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SITUATIONAL ANALYSIS OF RNTCP AND AIDS CONTROL PROGRAMME IN MANDYA DISTRICT

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SUMMARY

A joint project of WHO, SEARO and National Tuberculosis Institute, Bangalore was undertaken in the year 2003-05 to augment TB-HIV collaborative activities in the district of Mandya. At the outset, the achievements and the components of the tuberculosis and AIDS control programmes were identified during the situational analysis of the control programmes of the two diseases. This was done as a pre-requisite to facilitate effective collaboration between the two programmes. The observations made during the situational analysis are presented in the article.

The methodology adopted were through observations of various facets of the Revised National Tuberculosis Control Programme and the AIDS control programme in the district, scrutiny of records and interactions with patients and health care providers.

The observations were largely on expected lines. The TB-HIV collaborative activities were barely palpable in the district.

Key words: India, tuberculosis, HIV, control, programme.

Introduction

To curtail the adverse impact of the Tuberculosis (TB) and Human Immuno Deficiency Virus (HIV) epidemic on the existing TB and Acquired Immunodeficiency Syndrome (AIDS) control programmes, the South East Asia Regional Organization (SEARO) of the WHO has outlined a regional strategic framework on TB-HIV collaborative activities to commensurate with the requirement of the region. To gain experiences, the WHO has planned to support countries in piloting the TB-HIV collaborative activities in selected districts. Accordingly, a joint project of WHO, SEARO and National Tuberculosis Institute, Bangalore was undertaken in 2003-05 to augment TB-HIV collaborative activities in the district of Mandya (Karnataka).

Mandya is a predominantly rural district (> 86%) and is located in the southern part of Karnataka. The district has a population of about 1.9 million[1] and most of the population is engaged in agriculture. The district is located about 99 kilometers from Bangalore. The district had implemented RNTCP in the year 2001 and has 4 Tuberculosis Units (TUs) and 22 Designated Microscopy Centers (DMCs). There was only one Voluntary Counseling and Testing Centre (VCTC) in the district, which was located in the district hospital.

As a pre-requisite to facilitate effective collaboration between the two control programmes, a situational analysis of the Revised National Tuberculosis Control Programme (RNTCP) and the National AIDS control programme in Mandya district was conducted in order to identify the achievements and components of the two programmes that required strengthening. The paper details the situational analysis of these two control programmes and the existing collaboration between them.

Methodology

A. Methodology of situational analysis of RNTCP :

The situational analysis of the RNTCP in the district of Mandya was conducted in October and November 2003.

