

PERFORMANCE OF RNTCP IN HIMACHAL PRADESH AND KERALA - A PERSPECTIVE COMPARISON

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SUMMARY

Monitoring is a continuous assessment of certain key indicators through periodic reports. It is a process of fact finding. The efficiency of the programme is assessed by comparing its achievements with the expectations, which is in turn obtained from the periodic reports. The performance of two states viz Himachal Pradesh and Kerala for the year 2003 is considered for comparison. The performance of each state is evaluated on the key parameters such as case finding, smear positive to smear negative ratio, treatment activity, smear conversion and treatment outcome along with staff position and infrastructure available. It was found that the new chest symptomatics among new adult OPA is 2.1% (expected 2-3%) in Himachal Pradesh while in Kerala it was 1.2%. The overall smear positive to smear negative ratio was 1:0.6 in both states. Similarly the smear conversion rate in both states was as per the expectations viz 92% in Himachal Pradesh and 90% in Kerala and also the treatment outcome in both states was more than 85% (expected rate). The overall performance in both the states was found satisfactory and needs and to be maintained.

INTRODUCTION

India has a long and distinguished tradition of research in Tuberculosis (TB) Studies from National TB Institute, (NTI) Bangalore and Tuberculosis Research Centre (TRC) in Chennai provided key knowledge to improve treatment of TB patients all around the world. The National Tuberculosis Programme (NTP) in India began in 1962 and created infrastructure for TB Control throughout the country. It is significant that this programme has been formulated keeping in view not only the relevant administrative and financial considerations but also on the basis of systematically planned epidemiological, sociological and operational

studies. It was found that despite the existence of NTP, TB patients were not being accurately diagnosed and majority did not complete treatment. Based on these findings and the global recommendation of Directly Observed Treatment Short course (DOTS), the Revised National Tuberculosis Control Programme (RNTCP) was developed in 1993. This is the most effective strategy available for controlling TB. The RNTCP has set up many technical and operational norms and procedures viz establishing a network of sputum microscopy centers, monitoring, evaluation, supervision, training of personnel and adequate supply of drugs. The responsibility of accurate detection of cases, putting them on treatment and ensuring completion of treatment lies on the health system. Thus practically the patient is the VIP of the programme. RNTCP began implementation in India in 1993 on a pilot basis with the coverage of 18 million population. The expansion of the programme began in 1997, and during the year 2003, more than 71% of India's population is covered under RNTCP.

OBJECTIVE

The objective of this article is to compare the performance regarding reporting efficiency, case finding and treatment activity in the two fully implemented RNTCP states viz Himachal Pradesh and Kerala for the year 2003.

METHODOLOGY

A two tier system of reporting has been envisaged under RNTCP. The report from Tuberculosis Unit (TU) is sent to the District Tuberculosis Officer (DTO) for every quarter. The DTO in turn compiles the reports of all the TUs in his district and sends the district report to the State TB Officer, NTI and Central TB Division (CTD) on quarterly basis. The quarterly report comprises of report on New and Retreatment Cases, Sputum Conversion of New Cases, Relapses and

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Failure, Report on Results of treatment of Tuberculosis patients registered 12-15 months earlier and report on Programme Management and Logistics. The information contained in the quarterly reports received from the districts of Himachal Pradesh and Kerala of the year 2003 has been used for this comparative study. The key indicators discussed include reporting efficiency, case finding activity, smear positive to smear negative ratio, conversion rate, patients put on treatment and treatment outcome rate along with available staff position and infrastructure.

Baseline Data of each state

The state of Himachal Pradesh is hilly with the altitude ranging from 350 meters to 7,000 meters above sea level. The area is 55,673 km with a population of 61 lakhs. The climate of Himachal Pradesh, depending on the altitude, varies at different places from semi-tropical to semi-arctic. Out of the total area of Himachal Pradesh, 63.8% is under forest cover. It has 12 districts with population ranging from 0.3 lakhs in Lahaul & Spiti to 14 lakhs in Kangra.

Kerala is located on the southwestern tip of India with the Arabian Sea on the west and Western Ghats towering 500-2700m on the east. The area of Kerala is 38,863 km with a population of 318

lakhs. The climate of Kerala is tropical and varies from 34 degrees maximum to 21 degrees minimum. The state has 14 districts with population ranging from 8 lakhs in Wayanad to 37 lakhs in Malappuram.

