

Initial assessment of scaled-up sexually transmitted infection intervention in Himachal Pradesh under National AIDS Control Program – III

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Abstract

Objectives: To assess the impact of scaled-up sexually transmitted infection (STI) intervention under National AIDS Control Program (NACP) III and to examine the profile of STI/RTI clinic (now named Suraksha Clinic) attendees. **Materials and Methods:** A retrospective study by data analysis was done from April 2008 to March 2010. The scaled-up intervention comprised of (i) adopting enhanced syndromic approach, (ii) capacity building by appointing counselors and trainings of staff, (iii) strengthening STI/RTI clinics by provision of logistics and privacy by civil works, and (iv) supervisory support. The outcome which directly influenced service delivery was evaluated within this framework. **Results:** Sixteen “Suraksha Clinics” have been remodeled, equipped with supplies and laboratory set up. A total of 64,554 clinic visits were reported of which 27,317 [42%] attended the clinics for index STI/RTI complaint(s). Majority of the clients (44%) were young, 25–44 years old. Male to female ratio was 1:1.8. In females, the commonest complaint was lower abdominal pain (25%) and vaginal discharge (33%), the commonest syndrome. Amongst laboratory-confirmed STIs, 305 (1.4%) attendees were positive for trichomoniasis, while bacterial vaginosis was corroborated in 230 (1.07%) patients with clue cells. Amongst antenatal women, 251 were reactive for syphilis ($\geq 1:8$ dilutions). 10,579 partners of index STI/RTI patients were notified and partner management was attained to the level of 99%. **Conclusion:** Preliminary results show increased utilization of STI clinical services, though laboratory services need further strengthening. Continued supportive supervision and capacity building will enable skill development and quality monitoring.

Key words: National AIDS Control Program III, reproductive tract infections, Suraksha Clinics, sexually transmitted infections (STI), STI control

INTRODUCTION

Sexually transmitted infections (STIs) are common in developing countries^[1] and pose a major health

problem in India.^[2] STIs rank second among women for healthy life lost in the reproductive age group.^[3] WHO estimates that approximately 340 million new cases of four main curable STIs, i.e., gonorrhoea, chlamydial infections, syphilis, and trichomoniasis, occur every year and approximately 75–85% occur in developing countries.^[4]

Himachal Pradesh, a low HIV prevalent state, is an important tourist destination and has approximately 35,00,000 sexually active adult population. An estimated 67% of population especially long distance

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truckers carrying horticultural produce, migrant labor, and tourists is prone to risky behavior.^[5] STI control is defined as a public health outcome, measured as reduced incidence and prevalence.^[6] A recent review^[7] listed six priority STI control interventions, and the responsibility of at least four components viz. “STI treatment of high risk sub populations, comprehensive case management of symptomatic STI’s, condom promotion, and risk reduction counseling” has been assigned to the STI clinics.^[8] Based on these components, STI service package developed by National AIDS Control Organization (NACO) through which uniform and quality services can be delivered was implemented in the beginning of year 2008 and assessment done at the end of 2008–2009 and then again in 2009–2010 and results are being reported here.

MATERIALS AND METHODS

In this retrospective study, the impact of this scaled-up intervention was evaluated by comparing the clinical data of two consecutive years 2008–2009 and 2009–2010.

Scaled-up STI intervention of Suraksha Clinics

Since the emergence of HIV in 1980s, STI control efforts have been defined in relation to HIV program priorities,^[9] but recently coordinated multidimensional strategies have been adopted. Thus in the year 2008, using a tool provided by NACO, a rapid assessment of the facilities in the existing STI clinics of the state was conducted by a team. Each clinic was visited once. Based on this data, STI clinics one each in 12 district hospitals, 2 medical colleges, state hospital for mother and child and ESI hospital [Figure 1]. were upgraded and renamed as Suraksha Clinic. They were provided with proper

signage, a client friendly environment, and laboratory services.^[3] One counselor was appointed in each clinic responsible for STI work exclusively.