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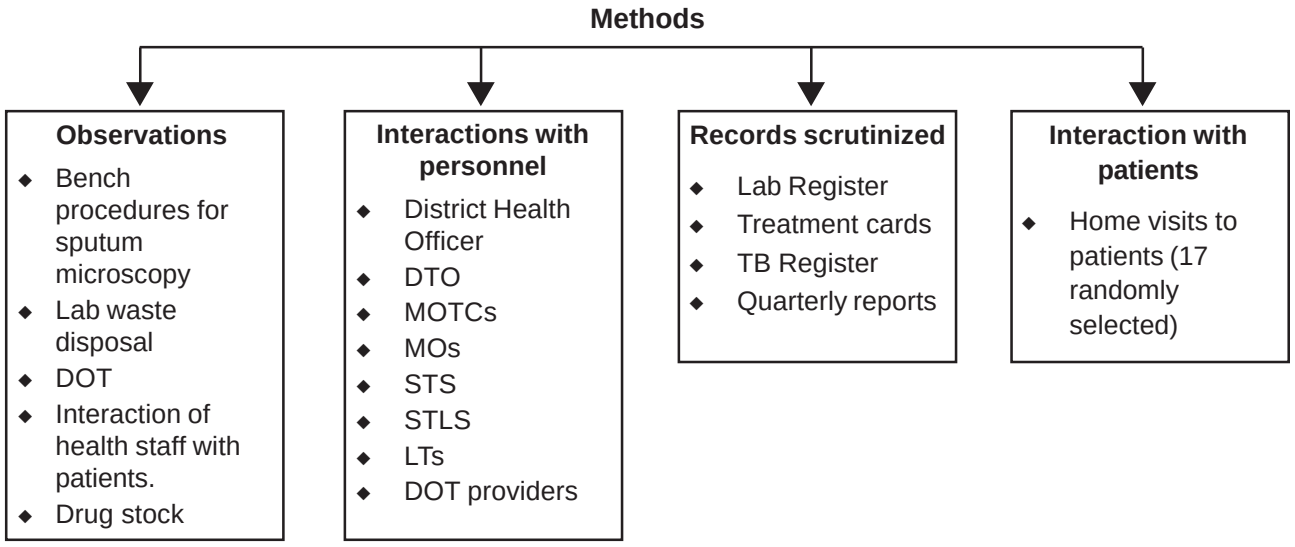
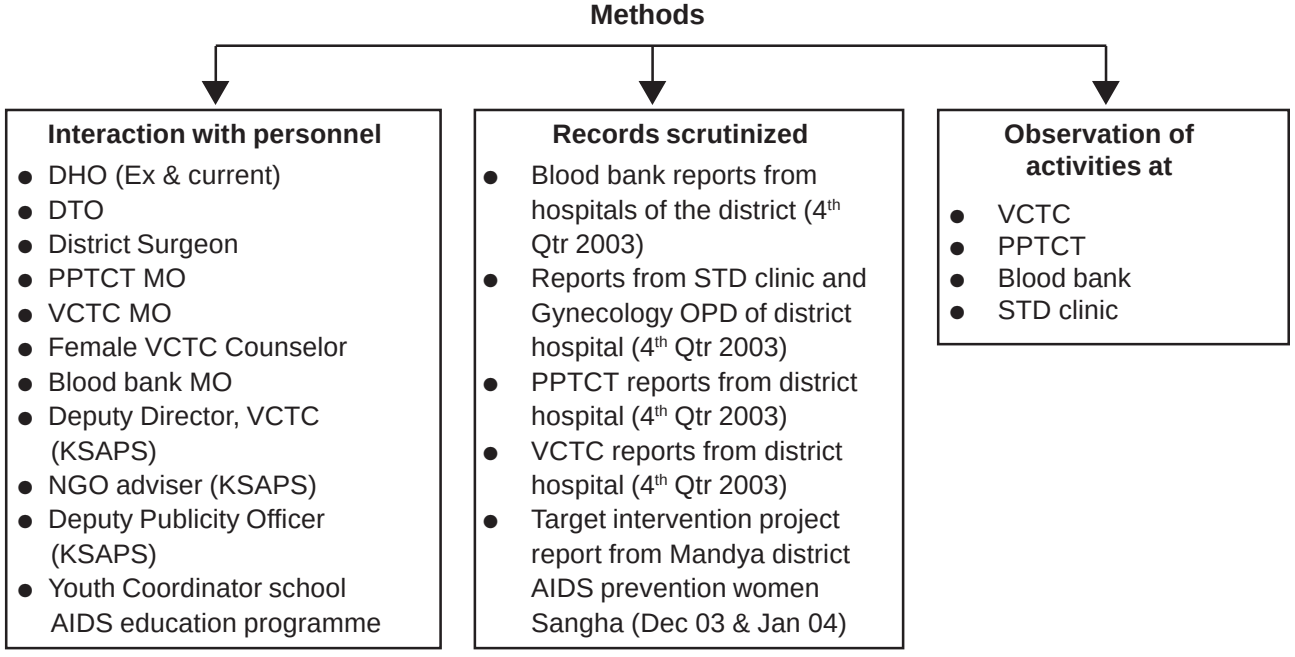


Places visited for collecting data

- District Tuberculosis Centre Mandya, All the 4 TUs in Mandya district –Mandya town, Malavalli, Nagamangala and KR Pet.
- 8 DMCs – 1 located at each of the 4 TUs and 1 randomly selected DMC from each of the 4 TUs, namely Maddur (Mandya TU), Halagur (Malavalli TU), Bellur (Nagamangala TU) and Panduvapura (KR Pet TU)
- MGM sanitorium
- 5 randomly selected PHIs -2 from Mandya TU (Mangala and Tobinkere) and 1 each from the other TUs (Adhichunchunagiri from Nagamangala TU, Kythanahalli from KR Pet TU, Hagalahalli from Malavalli TU)

