SIGNIFICANCE OF FOREIGN FUNDING IN DEVELOPING HEALTH PROGRAMMES IN INDIA - THE CASE STUDY OF RNTCP IN THE OVERALL CONTEXT OF NORTH-SOUTH CO-OPERATION

VARINDER SINGH*, ONKAR MITTAL **

Does the World Bank treat the RNTCP as an independent intervention or part of a broader strategy contributing to health sector reform in India? Considering that health sector reforms have made limited progress in India, does the Bank expect RNTCP to succeed in the absence of these reforms? Is the Bank using RNTCP or other projects in its portfolio, as a push mechanism to get the relevant health sector reforms and solve the systemic issues plaguing the health services delivery in India, which was the prime reason for the failure of NTP? Has RNTCP been able to contribute to this unstated, esoteric objective or is it being seen merely as a vertical programme driven either by the Centre or the States?

I. INTRODUCTION

External assistance on disease containment and health policy has been a global phenomenon ever since the advent of modern medicine. The technically and resource advanced countries have been contributing to health programs of the resource constrained nations particularly with an objective of disease containment and eradication. India has its own history of receiving external assistance for its health programs since 1950s. Eradication of Small Pox, control of Malaria in 1970s, Family Planning Program, Universal Immunization Program (UIP), Pulse Polio and more recently campaigns against Human Immune-deficiency Virus (HIV) and Tuberculosis Programme had been supported by bilateral or multilateral aids.

External assistance in India is small in terms of its proportion to the Gross Domestic Product (GDP). In health, it has never been more than 1-3 % of the total public health spending in any given year. Yet external assistance has had a profound impact on health, as technical support obtained from such assistance has made a significant contribution to hastening India’s demographic and epidemiological transition.

The present paper reviews the issue of foreign funding in health programmes and specifically highlights its impact of TB Programme development in India.

II. FOREIGN FUNDING IN DEVELOPING HEALTH PROGRAMS IN INDIA

In the initial years, India had depended a great deal on World Health Organisation (WHO) technical expertise for small pox eradication, malaria control and the development of technical capacity in public health. The establishment of technical mission for UIP attracted substantial assistance from a United Nations Children Fund (UNICEF)-led consortium of donors to establish cold chain and to supply associated inputs. This helped upgrade infrastructure and enabled campaigns against vaccine preventable diseases, significantly reducing the disease load amongst children. India has virtually eliminated polio with the assistance provided on an unprecedented scale for Pulse Polio campaign. These successes have strengthened and expanded the original design of the Maternal and Child Health (MCH) programme into a comprehensive Reproductive and Child Health (RCH) strategy, with a primary focus on maternal and child mortality.

Till 1990, except for the control of malaria and leprosy, disease control programmes did not receive the attention they had deserved, partly because of precedence given to population stabilisation by the government; and partly because of low priority given to health sector in development paradigm. The strategy changed with the introduction of liberalisation policies; macroeconomic compulsions and the process of economic reform also triggered a series of developments. The role of external assistance for health became more pronounced with the convergence of several unrelated developments. These included emergence of HIV/AIDS and the increasing concern with controlling infectious diseases as a consequence of globalisation together with the International Monetary Fund (IMF) and World bank strategy to push through the process of structural adjustment with a “human face”. The real change in the nature, scale and depth of donor aid to health began in 1992 with

* Associate Professor, Department of Pediatrics, Lady Hardinge Medical College and associated Kalawati Saran Children's Hospital, N Delhi.
** Ex- Health adviser, DFIDI India, British High Commission, N.Delhi.
World Bank assistance for HTV/AIDS, followed, in quick succession with lending for control for leprosy, cataract blindness, malaria and tuberculosis (TB).

External assistance has enabled technology transfer and influenced the technical strategies adopted for containing disease. In the malaria programme, attention has shifted from case finding and blood smear examination to radical treatment. Changes have been introduced in the technical strategies in DOT resistant pockets, and personal protection has been provided through the use of impregnated bed nets. Advocacy for political and administrative support to HIV/AIDS is also due to support from donor aid agencies; while leprosy eradication is virtually on account of the co-ordinated global efforts of Non Governmental Organisations (NGOs), donor countries and multilateral agencies. In the Blindness Control Programme, external assistance has helped build infrastructure for eye care, doubled the number of cataract surgeries and drastically brought down the cost of intra-ocular lenses, expanding the access of the poor to improved technology. The policy of establishing district level societies to facilitate fund absorption, and enable greater accountability emerged from externally funded projects.

