases attending RTI/STI clinics**

**Human resources:** One counselor and one medical officer in-charge available in all the three clinics. In mahila chikitsalay clinic in year 2012 counselor left but joined again in 2013. Staff nurse and lab technician not available for RTI/ STI clinic in zanana and SMS RTI/STI clinic.

**Practices of provision of other RTI-STI related Services :** Mahila chikitsalay clinic (Table-3): only condoms were provided during counseling in 2008, no other component of counseling e.g. RPR tests, Partner notification, Partner management, Referral to ICTC etc was done as RTI/STI clinic was started in 2008 only. Thereafter these other components were also considered during counseling. Maximum no. (11490) of patients were counseled in year 2011, with 8656 condom packets provision and 9093 of RPR tests conducted. 2196 high risk patients were referred to ICTC in year 2011 during counseling. Partner notification (6348) and partner management (15) were maximum in year 2010. Male counseling was also started by taking help of male guards who motivated them to consult to counselor. The most common investigation done was VDRL, probably because of compulsory VDRL screening in antenatal care. Gram’s staining, wet mount and KOH and other tests were not done at RTI/STI clinic. These tests were done at central Lab of hospital. VDRL test was performed in 11412 ANC out of total 27668 reported during 2008 to 2014. Out of them 245 (2.15%) turned to be reactive that was confirmed with TPHA in 79 patients and only 20 women took complete treatment for syphilis.

**Zanana Hospital Clinic:** (Table 4) maximum number of condoms were distributed in 2013 (8300). No of RPR test conducted were continuously increased from 2009 to 2013 from 4191 to 18654. No of partners managed were increased from year 2009 till 2012 from 141 to 1521 and then afterward it started to decline to 641 in 2013 and 4 in 2014 till March. No of high risk patients referred to ICTC were also increased from 2009 to 2013 continuously from 698 to 10723.

**SMS hospital:** (table 5) maximum work was done in year 2013 with total 2009 patients counseled, 9520 condom distribution, 2680 RPR test done, 1613 partners were notified, 318 partners managed, 1546 cases referred to ICTC. 34 found HIV infected till November 2014.

RTI/STI clinic	<20 yr (%)	20-24 yr (%)	25-44 yr (%)	>44 yr (%)	Total (%)
Mahila	4003 (14.58)	7231 (26.35)	12839 (46.78)	3373 (12.29)	27446 (100)
Zanana	3960 (4.94)	22697 (28.29)	45063 (56.17)	8504 (10.6)	80226 (100)
Sms	361 (6.07)	1286 (21.62)	3460 (58.16)	842 (14.15)	5949 (100)
Total	8324 (7.33)	31214 (27.47)	61362 (54)	12719 (11.2)	113621 (100)

**Table 1: Disease distribution among patients attending RTI/STI clinics**

Complains	Mahila	Zanana	SMS
Vaginal/ Cervical discharge (VCD)	6416 ( 27.55)	37944 (56.16)	7126 (24.45)
Genital Ulcer Non herpetic (GUD-NH)	132 (0.57)	69 (0.10)	308 (1.06)
Genital Ulcer herpetic (GUD-H)	3696 (15.87)	77 (0.11)	4738 (16.26)
Lower abdominal Pain (LAP)	9179 (39.42)	22547 (33.37)	9305 (31.93)
Urethral discharge (UD)	11 (0.05)	0 (0)	161 (0.55)
Ano Rectal discharge ( ARD)	1356 (5.82)	0 (0)	1359 (4.66)
Inguinal Bubo (IB)	928 (3.99)	0 (0)	929 (3.19)
Painful scrotal swelling (SS)	0 (0)	0 (0)	3 (0.01)
Genital warts	639 (2.74)	5 (0.01)	1270 (4.36)
Other STIs	929 (3.99)	6827 (10.10)	3142 (10.78)
Asymptomatic STI treatments	0 (0)	0 (0)	545 (1.87)
no of people living with HIV (PLHAs) attending with STI/RTI during month	0 (0)	100 (0.15)	256 (0.88)
Total	23286 (100)	67569 (100)	29142 (100)