B. Methodology of situational analysis of AIDS control programme:

The situational analysis was conducted in the months of November 2003 and Feb-March 2004. The activity was done in conjunction with an official from Karnataka State AIDS Prevention Society (KSAPS). The interruption in the activity after the month of November was due to the non-availability of the official from KSAPS during that period.



Places visited for collection of data -

- Office of KSAPS at Bangalore
- District hospital at Mandya
- Office of District Health Officer, Mandya
- Office of DTO

Observations and discussion

A. Situational analysis of RNTCP :

The RNTCP in the district of Mandya was implemented on 24th March 2001. Specifically looked into were the aspects pertaining to the political and administrative commitment towards the programme, human resource development, case finding and laboratory services, treatment and DOT, drug supply, supervision of the programme, recording and reporting, IEC activities and financial management.

Political and administrative commitment

The District Tuberculosis Officer (DTO) and District Health Officer (DHO) were committed to the cause of RNTCP. They regularly reviewed the performance of the programme through scrutiny of reports and periodical supervisory visits. The last District TB Control Society (DTCS) meeting was held nine months prior to the situational analysis and was thus not in accordance with the stipulated guideline of at least one meeting every six months. The DTO mentioned that the collector of the district was formally sensitized on the nuances of RNTCP. A district Action Plan for the year 2003-04 along with time-lines and budgeting (which also included an IEC component) was in place.

Human resource development

A significant shortfall in the district was the absence of a full time DTO. The District Surveillance Officer of Mandya district was entrusted with the additional responsibilities of DTO, District Malaria Officer and Nodal Officer of the AIDS control programme. Consequently, the proportion of time he could devote for TB control activities was limited. One of the TUs in the district (KR Pet) did not have a designated MOTC for over a year.

All the sanctioned posts of laboratory technicians (LTs), Senior Treatment Supervisor (STS), Senior TB Laboratory Supervisor (STLS) and Medical Officers at peripheral health institutions were completely filled. All the LTs, STS and STLS were trained in RNTCP and their knowledge levels on the programme was satisfactory. About 90% of the Medical Officers of the general health services were trained in RNTCP and during interaction it was observed that they were familiar with the programme guidelines. The identification of staff requiring retraining in RNTCP was ascertained by the DTO during his supervisory visits.

Case finding and laboratory services

The most notable achievement of the RNTCP was in the high degree of proficiency exhibited by the laboratory personnel in the district. The laboratory technicians and all the STLS performed their duty diligently and were adept with the bench procedures of sputum smear microscopy. When a panel of five stained slides were provided to the LTs to gauge their proficiency, it was observed that there was 100% concordance in the readings.

All the designated microscopy centers were equipped with a functioning binocular microscope. However, the DTO was not aware of any Annual Maintenance Contract for the microscopes. The laboratory registers were correctly maintained and up to date in all the microscopy centers visited. Random scrutiny of the records revealed that the data entered in the laboratory register, TB registers and treatment cards were uniformly consistent. There was a shortage of laboratory consumables and reagents for several months in 75% (6 out of

8) of the DMCs visited. All the slides were preserved by the laboratory technicians for cross-examination by the STLS.

The annualized case detection rate of new smear positive cases, based on the quarterly reports of 3rd quarter 2003 was 64%[2]. The sputum conversion rate of new smear positive cases put on treatment during the 2nd quarter of 2003 was 86%[2]. The case finding and sputum conversion rate were thus below the expected levels. The ratio of smear positive to negative patients was 1:0.7.

The contribution of the hospitals in the district towards case finding activities was also looked into. In the 2nd quarter of 2003, the proportion of new adult OPD patients referred for sputum smear microscopy from the hospitals were as follows – 0.4% from district hospital at Mandya, 1.1% from hospital at Maddur (MC), 0.3% from hospital at Malavalli (TU), 1.3% from hospital at Nagamangala (TU), 0.5% from hospital at K.R.Pet (TU), 0.8% from hospital at Panduvapura (MC).