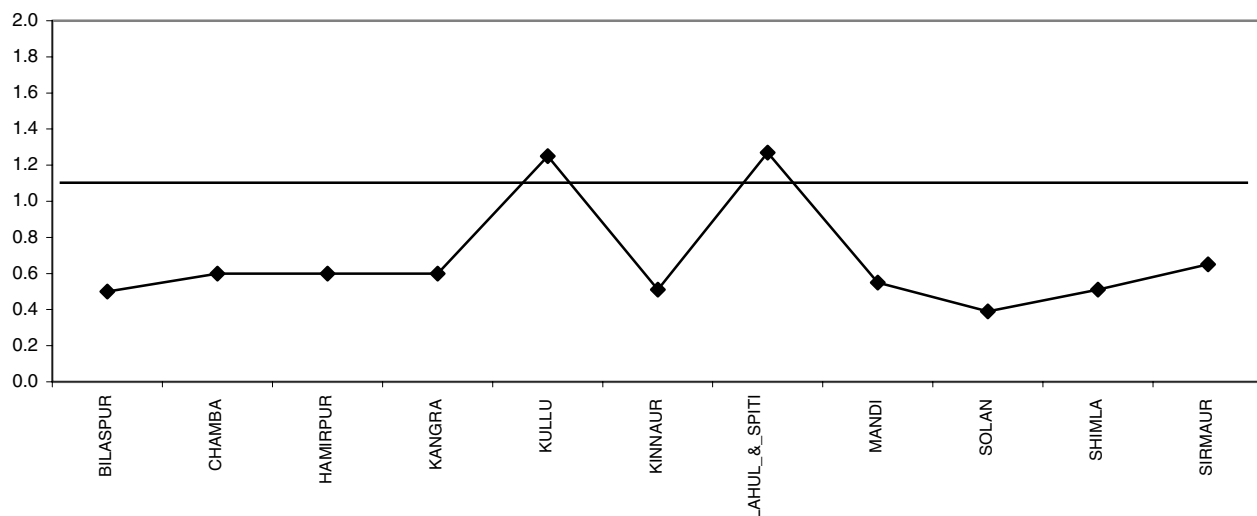
Reporting efficiency

Of the expected 56 quarterly reports from 14 districts of Kerala, only 40 reports (71%) were received, while in Himachal Pradesh, of the 48 quarterly reports expected from 12 districts, only 40 reports (83%) were received at NTI.

Case finding Activity

During the year, 24,35,077 new adult out patients visited the health facilities across Himachal Pradesh of whom 53,320 (2.1%) were chest symptomatics and were subjected for sputum examination. Of the total chest symptomatics, 4,338 (8.1%) were found to be new smear positive patients. The annual new smear positive cases detected were 85 per lakh population (mid year population of 2003). The overall smear positive to smear negative ratio for the state was 1:0.62. The Extra Pulmonary cases were 58% of the smear positive cases, which was very high than the expected 20%. The percentage of new smear positive cases in the productive age group of 15-54 years is 79%, amongst which 61% are males and 39% are females.

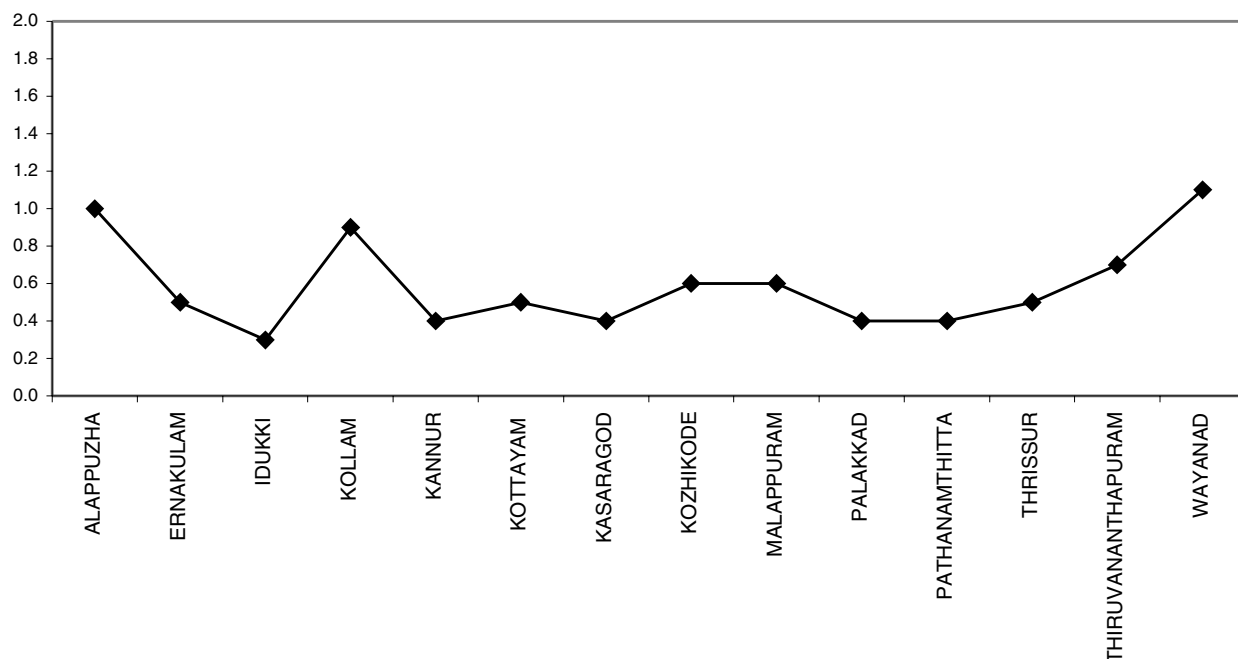
Smear positive to smear negative ratio of districts of Himachal Pradesh