Capacity building and supportive supervision

Capacity building support was provided at three levels. Faculty members (Community Medicine, Microbiology, Obstetrics and Gynecology and Dermato-venereology) from the State Medical Colleges along with the STI state program manager were trained by the national STI team on “enhanced syndromic approach” outlining guidelines, management, treatment protocols, documentation, and monitoring. The state-level STI team further trained the regional and district level managers who in turn trained the doctors, counselors, laboratory technicians, and staff nurses based on two resource documents supplied by NACO. At the subdistrict level, the STI and reproductive tract infections (RTI) services mainly focused on the syndromic case management.^[10] Laboratory services if available were used under the enhanced syndromic approach. Joint supervisory visits of these clinics were conducted at least every quarter by the trained STI state resource teams. The team provided supportive supervision, onsite technical assistance, emphasis on strict adherence to national guidelines, and feedback to the district and state program managers.

Four STI clinics managed by NGOs were also set up in the “Targeted Intervention” sector to cater to the high-risk populations such as truckers and sex workers with proper training of their staff, attention to their capacity building, service delivery, and development of linkages.^[7]

RESULTS

After the capacity building exercise there was definite change in the provision of confidentiality and in privacy after renovation and remodeling of the clinics. Dedicated counselors have proved an important asset to these clinics, who at least were exclusively responsible for the STI/RTI work. Counseling and partner management which were two most neglected areas of the STI control program in past have appreciably improved. Although institutional referral linkages improved significantly, but referrals from private set up still stands at very low levels.

Clinical profile of “Suraksha Clinic” attendees

Demographics of the attendees are shown in Tables 1 and 2. The majority of “Suraksha Clinic” attendees were in the reproductive age group of 25–44 years (44%). A total of 6443 (9.9%) clients were in the age

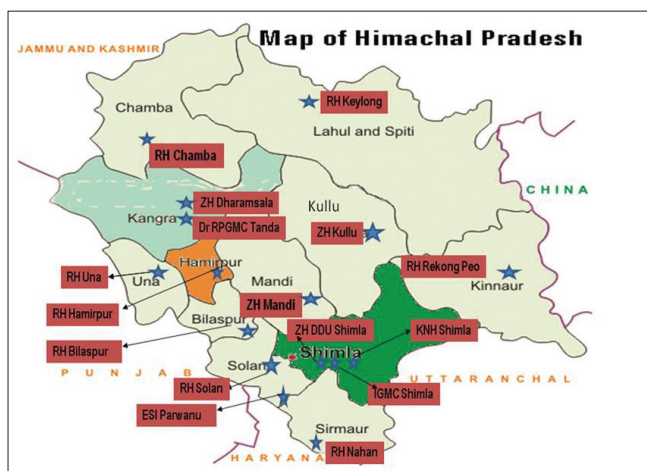


Figure 1: Location of “Suraksha Clinics” in Himachal Pradesh

group <20 years. Syndromic diagnosis for the index STI/RTI patient was reported in 8084 (27%) males and 21,353 (72%) females; the distribution according to the diagnosis is depicted in Figures 2 and 3. The number of clients visiting the “Suraksha Clinics” for no complaints was 35,117 (54.39%). The STI clinics in the Targeted Intervention group delivered services to 4615 new clients and 1591 clients had regular check up.

During these two consecutive years, 12,110 and 23,317 patients were counseled, respectively, denoting a sharp increase (48%) in the level of utilization of counseling services in the second year. Partner notification (PN) was undertaken in 10,579 index clients and their 10,482 partners (99%) were subsequently managed. A total of 1,38,943 condoms were provided to attendees of “Suraksha Clinics” out of which 82,539 (59%) were given to females.

There were 132 HIV infections detected in these clinics. A total of 15,098 clients were referred to integrated counseling and testing centers and other services.

DISCUSSION

Government health facilities have noted a gradual decline in the detection and reporting of new STIs.^[11]