There was a surfeit of microscopic centers in addition to those designated under the RNTCP which were undertaking sputum smear examinations which is not in accordance with the programme policy.

The disposal of laboratory waste in 75% (6 out of 8) centers visited (Maddur and Panduvapura being the exceptions) was not as per guidelines. The foot-operated bin was not available in many laboratories. There was also a shortage of hypochlorite/phenol in many places.

Treatment and DOT

The DTO conceded that initial home visits to patients houses were not always made by the health workers before initiation of treatment. Almost all the patients (over 97%) put on TB treatment were on DOTS regimens. The doctors including those posted in the sanatorium prescribed only RNTCP regimens. Three of the seven patients on non – DOTS treatment in the district were prescribed rifampicin containing regimens. Most of the patients (83%) were put on treatment within a week (mean duration 4.5 days) of being diagnosed. All cases were registered within a month of initiation of treatment.

The maintenance of the treatment cards, patient wise drug boxes were as per guidelines. There was good co-relation between the quantum of drugs in the patient wise boxes and entries on the treatment card.

There was good utilization of the government staff at all levels to provide DOT. In fact, some of the doctors also functioned as DOT providers. At times the DOT providers adopted innovative strategies like providing DOT in the work place of patients if it was mutually convenient to the provider and the patient.

There was no peadiatric patient put on treatment under DOTS as there was no provision for the procurement of peadiatric anti-TB drugs in the district.

In all the facilities visited, the arrangements made for the provision of the DOT was not as per guidelines-there was no proper place identified for administration of DOT, while provisions for water, glass and seating facilities for patients were unsatisfactory.

Random home visits to 17 patients (from Nagamangala, K.R.Pet, Malavalli & Mandya TUs) on treatment revealed that they were content with the services provided by the RNTCP and received DOT during the intensive phase as per guidelines.

Regarding treatment outcome of new smear positive cases, registered in 2nd quarter 2002 the cure rate was 79% while the death, failure and defaulted rates were 5%, 3% and 12% respectively[3]. The high default rates in the district can be attributed to patient retrieval actions not

being in accordance to guidelines. On perusal of treatment cards, it was observed that it took about four days to retrieve patients who interrupted treatment during the intensive phases of treatment.

RNTCP Drugs

There was no shortage or stock out of RNTCP drugs in the district at any point of time. All the drugs were within the expiry period. The storage and inventory of drugs were satisfactory though the civil works at the drug stores in the TUs were not as per RNTCP guidelines.

Supervision

The supervision of the TB control programme by the DTO, MOTC at Mandya, STS and STLS was undertaken as per RNTCP guidelines. However there was no supervision undertaken by the MOTCs at Nagamangala and Malavalli.

Recording and reporting

On random scrutiny of records, it was observed that there was 100% consistency between the recording on the treatment cards, laboratory and TB registers. The DTC had a computer, fax and a photocopier. The quarterly reports were sent electronically to the state and central authorities on time. The data from TB registers of all the four TUs was scrutinized to calculate the number of patients registered and to ascertain the cure rates during the second quarter of 2002. This was cross-checked with the quarterly report submitted by the district. There was no discrepancy between the observed and the submitted data.

Building Partnerships

The lone medical college in the district at Adhichunchunagiri was not involved in RNTCP. Also, there was no partnership forged with the NGOs or private practitioners in the district. The sanatorium in the district diagnosed large volume of TB patients but the networking between the RNTCP and the sanatorium was not formalized. Only 81 of the 122 patients belonging to Mandya district (2nd quarter 2003) who were diagnosed in the sanatorium were put on treatment. The laboratory at the sanatorium was not designated as a microscopy center and civil works too was not satisfactory. The visits to the sanatorium was made only to augment case finding activities and the STS and STLS did not undertake any supervision of the microscopy or treatment activities of the center. The district had a functional computer with Internet facility and had in place a contractual data entry operator. The RNTCP had provided the DTO and STS / STLS of the district with vehicles for supervision.

