# **Evaluation of state-run STI/RTI clinics in the state of Haryana, India through a supportive supervision approach**

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# ABSTRACT

**Introduction:** Sexually transmitted infections (STIs) are an important public health problem because of their adverse effects on reproductive health of men and women. About 5% of adult population in India suffers from STIs. To tackle this issue the government has set up reproductive tract infection (RTI) clinics across the country. **Aims:** To assess the effect of supportive supervision on the quality of services provided in STI/RTI clinics in the state of Haryana, India. **Settings and Design:** Selected state-run STI/RTI clinics, facility-based pre- and post evaluation study. **Material and Methods:** Sixteen STI/RTI clinics were selected for the study, including six from government facilities and 10 from targeted intervention sites across five districts of Haryana. From each of the selected sites one physician in-charge was interviewed twice with an interval of 2-3 months using pretested formats. Scores were given in selected domains of STI/RTI management for each visit and the improvement was assessed. **Statistical Analysis:** Wilcoxon signed rank test. **Results:** A total of 16 physicians one from each site were interviewed. Improvement in mean score of the physicians for knowledge about STI/RTI was 3.6 points. Similarly for skills score, which measured the physicians' skill in various domains of running STI/RTI clinics, the mean improvement was 3.1 points. Both the improvements were statistically significant (P < 0.001). **Conclusions:** Supportive supervision proved to be a useful tool for monitoring and improving the quality of services provided by the STI/RTI clinics.

Key words: Haryana, STI/RTI clinics, supportive supervision

# **INTRODUCTION**

The global annual incidence of curable sexually transmitted infections (STIs) was 364 million in 1999, of which 50 million was estimated to have occurred in India.<sup>[1,2]</sup> STIs lead to several complications in women such as tubal blockade, pelvic inflammatory diseases, chronic pain syndromes, sexual dysfunction, and others. They cause significant morbidity among males, including strictures, sexual dysfunction, genital ulcers, kidney and bladder problems. They also lead to complications, such as chlamydial conjunctivitis, sepsis, and other morbidities, in neonates. Annually about 4000 children suffer from blindness due to maternal chlamydial infection and untreated syphilis results in 40% of perinatal deaths.<sup>[1]</sup> The problem is much worse in India, where even talking about sexual health is considered a taboo. Therefore it becomes the responsibility of health systems to provide clients with STIs symptoms the best guality of care

possible. The importance of STI/Reproductive tract infection (RTI) is further enhanced by the spread of HIV/AIDS, because the chance of acquiring HIV is greatly increased in the presence of STI.<sup>[3]</sup> Hence the quality of health services offered at STI/RTI clinics becomes important for controlling HIV/AIDS as well. Under the aegis of National Rural Health Mission (NRHM) and National AIDS Control Programme (NACP), STI/RTI clinics have been operating in India for quite a long time now. They are popularly known as Suraksha clinics. These clinics manned by a laboratory technician, a specialist or trained physician, and a specialist counselor provide services for the management of STI/RTI.<sup>[4]</sup> There were 24 Suraksha clinics in the state of Haryana during the year 2011.<sup>[5]</sup>

For improving the quality of care in STI/RTI clinics, two things are considered essential. First, development of a standard against which performance of others can be compared and

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second, upliftment of substandard facilities. Evaluation of the quality of STI/RTI clinics can be done by several means such as mystery patients, record review, and observing clinical practice.<sup>[6]</sup> Supervision of such clinics can be normative (administrative), formative (educational), or restorative (supportive).<sup>[7]</sup> Supportive supervision may be defined as a range of measures to ensure that personnel carry out their activities effectively through direct personal contact.<sup>[6]</sup> Supportive supervision along with observing clinical practice has been shown to improve the quality of health care delivery in other fields.<sup>[6]</sup> We aimed to study the effect of supportive supervision on the quality of services provided by STI/RTI clinics in the state of Haryana.

## **MATERIALS AND METHODS**

This was a pre- and post evaluation study conducted in five districts of Haryana, namely, Bhiwani, Jhajjar, Rohtak, Panipat, and Sonepat. The study was conducted in two phases over 10 months. First phase extended from January to March 2011 and second phase from May to October 2011. Sixteen STI/RTI clinics in five districts were selected for the study, which included one state medical college, five district hospitals and 10 targeted intervention (TI) sites. We gave prior information of visits to the clinics so that they can display the highest quality of services. We interviewed the treating physicians and did not include other supportive staff. The supervision was done by a Senior Medical Officer from the Office of the Deputy Civil Surgeon, Sonepat District, during both visits. We assessed the knowledge and skills of the physicians through a supervisory checklist provided by National AIDS Control Organisation (NACO)[8] and through inspection, observation, and review of records and reports. The physicians were observed for the patient management skills, record-keeping skills, and other activities. Details of the checklist used for assessing their knowledge and skills are described in table 1. Scores were accorded in a graded scale, which ranged from zero to two, in which zero meant poor, one meant satisfactory, and two meant good performance. The total score range was zero to 12 for each domain. Gaps identified during this evaluation process were discussed with the participants and monitoring was done to readdress the issues. During the second visit the same evaluation was done and scores were given in the same manner. Data were analyzed using SPSS version 17.0. Means and standard deviations of scores in the pretest and post-test evaluations were calculated. The differences in the mean scores were tested using Wilcoxon signed rank test and a P value < 0.05 was considered to be statistically significant. This study was conducted as part of service improvement and was aided by NACO. All the ethical principles stated in the Helsinki Declaration were strictly followed. Respondent confidentiality was maintained throughout the study.