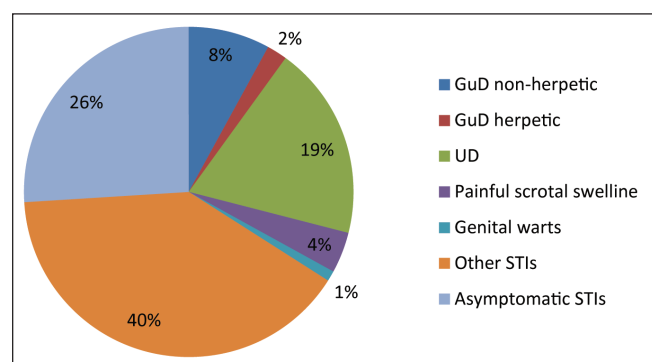


Figure 2: Syndromic diagnosis in male “Suraksha Clinic” attendees

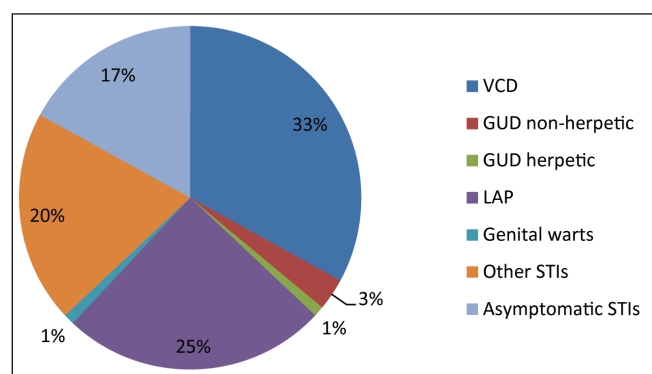


Figure 3: Syndromic diagnosis in female “Suraksha Clinic” attendees

According to a survey carried out in 2003, about 6% of the adult population suffers from STIs in India although with regional variations.^[12] A study in reproductive health clinic in New Delhi reports 22% STI prevalence in women clinic attendees.^[13] Similarly in Tamil Nadu, in a “probability proportional to size” cluster survey, the overall community based prevalence of STIs was 8.3%.^[14] The demographic profile of our patients and the prevalence patterns are similar to the previous studies.^[4,12,15] Approximately 0.23% of the population of the state reports to Government health clinics for their index STI/RTI complaints in a year.

In most of the service delivery settings, the syndromic approaches whether “standard” or “enhanced” have been shown to be effective in

Table 1: “Suraksha Clinic” service delivery over two years

Type of patient	Year 2008-2009	Year 2009-2010
First clinic visit (for the index STI/RTI complaint)	13532	13785
First clinic visit (for no STI/RTI complaint)	16738	18379
Repeat clinic visit for the index STI/RTI complaint	1405	715
Total no of visit	31675	32879

STI: Sexually transmitted infections, RTI: Reproductive tract infections

Table 2: Age and sex distribution of “Suraksha Clinic” attendees over two years

Age group	Male (%)	Female (%)
<20	2,106 (9.2)	4,337 (10.4)
20-24	6,141 (26.8)	15,472 (37.1)
25-44	10,955 (47.8)	17,581 (42.1)
>44	3,672 (16)	4,290 (10.2)
Total	22,874	4,1680

Table 3: Syndromic diagnosis in STI clinic attendees for index patients

Diagnosis	Male	Female	Total (%)
Vaginal cervical discharge	-	7027	7027 (23.8)
Genital ulcer non-herpetic	630	712	1342 (4.56)
Genital ulcer-herpetic	164	153	317 (1)
Lower abdominal pain	-	5402	5402 (18)
Urethral discharge	1568	-	1568 (1.7)
Anorectal discharge	7	13	20 (0.06)
Inguinal Bubo	8	24	32 (0.1)
Painful scrotal swelling	326	-	326 (1.1)
Genital warts	70	133	203 (0.6)
Other STIs	3211	4330	7541 (25.6)
Asymptomatic STI treatment	2100	3559	5659 (19.2)
Total	8084	21353	29,437

STI: Sexually transmitted infections

relieving the symptoms and in prevention of obstetric and gynecological complications (and possibly HIV transmission).^[13] In the present study, it is pertinent to mention that amongst index patients the number of female attendees is almost three times the number of males [Table 3]. Although in this state, generally, the number of females in Dermatology outdoors is more than the males, but in the Suraksha Clinics this difference is highly significant implying that the trend existing few decades back that females were ignoring their reproductive health has been reversed at least in this state. This probably is due to scaled-up intervention, better female literacy rate, changed definitions of STIs in the light of syndromic case management, clubbing of RTIs, and media awareness campaigns. This trend has also been observed by other workers in some other states as well.^[2,12,13,15]