In the TB programme, currently efforts are on for implementation of Directly Observed Treatment Short Course (DOTS) strategy and its rapid expansion with assistance from external donors. This strategy is likely to be strengthened with the establishment of Global Drugs Facility to provide developing countries with TB drugs as in case of leprosy. Finally, in view of the inflow of external assistance, the budgetary outlays for disease control have increased substantially. In proportion to the total Central (Plan) budget for health and family welfare, external assistance has steadily increased to about 35%.

Without under-emphasising the positive impact of the external funding, which has almost always come coupled with a newer technological input, there have been some negative impacts of the external funding. One of the casualty of the reorganisation of the national programs with external assistance has been near total neglect of dissenting views from within the country. The rhetoric commonly used has been that the country has a lot of studies, research experience but to alleviate the suffering of common masses, action should take precedence over debates and research. Time has come to show that we can deliver. Even though this view point is not away from the truth but is not the complete truth. A careful consideration of the dissenting views and real flexibility to adapt or change according to local needs or experience is more likely to enrich any program and shorten the learning curve.

III. INDIAN NATIONAL TUBERCULOSIS PROGRAM - A BRIEF RESUME

India had launched the National Tuberculosis Programme (NTP) in 1952 with the aim controlling TB in the country. The principles of India’s NTP were soundly based on high quality research which demonstrated the feasibility of community based TB control a paradigm shift from expensive sanatoria based treatment. The cornerstones of the NTP were to be the provision of sputum based diagnostic facilities at the Primary Health Centre level; the facility for referring cases for radiological examination and the regular supply of anti-TB drugs as close to patient as possible. The programme nevertheless failed to meet its potential due to factors, which were primarily beyond the control of NTP implementers. The reasons of inadequate performance and inefficiency seems to be lack of support by administrators, politicians, poor supervision, insufficient budget and drugs, poor response of the Peripheral Health Institutes and indifference of the grass root level District Tuberculosis Program (DTP) workers(l). Government of India (GOI) in 1992 conducted a major review of the NTP with assistance of WHO and SIDA(2). The major findings of the review were that there had been undue emphasis on X-ray diagnosis, poor quality and or lack of availability of sputum microscopy, undue emphasis on objective of case detection at the expense of cure, a multiplicity of treatment regimens, treatment completion rates of less than 30%, poor institutional support for the TB programme, inadequate budgetary outlay and shortage of drugs. This review, however, did not attempt to focus on the genesis of the problems plaguing the NTP, viz., weaknesses within the general health services, poor infra-structural support and poorly functional staff which were highlighted by an earlier independent evaluation of NTP in 1988(3).

The incidence of TB in India had changed little in the past 30 years. It was envisaged that HIV associated TB and multidrug resistant problem will increase the magnitude and severity of the epidemic(4). Infact, the spread of HIV epidemic had made the control of TB an international priority for the multilateral development agencies and the bilateral donor organisations. Simultaneously to the GOI review, there was already a think tank working in major developmental agencies like WHO on the needs to affect changes in global strategy for tuberculosis control. Perhaps the GOI review was actually prompted by the impending change in the strategy at WHO. India thus, introduced WHO’s Directly Observed
Treatment, Short Course (DOTS) model under their RNTCP strategy in 1993(5). The essential elements of India’s RNTCP include: passive case finding and diagnosis by sputum smears, directly observed therapy for at least two months, using rifampicin-containing short course chemotherapy regimens; effective patient education to maintain treatment adherence; a secure supply of drugs; individual patient registration; follow-up (including the tracing of treatment defaulters) and outcome evaluation by health workers; and political commitment from local to national level.

The objectives of India’s RNTCP are:

* The cure of infectious and seriously ill tuberculosis patients through the administration of supervised short course chemotherapy (SCO) to achieve a cure rate of at least 85%.
* Augmentation of case finding activities to detect 70% estimated cases, once cure rate objectives are achieved.

The pilot projects for testing the RNTCP based on DOTS strategy, were funded by the GOI with its own budget and funding support from SIDA (phase I pilots) and WHO, World Bank and Department for International Development of UK (DFIDI) (phase II pilots).