#### RESULTS

A total of 16 physicians were interviewed at the end of the study. Scores obtained by the treating physicians during the first and second visit for the knowledge and skills domain are given table 2. The mean score (SD) for the knowledge domain during the first visit was 5.5 (1.0) and for the second visit it was 9.1 (1.1). There was an increase of 3.6 in the mean score and this improvement was statistically significant (P < 0.001). The mean score (SD) for the skills domain during the first visit was 6.3 (1.0) and for the second visit it was 9.4 (0.9). There was an increase of 3.1 in the mean score and this improvement was statistically significant (P < 0.001).

Table 1: Domains covered for evaluation of

knowledge and skills				
Domains for knowledge	Domains for skill			
Signage	Training of staff			
Equipment	History taking			
Consumables	Clinical examination			
Infection control	Syndromic diagnosis			
Referral of patients	Counselling			
Filling of records and reports				
Patient card	Partner management			
Patient register				
Indent register				
Stock register				
Monthly Computerized Information Management System report				

# Table 2: Scores obtained by the participants in the knowledge and skills domains during first and second visits in the different STI/RTI clinic

Site of the	Knowledge		S	Skills	
STI/RTI clinic	First visit	Second visit	First visit	Second visit	
PGIMS Rohtak	7	10	8	11	
DIST Hosp Sonepat	4	6	5	7	
DIST Hosp Panipat	5	10	6	10	
DIST Hosp Rohtak	6	8	6	9	
DIST Hosp Bhiwani	7	10	8	10	
DIST Hosp Jhajjar	4	10	5	10	
RED Sonepat	4	8	6	9	
BGDS Bhiwani	6	9	6	8	
AAHD B.Garh	5	10	7	10	
CSI Panipat	6	9	6	9	
TPF Panipat	6	10	7	10	
NYKS Rohtak	6	10	7	10	
MVF B.Garh	6	8	5	9	
CWI Rohtak	5	9	8	10	
MSRSS Panipat	7	9	6	9	
MES Sonepat	4	10	6	10	

STI: Sexually transmitted infections, RTI: Reproductive tract infection

## DISCUSSION

We found that the mean scores for both knowledge and skills of the physicians' in charge of STI/RTI clinics improved significantly after the supportive supervision exercise. Because the evaluation was done by a single investigator, the chances of inter-observer variability was reduced. A similar study conducted in Himachal Pradesh by Ganju et al.[9] also showed improvement in the knowledge and skill of health care providers by approximately 20% after supportive supervision. Another study conducted by Mogasale et al.[5] in six Indian states over a period of 45 months showed that the quality of care provided in the STI clinics improved by 3-7 times. This finding proves that supportive supervision is an effective tool for evaluating as well as improving the standards of STI/RTI clinics. This provides hope to the national efforts that aim to control the STI/RTI problem in India and as an offshoot also provides impetus to the National AIDS Control Programme (NACP). Therefore, we recommend that it is essential to provide supportive supervision for all STI/RTI clinics in the country on a regular basis, at least twice a year as per the NACO's recommendation.<sup>[8]</sup> This will bring all the clinics to a comparatively higher standard.

Because a sizeable number of STI/RTI clinics in five districts of the state were covered in this study, the findings could be generalized to other clinics in the state. The evaluation methods used in this study were comprehensive and were able to capture both knowledge and skill parameters effectively. There were a few limitations in this study. Only the treating physicians' score was taken into account, but it is possible that other staff may have responded differently to the supportive supervision. Because the treating physicians' efficiency plays an important role in the quality of care, they can alone be considered to be representative of the whole system. The duration between the first and second visits was considered an important factor in determining the improvement. The interval ranged from 2-3 months in our study. This short duration might have been one of the reasons for improvement shown in this study. The performance improvement in our study was less as compared with that shown by Mogasale et al.,<sup>[5]</sup> which may have been due to the differences in duration and frequency of supervision. Also important confounding factors such as workload of individual clinics, vacancy and efficiency of supporting staff, and age and gender of the participants and their professional qualification were not examined. In spite of these limitations, the study provides evidence for regular implementation of supportive supervision activities to improve the quality of care in state-run STI/RTI clinics.

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