**Table no 2: Repeat visits in RTI/STI clinics associated with SMS medical college, Jaipur.**

Years	MAHILA repeat STI/RTI visit	ZANANA repeat STI/RTI visit	SMS repeat STI/RTI visit
2008	27 (11.64%)	*	*
2009	81 (3.26%)	0 (0%)	*
2010	203 (2.14%)	2 (0.013%) from march	*
2011	18 (0.16%)	1322 (6.88%)	7 (0.68%)
2012	Nil	130 (0.70%)	122 ( 12.5%) till august
2013	0 (0%)	154 (0.88%)	250(12.39%)
2014	25 (0.98%) (till August)	2 (0.05%) (till march)	269 (14.02%) (till November)
total	354 (1.29%)	1610 (2.01%)	648 (10.90%)

(\* Data not available for the period)

**Table no 3: Practices of other RTI-STI related Services (RTI/STI clinic of Mahila Chikitsalay)**

Services	2008 n=236	2009 n=2481	2010 n=9491	2011 n= 11490	2013 n = 963	Up to Aug. 2014 n=2539	Total n= 27029
condoms provided*	45 (24.73)	1834 (77.58)	6935 (73.07)	8656 (75.36)	901 (93.56)	665 (26.19)	19036 (70.43)
RPR tests conducted	0 (0)	695 (29.4)	7645 (80.55)	9093 (79.14)	129 (13.4)	334 (13.15)	17896 (66.21)
partner notification	0 (0)	0 (0)	6348 (66.88)	4396 (38.26)	0 (0)	57 (2.24)	10801 (39.96)
partners managed	0 (0)	12 (0.51)	15 (0.16)	0 (0)	0 (0)	3 (0.12)	30 (0.11)
referred to ICTC	0 (0)	324 (13.71)	1062 (11.19)	2196 (19.11)	248 (25.75)	637 (25.1)	4467 (16.53)
found HIV infected	0 (0)	3 (0.13)	0 (0)	0 (0)	0 (0)	1 (0.04)	4 (0.01)
referred	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.04)	1 (0.004)

\*This is number of condoms distributed and not the no. of people to whom condoms distributed

**Table no 4: Practices of other RTI/STI related Services (Zanana Hospital, Jaipur)**

Services	2008	2009	2010	2011	2012	2013	Up to March 2014	Total
Condoms provided	Nil	2772	6010	7480	6500	8300	1500	32562
RPR tests conducted	Nil	4191	6160	6638	16253	18654	5085	56981
Partners managed	Nil	141	1307	1061	1521	641	4	4675
Referred to ICTC	Nil	698	2724	4594	8501	10723	2885	30125
Found HIV infected	Nil	3	4	3	5	5	0	20

**Table no 5: Practices of other RTI/STI related services (SMS, Jaipur)**

Services	2011 (n=1025)	Up to Aug. 2012 (n=956)	2013 (n=2009)	Up to Nov.2014 (n =1860)	Total (n=5850)
condoms provided*	3090	4840	9520	750	18200
RPR tests conducted	1000 (97.56)	844 (88.28)	1680 (83.62)	1198 (64.41)	5722 (97.81)
partner notification	247 (24.10)	442 (46.23)	1613 (80.29)	1535 (82.53)	3837 (65.59)
partners managed	151 (14.73)	132 (13.8)	318 (15.83)	222 (11.93)	823 (14.10)
referred to ICTC	787 (76.78)	786 (82.22)	1546 (76.95)	1146 (61.61)	4265 (72.91)
found HIV infected	23 (2.24)	14 (1.46)	29 (1.44)	34 (1.83)	100 (1.71)
referred	0 (0)	0 (0)	0 (0)	2 (0.01)	2 (0.03)

During supervision in Mahila clinic it was observed that separate consultation area for privacy was available but because of seepage in that area, fungus on walls made it unsuitable to sit hence counseling was being held mostly in ICTC rooms. Signages were in English language or in small fonts and may be that patients might face difficulty to approach Surksha clinic. Only drug kit no. 1,4,5,6 was available. Hurdles of availing counseling and drug kits from RTI clinic was that treating doctors were either not aware or reluctant to send patients to RTI clinic which is little far from OPD. So along with this counselor started to go to OPD every day in morning to remind all doctors to send patients to RTI clinic for kit and counseling. Staff pasted poster indicating that RTI/STI drug kits are available in room number so and so for patient's convenience. RPR kits and condoms were available. Patient-wise cards and patient registers were available but few of them were incomplete/ incorrect/ inconsistent as per guidelines. Infection control measures were taken care as hand washing facility, waste disposal, sterilization etc. IEC materials and job aids were available. Supervisory visits from RSACs were done at least once in a month. Thrice in a year they met superintendent and talked to pharmaceuticals and appraise them.