### IV. THE INDIAN REVISED NATIONAL TUBERCULOSIS CONTROL PROGRAM FUNDED BY WORLD BANK

Encouraged by the success of these pilots, in 1997 a new Tuberculosis Control Project was launched in selected districts all over the country by GOI with its own budget and funding support from SIDA (phase I pilots) and WHO, World Bank and Department for International Development of UK (DFIDI) (phase II pilots).

The pilot projects for testing the RNTCP based on DOTS strategy, were funded by the GOI with its own budget and funding support from SIDA (phase I pilots) and WHO, World Bank and Department for International Development of UK (DFIDI) (phase II pilots).

The central budget allocation for TB control has increased from approximately Rs 12 crores (US$7 million) in 1989 to Rs 95 crores (US$22 million) in 1999. The allocated annual budget has, however, been consistently under-disbursed by 0%-73% during the past decade, with an average annual under-disbursement of 35%. Although the total budget for TB control has increased, the budget allocated under the national component reduced from about Rs 46 crores (US$ 415 million) in 1994 to about Rs 25 crore (US$ 6million) in 1999. Since the world bank funds are only partially reimbursed in a time slice pattern, actual national expenditures are somewhat higher.

### V. GLOBAL CO-OPERATION IN TB CONTROL

Since 1998, TB has become more important on the international agenda. In 2000, a conference in Amsterdam involving ministers from 20 of the 23 high-burden countries (HBCs) and international donors endorsed the urgency of TB control and participants accepted responsibility for tackling the problem. In 2000, the G8 group of countries called for the scaling up of interventions against HIV, tuberculosis and malaria, and set a target for the reduction in tuberculosis mortality of 50% by 2010(8).

WHO regional offices have started to respond in a systemic way to the needs of all countries through strategic planning. International partnerships are better organised than ever, and in a position to provide strong technical support to countries. More donors are investing in TB control, and the establishment of Global fund to fight AIDS, Tuberculosis and Malaria (GFATM) should provide an opportunity to accelerate the implementation plans develop during 2001. New services such as Global Drug facility, are beginning to supply countries with essential drugs for TB control. Assurance of reliable supply of four-drug combinations simplify chemotherapy and reduce the risk of inadequate treatment. There is potential for the pharmaceutical newcomer to improve TB control.
Assisted by Stop TB partnership, all the 22 HBCs made progress towards preparing sound strategic plans during 2001. An international lead technical partner has been identified for each of the 22 HBCs. All HBCs have secured the supply of TB drugs for 2002. Except in China, drugs will be supplied free of charge to all patients(7).

Despite these global alliances and concerns, the major challenge is financial sustainability, in countries that have reached the WHO target of a 70% case detection and 85% cure rate. External financial support has been used to facilitate initial implementation and expansion. Unfortunately, the time scale for external support (typically 5 years or less) is much shorter than that for TB control (usually decades).

The total financial resources required for TB control in the 22 HBC, at an estimated USD 1 Billion per year, if targets are to be met in 2005, are small in the context of recent estimates of the resources required for both HIV/AIDS and malaria. However, important funding gaps are evident, and if progress in global TB control is to be made, these will need to be filled - by governments, by donors, or by both. Increased funding commitment to TB control from traditional donors, the GFATM, or governments, or all three, is necessary if existing plans for improved TB control are to be fully implemented.

VI. CURRENT STATUS OF RNTCP IN INDIA

In order to understand the impact of the foreign funding on tuberculosis control in India, one needs to look at the current status of the program and the available review of the strategy. Several reviews of the progress of the RNTCP have been held by the various stakeholders like Central TB division (CTD) of the Government of India, or the funding or donor agencies.

According to Global tuberculosis report 2002, RNTCP services have become available to over 450 million people in India, up from 400 million in June 2001 and 245 million in September 2000. Impressive as this expansion has been, it still covers only about 11% of TB patients in the country up from less than 2 percent in mid 1998(9).

The RNTCP has been on since 1993 in the country whereas the WB project was started in 1997. The project has completed five years of its life and is due to run for another six months until the closing date of December 2002. During the last five years, suspension of disbursement was in effect for two years due to matters related to procurement. Although disbursement continue to be low at 21%, the project performance continues at this time to be rated satisfactory (in anticipation of the quicker pace of procurement and implementation of the critical project actions upon EFC clearance)(10).

According to the CTD, since 1998 under RNTCP, approximately 3000 small laboratories have been upgraded for smear microscopy, 2000 contractual staff hired, approximately 2,00,000 health care workers trained in different aspects of DOTS service provision, and approximately 500 million tablets of anti-TB medication distributed(11).