Genital discharge cases have mostly shown a declining trend,^[2] while GUDs a rising trend^[2,12] and in our compilation they comprised 29% for genital discharges ($n=8595$; $m=1568$, 5.3%; $f=7027$, 23.8%) and 5.6% for genital ulcer diseases (GUDs) ($n=1659$; $m=794$, 2.6%; $f=865$, 2.9%) of the total new cases. Under the “enhanced syndromic approach” in some of the clinics laboratory confirmed trichomoniasis was diagnosed in 305 cases and bacterial vaginosis in 230 (1.07%) cases, which is similar to the overall low prevalence reported in the gynecology clinic attendees.^[2] In past, GUDs have been predominantly reported in males;^[16] however, in the present data no significant difference was observed.

The antenatal syphilis screening was carried for 33,756 clients out of whom 251 were found reactive ($\geq 1:8$ dilutions). The incidence of syphilis seropositivity is showing a declining trend (0.74%), similar to the findings of Thapa *et al.*^[17]

Several studies^[12,18,19] have reported increase in the incidence of genital warts (7.6–25.2%) during these years. However, the present study shows that only 0.68% cases of total clinic attendees were of genital warts. The reasons for these variable results probably lie in the study design, data sources, and computational method. Ours is a consolidated data of the state from the clinics of secondary and tertiary care hospitals and includes asymptomatic cases as well, while the figures in most of the other studies are from the STI clinics of tertiary care hospitals.

The detection of asymptomatic STI infections has always remained problematic. These were seen in 5659 cases, of which 3559 (62.8%) were females. The partners of the female symptomatic clients were

presumed as asymptomatic male STI infections. Owing to the lack of symptoms, a sizable number of women do not report to the “Suraksha Clinic,” thus it is important to develop a STI screening program to perceive silent infections in women.^[20] Screening tests for detection of chlamydial infections are expensive and not available for mass use.^[8] Moreover, they require high technical expertise. Similarly, confirmatory diagnosis for viral STIs and GUDs also require advanced laboratory set up.

Targeted intervention in case of high-risk groups is an important component of STI control program. In a study on outreach activities of sex workers, in four large states of south India, 128,326 (70%) sex workers were contacted through peer outreach, out of which 74,265 (41%) attended the STI clinic at least once, thus suggesting that the scale-up of quality STI/HIV services with sex workers is yielding favorable results.^[21] We could target a sizable number of this group but more needs to be done in this field.

A drastic two-fold rise in clients counseled in the second year of the study period is a direct consequence of scale up of services with counselors, their growing experience, and realization of importance of counseling. PN has been recommended as an important step in STI management to help interrupt transmission of infection, prevent potential reinfection, and prevent complications.^[22] In the present study, predominantly spousal partners were targeted with a very small fraction of casual partners. Similar partner coverage has been reported by Moyo *et al.*^[23] PN provides an opportunity to make index patients aware of various risk reduction strategies for preventing STIs and in selected studies estimates of PN was 54% (range, 0–94%) depending on the type of partner and the means of verification.^[24] A well-designed PN intervention is essential for STI control and prevention and to evaluate the impact on dynamics of STIs.

Demonstration of correct use of condoms has shown to decrease transmission of HIV and STIs^[25] and their lack use and acquisition of some STIs has also been demonstrated.^[26] However, there is difference between distribution of condoms and their actual use and this is critical to the STI control program.^[27] The counselors have carried out this component very effectively; although, the impact of this will only be evident in the long term.

STIs can be one of the presenting manifestations of HIV and a small percentage of HIV infections are detected in the STI Clinics. In the present

compilation 0.21% of the STI/RTI clinic attendees and 0.87% of the ICTC referrals from these clinics were HIV positive.

CONCLUSION

The scale up of quality STI intervention has shown encouraging results. A platform has been established and the main aim is to consolidate and achieve effective STI services. Continued and coordinated capacity building, strengthening of laboratory services, standardization of data, supportive supervision, and quality monitoring are the key to success of the STI prevention and control strategy under the national AIDS program. Targeted intervention needs added structured guidance to organize the STI intervention and enable them to deliver quality services in diverse settings and explore unidentified areas. Public health education and promotion of health seeking behavior are essential for a sustainable and effective control program.

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