IEC activities

There were adequate IEC print materials at the DMCs. However in 75% (6 out of 8) of the centres visited there were no wall paintings and even posters and other RNTCP materials were inadequate. The DTO informed that the IEC Budget for the year was largely unspent.

Financial Management

There were episodic shortages of budget, which precluded the regular disbursement of salary to the STS and STLS. The Statement of Expenditure was sent on time to the Central TB Division.

B. Situational analysis of AIDS control programme

The HIV/AIDS prevention and control measures at the district level in Karnataka are implemented by KSAPS in consonance with the policies of National AIDS Control Organization (NACO). The activities of KSAPS include targeted interventions among high risk groups through the involvement of NGOs, condom promotion, strengthening of efforts to control Sexually Transmitted Infections (STIs), IEC activities

promoting awareness on HIV/AIDS, blood safety, establishment of VCTCs and Prevention of Parent to Child Transmission (PPTCT) and family health awareness campaigns. The KSAPS activities were only confined to the district hospital. The facts of the activities evident in the district is described below.

Blood Safety

The blood safety activities were observed in the blood banks at the District Hospital, Adichunchunagiri Hospital and MDC Voluntary Blood Bank. The visit to the blood bank in the District Hospital revealed that the critical equipment and consumables were available in adequate quantity. The blood units were tested for HIV, Hepatitis B and C, Syphilis and Malaria. The stock of the blood bags was adequate and voluntary blood donation camps were arranged periodically. The Medical Officer of the blood bank at the district hospital informed that professional blood donating activities were non-existent in the district. HIV positive blood was discarded by mixing it with sodium hypochlorite solution.

STD clinic

The functioning of the STD clinic at the District Hospital appeared to be satisfactory. There were no inadequacies with respect to staff, equipment, consumables, drugs and condoms in the STD clinic. The personnel at the STD clinic distributed about 3300 condoms in the fourth quarter of 2003. The STD clinic did not have a waste disposal bin nor was antiseptic solution present in the bowl meant for it. The DTO mentioned that all government doctors of the district were trained in the syndromic management of STIs and the requisite drugs were also provided.

PPTCT activities

The PPTCT team was headed by a paediatrician. However, the team did not have a gynaecologist as one of the members and thus did not conformed to guidelines[4]. Pregnant women were counseled at the PPTCT centres and offered HIV testing in accordance with NACO guidelines. HIV positive mothers were offered post test counseling, options of breast-feeding was explained and issues related to partner notification were discussed. Nevaripine prophylaxis was administered to new-borns of HIV positive mothers (2mg/kg as a single dose to new born and 200 mg tablets to mother during labour). Regular follow-up of HIV positive babies and their siblings were undertaken. In all 2901 antenatal cases registered in the year 2003. Of the registered cases, 2269 (78%) were counseled and 2212 (97%) accepted the HIV test of which 22(1%) were found to be positive.

VCTC activities

The VCTC was adequately staffed with a Medical Officer, two counsellors and a laboratory technician. The knowledge levels of the staff on HIV testing protocol except the VCTC Medical Officer were satisfactory. Adequate quantities of post-exposure prophylaxis drugs – Ziduvudine, Lamivudine and Indinavir were present in the hospital. The laboratory had adequate HIV testing kits and critical equipment (2 refrigerators, centrifuge, micropipettes, needle destroyer etc.). There were adequate IEC messages displayed in the VCTC highlighting the various aspects of HIV / AIDS – how it is spread, how it is not spread, how to prevent HIV / AIDS, promotion of the use of condoms, educating people on the symptoms of TB and where to go for treatment. There was also poster on Karnataka Network of Positive People (KNP+) which is a self-help group funded by KSAPS. The reports pertaining to VCTC activities revealed that the HIV sero-positivity among the clients attending VCTC was 25%, 24% and 16% respectively for the months of October, November and December 2003.