Following start of DOT treatment, 2,56,621 (80%) patients had been treated successfully, and 98,302 (81%) patients, who were initially sputum smear positive, had laboratory evidence of sputum conversion in negative. During April June 2000, 75% of the DOT districts reported treatment success rates of more than 80 percent. This is way ahead of the earlier 20-30% cure rates under NTP(11).

The GOI/WHO technical review of the project undertaken in February 2000 agreed that RNTP constitutes an effective public sector TB control service in India(12). It also recognised that most important challenges that India faced in this arena will be from multi-drug resistant TB and the effect of HIV epidemic. Thus it asked for imperative expansion of RNTCP.

During 2001, approximately 300,000 adult outpatient visits were recorded per day in facilities covered by RNTCP, with approximately 5,000 patients examined for TB and approximately 1300 patients started on treatment on each day of operation. During April -June 2001, 179 (95%) of the 189 districts reported that more than 50% of all new pulmonary TB patients were diagnosed as sputum smear-positive for AFB, indicating high diagnostic quality in these districts(11). In a subsequent review of the program, the WB mission also noted that the drugs were universally available in adequate quantities, records well maintained and sputum cups hygienically disposed off(10).

India has been seeing an increase in the total number of smear positive cases reported under DOTS. In the year 2000, the figure (95,000) was almost double of 1999 figures. This increase matched the increase in population coverage under the revised strategy(9).

However, only about one third of estimated smear positive cases in DOT areas were notified and
the total number of smear positive cases recorded nationally was about the same as in 1999. There could be several reasons for this, in addition to the fact that the intake under the RNTCP is based on passive case reporting. Even in areas that have implemented the RNTCP, it is difficult to assess the actual coverage or reach of the RNTCP in these areas. In some urban areas where the RNTCP has been implemented, many patients are still treated under the NTP. There is some evidence to suggest that patients were being selected for inclusion in RNTCP based on their perceived likelihood of completing treatment. As the cure rates are being calculated and monitored only for RNTCP patients, instead of all the patients in an area, this pre-selection of cases for RNTCP, or in other words ceding of the “difficult” patients to NTP, has found favour with the functionaries to achieve target of cure rates(13). After being sensitised to this practice, there has been a change in the reporting format only very recently. It is now that the number of patients put on NTP regimes, in areas where RNTCP strategy is in force, are also to be included in the reporting format. Be that as it may, the outcome measures are rigorously monitored only for the RNTCP patients at the present.

Some TB patients are treated in other governmental institutions and sectors, and many in the private sector. They are totally unregulated. The WB mission noted that in the absence of an approved alternate action plan, districts receiving short course chemotherapy (SCO and conventional treatment (CT) drug regimens under NTP continued to have poor treatment and monitoring practices(10).

A Management

Under the RNTCP several changes in the management were required to decentralise the program beyond the district level by establishing tuberculosis units at sub-district level (one for every 5 lac population). The District Tuberculosis officer (DTO) has the responsibility of supervising the Tuberculosis Units (TUs) and ensuring the quality of diagnosis, treatment and reporting. The recent review by the mission noted that some DTOs lack the necessary training and expertise to provide technical support to, and ensure the credibility of, the Senior Treatment Supervisor (STS) and Senior Tuberculosis Laboratory Supervisor (STLS). Wherever, there was lack of access to transport, supervisory visits by DTOs to the TUs and by the STS and STLS to the health centres and patients were infrequent. In some states, DTO has significant additional responsibilities (e.g. HIV/ AIDS, leprosy, family welfare, immunisation, etc.). Thus programme implementation is unlikely to succeed without a full time officer responsible and accountable for TB control. Some DTOs appear to concentrate on achieving numerical targets to the detriment of understanding problems and devising solutions. Many MO-TCs at the TU level had limited commitment to implement RNTCP.

Generally, the performance of the STS with regard to supervision of drug distribution, recording, and reporting was satisfactory. The STLS are often hampered by lack of sufficient knowledge, skills, experience, and technical supervision. Supervision of treatment observers by the STS was often insufficient, resulting in inadequate performance, especially of treatment observers from other programmes e.g. leprosy(12).

In almost all districts, the high quality and timeliness of quarterly reporting in the RNTCP reflect both good training and intensive monitoring at the central level. Importantly monitoring under RNTCP is done centrally by the CTD in the Central Ministry of Health which has more teeth. This is materially different as compared to what has so far been under the NTP for decades, wherein National Tuberculosis Institute, Bangalore (NTI) used to collate the reports. The latter practice still continues for areas under NTP. It remains to be seen what will happen to the quality of reporting once the control is devolved to the state level.