In Kerala, the new adult outpatients visiting the health facilities was 1,10,12,084 out of which 1,40,284 (1.2%) were chest symptomatics and subjected for sputum examination. The new smear positive cases were 7,832 (5.6%) of the chest symptomatics subjected for sputum examination. The annual new smear positive cases detected were 35 per lakh population (mid year population of 2003).

The overall smear positive to smear negative ratio is 1:0.6. The Extra pulmonary cases were 45% of the smear positive cases, which is higher than the expected 20%. The percentage of new smear positive cases in the productive age group of 15-54 years was 67% among which 75% are males and 25% are females.

Smear Positive to Smear negative ratio districtwise of Kerala



Treatment Activity

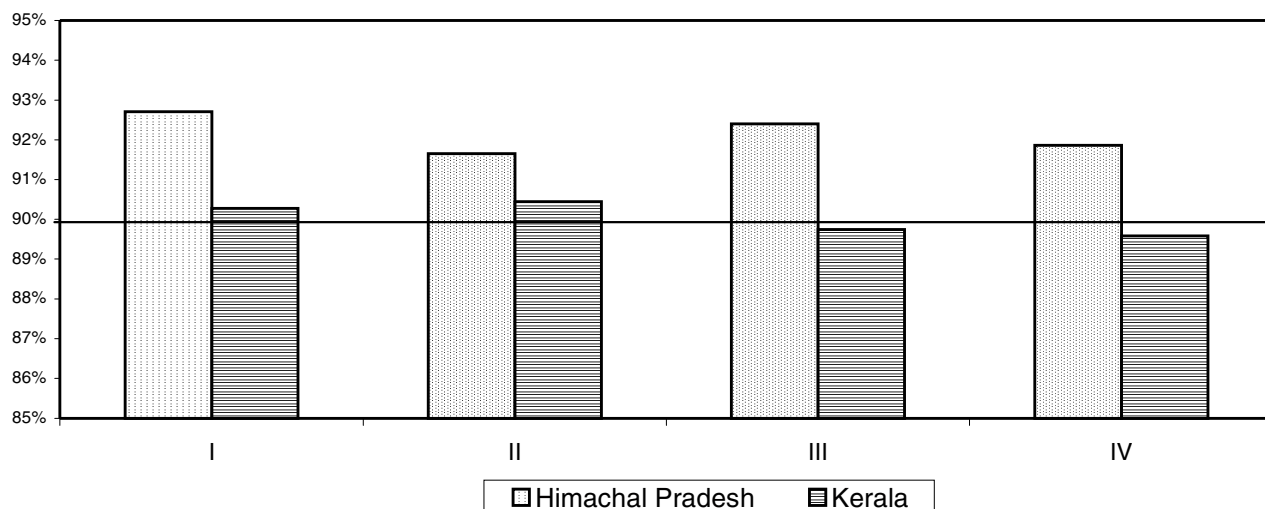
During the year, a total of 11,864 patients were put on treatment in Himachal Pradesh, of whom 4,338 were new smear positive cases, 5,168 were new smear negative and extra pulmonary cases and the remaining 2,358 were retreatment cases, while in Kerala, of the total 17,893 patients put on treatment, 7,832 were new smear positive cases, 8,191 were new smear negative and extra pulmonary cases and

the remaining 1870 were retreatment cases.