Involvement of NGOs

The only NGO which was involved in AIDS control activities was Mandya District AIDS Prevention Women Sangha. The NGO was involved in targeted interventions among 823 brothel and non-brothel Commercial Sex Workers (CSWs). Peer educators participated in the monthly meetings with the targeted audience. Behaviour change communication was instituted through stickers, posters, leaflets, handouts and pamphlets. They were counseled on STIs by the NGO staff and referred to specialized centres, if required. The organization also undertook free distribution of condoms.

School AIDS Education Programme and Family Health Awareness Campaign

Family Health Awareness Campaign was an effort undertaken by the DTO in April-May 2003 to address key issues related to reproductive health especially in rural and marginalized population. School AIDS Education Programme was an endeavour to create awareness on issues of sex and sexuality, reproductive health, STIs and HIV/AIDS prevention in high school children. The DTO was involved in the sensitization of high school teachers in these aspects and the teachers in turn imparted this information to students.

Scrutiny of reports

All the reports pertaining to KSAPS activities (PPTCT, VCTC, STD clinic, Gynecology OPD, Blood Banks) emanating from the district were sent in the prescribed formats to the KSAPS office at Bangalore within the stipulated time. In the absence of any indicators or targets, it is not possible to draw any inference on the performance of the AIDS control programme in the district based upon the reports. Nevertheless, it was observed that one of the specific objectives of KSAPS, namely to keep the HIV prevalence rate below 3% in the adult population was achieved in the district[5].

C. TB-HIV collaborative activities

The TB-HIV collaborative activities were evolving and in a nascent stage. On scrutiny of the entries in the VCTC register, it was not clear whether patients were referred from VCTC to RNTCP or vice-versa. Also the DTO mentioned that TB patients were at times indiscriminately referred to the VCTC for HIV testing. There was no IEC activity undertaken in the district pertaining to TB-HIV except in the VCTC where there were posters on symptoms of TB and free diagnosis and treatment offered by the RNTCP.

The major reasons for minimal palpable linkages between the RNTCP and VCTC in the district were lack of sufficient data on TB-HIV co infection, lack of awareness on collaborative activities among service providers, inadequate facilities in peripheral areas (the KSAPS activities were retracted to the district hospital) and the existence of a sub-optimal referral and reporting system between the VCTC and RNTCP.

Recommendations

The revelations of the situational analysis were largely on the expected lines. The programmes had their areas of achievements though they were punctuated by shortfalls –most of which were amenable to administrative rectification. The findings of the situational analysis along with recommendations for improvement were presented to the concerned authorities at the state and district.

It was most necessary to post a full time DTO and to fill the vacant post of MOTC at K.R.Pet TU. It was suggested to the DHO, District Surgeon and DTO of Mandya to hold District TB Control Society meetings at least once in six months. They were also requested to ensure that field supervision be undertaken by the MOTCs at Malavalli and Nagamangala TUs. It was also pointed out that the budget for IEC activities was largely unspent. The DTO and the STS at Mandya TU were asked

to look into the issues concerning the shortage of laboratory consumables and disposal of laboratory waste, which required immediate remedial actions. The facilities for provision of DOT could be made more patient-friendly. There was room for improvement of case finding by instituting measures to forge partnerships with other health care sectors (Adhichunchunagiri medical college, sanatorium, NGOs and private practitioners). Equally important was the fact that the contribution of the six hospitals of the district towards case finding was sub-optimal, though all the doctors were trained in RNTCP. Minimizing default rates (12%) could substantially have increased the cure rate of 79% during that period.

The KSAPS activities were restricted only to the district hospital. It was suggested that the activities of the KSAPS percolate to levels beyond the boundaries of the district hospital for the effective implementation of AIDS control strategies. The other major recommendation was to improve the ownership for the programme – the lack of it even within the district hospital was conspicuous at various levels. The District Surgeon who was heading the hospital and the DHO who was responsible for the implementation of National programmes in the district were not involved in the KSAPS activities. The medical officer in-charge of the PPTCT and the DTO opined that they were too pre-occupied to devote time to KSAPS activities. It was also pointed out that there was a need to involve more NGOs to address the concerns of high risk and bridge groups like IDUs, street children, truckers and so on.

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