B. Information Education Communication (IEC):

At present the IEC plan is largely un- implemented. Training in IEC methods and initial development of materials has been limited. Posters were not consistently displayed in health care centres. Although widespread community sensitisation to RNTCP would not be appropriate until adequate services are in place, materials for health care workers and for patients within RNTCP areas are needed.

C. Training/ Human Resource development

Over the past few years, an excellent series of module has been developed for Medical Officers, Treatment and lab supervisors, laboratory technicians as well as and treatment observers. These modules have been extensively field tested and subsequently utilised in dozens of training programmes. Several courses varying in length from 2-15 days for all except the treatment observers have been held.

A formal evaluation of training was recently conducted. Participants were generally satisfied with the content, coverage, usefulness and clarity of modules. Trainees felt that their training needs were met, and they were able to use their knowledge and
skills in their jobs. Their supervisors confirmed that the training had improved job performance(14).

**D. DFID supported RNTCP in Andhra Pradesh**

A review in Andhra Pradesh (AP) found that the project has been slow to expand in the State of Andhra Pradesh. By the end of 2001, DOTS was implemented in 8 districts, covering 25 million population (33% of the total population). Comparatively, the GOI feels that the programme has been more rapidly scaled up in other parts of the country. The GOI is expecting DFIDI to speed up process in the state to improve performance. The reason for unsatisfactory performance is being passed around between project partners. The DFIDI has assumed the role of a change agent and has been supporting the state of Andhra Pradesh to run the program. But there seems to be some lack of working consensus between the partners on the responsibilities and the ownership. In a review of the program in the state of Andhra, there were gaps in the rigorous implementation of the new strategy. The access to microscopy was poor. Though access to TB treatment was good, access to DOTS was questionable and of poor quality. The data revealed weak DOTS, weak supervision and weak follow-up(15).

**E. The Mid Term Review of RNTCP in September 2000.**

The World Bank mission along with MOHFW conducted a mid term review of RNTCP and found that the current management arrangements for the program were inadequate. It cautioned against further expansion without modification of the institutional design of the project, that may entail risks. These institutional modifications were agreed with the CTD but were yet to be completed. Disbursements continued to be low and only 14% of the funds were disbursed(10).

The previous Bank mission agreed that maintenance of a satisfactory project rating was dependent on satisfactory progress toward decentralisation as well as on service delivery. Although the service delivery activities are satisfactory, there has been little progress on project decentralisation. Thus the project was rated as unsatisfactory but this rating has subsequently been revised to satisfactory.

Proposed scope of WB restructured project: The restructuring plan is predicated on continuation of revised technical paradigm for TB control. It is recommended that the development objective remain substantially unchanged, and be revised to read “.... setting UD a decentralised institutional and managerial infrastructure to establish the revised strategy for Tuberculosis control (RNTCP) on a larger scale, and to facilitate its gradual expansion in a sustainable manner to the entire country within 8-12, years timeframe...” (emphasis added).

The PIP which runs from March 2001 to March 2004, proposes acceleration in the coverage of the country with RNTCP services to fully utilize all undisbursed credit within a time frame extended by 1.9 years until September 30, 2004. It proposes phased implementation of RNTCP in approximately 700 Million population (370 districts as compared with original 102), inclusion of all districts with SCC under NTP into RNTCP and strengthening of conventional therapy districts (about 176 districts) for quick inclusion under the program.

It is proposed that the State Tuberculosis Control Societies (STCS) will implement the State level activities and monitor, review, control and report the District level activities. The funds will flow from STCS to District Tuberculosis Control Societies (DTCS). A budgeting and accounting system is in the process of being established at newly created implementing agencies and training of staff is being provided to carry out basic accounting functions and periodic accounting at each level.

**VII. WHAT IS THE KEY IMPACT OF FOREIGN FUNDING ON THE RNTCP?**

The multilateral agencies like World Bank and WHO and other bilaterals like DFIDI and DANIDA have made major impact on the India's Tuberculosis Control Programme. RNTCP as a strategy has evolved from learning from the weaknesses of NTP. NTP had suffered from lack of resources, bureaucratic commitment and political will and functioning health systems. The resources commanded by the donors and the prestige of these institutions seems to have overcome some of these constraints for the time being, after an initial difficult phase the programme is making rapid strides now.