Sputum conversion

The new smear positive patients registered during 4th quarter 2002 to 3rd quarter 2003 were considered for sputum conversion rates. The overall sputum conversion rate in Himachal Pradesh was about 92% while in Kerala it was about 90%, both of which were as per the expected norms.

Smear Conversion of new smear positive patients at 3 months of each quarter of 2003 of Himachal Pradesh & Kerala

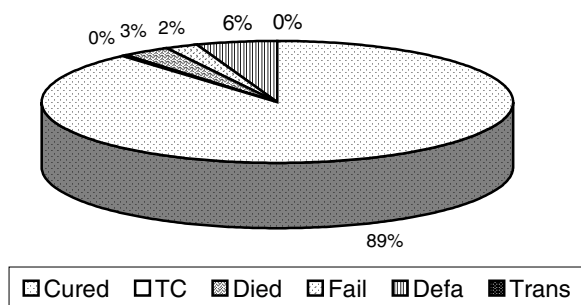


Treatment Outcome

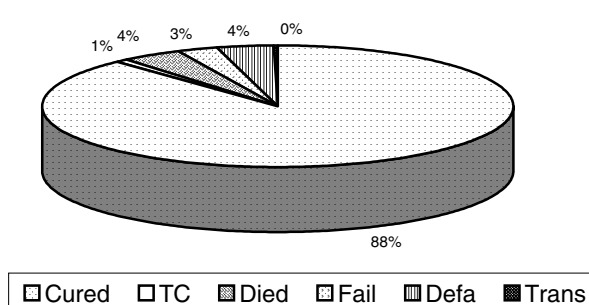
The treatment outcome indicators such as cure rate, treatment completion rate and success rate

form the key indicators of the programme. In Himachal Pradesh, the cure rate during 2003 was 89% and the default rate 6% while in Kerala the cure rate was 88% and the default rate was 4%.

Treatment outcome of patients registered in 2002 -Himachal Pradesh



Treatment outcome of patients registered in 2002-Kerala



Staff position & equipments

Based on the report of 4th quarter 2003, about 97% of the key personnel viz the DTO, the Medical Officer-TB, the Laboratory Technician, the Senior Treatment Supervisor (STS) and Senior Tuberculosis Laboratory Supervisor (STLS) are in place and about 96% are trained in Himachal Pradesh while in Kerala about 95% of the key personnel are in place and 93% of them are trained. In Himachal Pradesh no two wheelers were provided whereas in Kerala two wheelers were available for supervision by STS/STLS.

Discussion

The primary goal of RNTCP is to detect and cure patients of TB, especially smear positive patients. The emphasis in RNTCP is mainly on smear positive patients since they are the ones who spread the disease. The RNTCP formulated key indicators such as implementation, case finding, sputum conversion of new smear positive patients and cure rate of new smear positive patients. Based on these indicators, the efficiency of performance of the states of Himachal Pradesh and Kerala could be considered good for 2003 and should be maintained.

The states of Himachal Pradesh and Kerala are situated diagonally opposite, with a population density of 109 per sqkm and 818 per sqkm respectively. Though both the states vary in their geography, climatic conditions and population density, the targets achieved by the districts in both the states were nearly in accordance with the RNTCP standards, except that sputum positive case finding activity has to be increased in Kerala. However the reporting efficiency in both the states is below 100%.

Conclusion

The NTP which was conceived in 1962 did not come up to the expectations and were found lacking accuracy in several areas especially in accuracy of diagnosis and case holding. DOTS is the most effective strategy of the RNTCP for controlling TB. It ensures that the patient adheres to treatment. DOTS prevents the spread of tuberculous bacilli, thus reducing the incidence and prevalence of TB. TB causes indirect costs to the individual as well as society such as loss of employment, social stigma, and dropout from school etc. RNTCP helps in alleviating poverty by saving lives, reducing the duration of illness and prevention of new infectious cases. For each 100 patients treated under RNTCP it is estimated that at least 15 deaths are averted. Success of the RNTCP depends on communication, collaboration and co-ordination between the Government and private practitioners, Non-Government organizations and other institutions of prominence such as medical colleges. It is time to look towards RNTCP for delivery of social security to the suffering TB patients. However, some

important procedures for instance, domiciliary treatment option to smear negative and extra pulmonary patients, weeding out of records and reports has to be incorporated in the RNTCP guidelines.

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