Similarly in Zanana clinic: Signage, room privacy, IEC material present, drug kit number 6, 1, 4 and condoms were also available. RPR kits and tests were done through Mukhya Mantri Nishulk Jaanch Yojna. Patient-wise cards were not filled completely. Infection control measures were adequate. Supportive supervision was done by NACO, Directorate, RSAC & Department of PSM, SMS medical college.

In SMS hospital clinic: Drug kit no 1,4,6,7 were available, RPR tests are done through MNJY as no lab technician was appointed separately for this clinic. Condoms, patient wise cards, patient register, IEC, and adequate infection control measures were present.

## DISCUSSION

In our study more female (95.79%) attended RTI/STI clinics than male (4.21%). Similar findings were obtained from studies done in Himachal Pradesh<sup>11</sup> where females are approximately twice than males, Madhya Pradesh<sup>12</sup> (75% females, 24% males), Amritsar<sup>14</sup> (63% females, 36% males) and in a countrywide rapid assessment survey<sup>6</sup> (overall 12% of female clients and 6% of male clients attended the PHC OPDs for complaints related to STIs/RTIs). Male and female were suffering from STI/RTI almost equally in Vishal Jamra's study.<sup>15</sup> In all three clinics majority (46 to 58%) patients were in the age group of 25 to 45 years, similar findings observed in studies done in Himachal Pradesh<sup>11</sup> (59%), Amritsar<sup>14</sup> (46% in 16-30 yr age group), country wide rapid assessment survey<sup>6</sup> (90% in age group 20-40 yr), while little younger age group (15-20 yrs) was affected most in Arun singh's study.<sup>16</sup> In mahila chikitsalay and SMS, commonest complaint was lower abdominal pain followed by vaginal/cervical discharge, whereas in Zanana hospital, commonest complain was vaginal/cervical discharge, followed by lower abdominal pain (33.37%). These findings are similar to the study done in Himachal Pradesh<sup>11</sup>, Madhya Pradesh<sup>12</sup>, west Bengal<sup>13</sup>, Bhopal<sup>15</sup>, Bareilly<sup>16</sup>. Alpana Thakur et al<sup>14</sup> observed that bacterial vaginosis followed by candidial vulvovaginitis were two most common presentations. According to countrywide rapid assessment survey<sup>6</sup>, the most common STI/ RTI complaints among men seeking treatment at PHCs were burning micturation (46%), while most women complained of vaginal discharge (67%) followed by burning micturation (12%) and lower abdominal pain (12%). Repeat visits were very few in all the three clinics (1-10%) in current study. A study of west Bengal<sup>13</sup> observed that all the position of counselors was filled up, free condoms are provided to clients at DSRCs (Designated STI and RTI centers) and in one year around 11753 clients have been referred to ICTCs. Most of the staff from 43 DSRCs underwent regular trainings, which includes 35 MOs, 86 Nurses, 27 Lab technician and 26 Counselors for smooth running

of clinic.<sup>9</sup> According to country wide rapid assessment survey<sup>6</sup>, the basic requirement for the examination of RTI/STI clients were inadequate- starting from STI department of the district hospital to sub-centers. A separate room for examination and audio visual privacy were conspicuously absent in about 45% PHCs and 62% sub-centers. In the eastern zone, they were non-existent and were available in only 1/3<sup>rd</sup> of the facilities. It was also observed that there were no separate sitting arrangements and toilets for patients in many PHCs and sub-centers. Availability of equipments like uterine sound, speculum, microscope, glass slides, examination table, refrigerator, sterilizing equipments though adequate in district and rural hospitals, were inadequate in PHCs. The availability of reagents and supplies required for lab diagnosis of RTIs were also available in only 9% of CHCs and 6% of PHCs. RPR/ VDRL kits were present in only 3% of PHCs and 21% of CHCs. Wet mount examination, grams staining, VDRL/RPR, HIV and hepatitis b tests were available in 60-100% of district hospitals but were largely not available at CHCs and PHCs.

## CONCLUSION

More females reported to these clinics than males. The activity of providing condoms was practiced most regularly. Other components of counseling and services were not practiced consistently in all three clinics. Partner treatment and revisits were particularly lacking. Continuous presence of counselor at RTI/STI clinic is vital for functioning of clinics.

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