World Bank has also been able to push the shift in the strategy towards decentralisation of the programme to the State governments, though this seems to be not in consonance with the new national health policy. The DFIDI had already been following the same policy in A.P., though the programme seems to have suffered due to that. The DTCS have emerged as new institutional and management tools under the influence of World Bank. The new procurement systems are in place that have streamlined the procurement and reduced the cost of drugs and
supplies. The IEC and other elements of the programme management like involvement of Private medical practitioners and communities are being strengthened. A rigorous Management Information System is in place.

The TB control programme in India, already one of the largest public health programme in the world, continues to expand with plans to cover 80% of the country by 2004 and 100% by 2005. Sustaining and expanding the programme will require continued high level commitment from the central and state governments in India, supplemented by continued and co-ordinated assistance from international and bilateral organisations. Progress in TB control in India is critical to global TB control.

Externally funded projects have also been more flexible of late in resource usage, providing scope for innovation. Amongst examples of innovative features are the co-option of NGOs, the contracting of private sector providers, hospital autonomy to improve managerial efficiencies, and encouraging the retention of users fee at the institutional level to enhance sustainability. However the flexibility is only to a limited extent in order to help rapid implementation of the plan by allowing circumventing procedural delays or legalities of the formal mechanism. However these projects do not allow any flexibility or mechanism for any alternations in the technical aspects of the program.

While the weaknesses of the health systems continue to persist to the same degree or even more in absence of appropriate health sector reforms in India, the direct role played by the international agencies has perhaps filled the gaps that existed in the political will and availability of resources. Is it sufficient to make RNTCP a success where NTP had failed? In absence of the results from the impact studies on the Annual Risk of Infection, prevalence of multi drug resistance and the benefit incidence, it is difficult to provide a definitive answer. While the achievements are impressive, a more detailed analyses of the available data and studies compels to a more cautious optimism.

To conclude, it may be fair to make following observations on the future of the Tuberculosis Control under the RNTCP in India with support from foreign funding:

* **Feasibility of rapid DOTS expansion throughout the country**

The large majority of non-RNTCP districts are in state of UP, Bihar, and Madhya Pradesh where general health services appear to be in not very good shape considering the poor general health indicators in these states. Therefore, the rapid expansion of RNTCP in the next phase will be the real challenge and litmus test. Some Indian workers have always strongly felt that the problem with NTP was a poor primary health care structure and therefore RNTCP will show the same flaws and failures when the program reaches districts where primary health care continues to be poor (16).

* **Improving case detection and cure rates**

It is important to be vigilant about whether the targets for case detection are being achieved or not. In order to achieve the desired case detection rate of the self reporting cases, there is need for involvement of the whole health systems and the private medical practitioners (PMPs) in the programme. Moreover, alternative strategies than DOTS should be considered for the migrant population and other patients in distant areas to improve their access to the RNTCP and ensure that they are not excluded from the programme.

* **Sustaining the programme momentum**

The lack of interest of the DTP workers and patients failure to complete the treatment had been identified as the major factors contributing to failure of NTP. These should be given adequate recognition in policy formulation and programme design to bring about necessary institutional and managerial capacity in the RNTCP to maintain the momentum and make it a success.

* **Social Indicators**

There is ample evidence from all over the world demonstrating an association between TB, poverty and social marginalisation. However, this information has not been included in public health interventions. The social and clinical consequences of TB vary by gender: women who are marginalised within their households and communities may be more vulnerable to the sequelae of disease. The greatest burden is borne by those, least capable of bearing it, and this affects completion and continuity of treatment. Reducing the economic burden is thus likely to increase the cure rate of TB programme. The social, economic and other program indicators in this context, that were developed in the RNTCP, are not being monitored and evaluated at present. This is important not merely for the equity considerations, but also for achieving the programme objectives.
Is DOTS the most cost effective strategy

Studies carried out for patients under NTP indicate that it may be more important to ensure drug collection than to supervise drug consumption. It is worthwhile noting that the relationship between adherence and direct observation of treatment has not been systematically studied in Indian setting, despite the fact that DOTS is one of the main pillars of the new revised strategy for TB control. Evidence form neighbouring Pakistan did not reveal any difference in the cure rates with health worker observation, family member observation, and self-administration groups(17). It seems likely that the most successful approach would be the one, which is responsive to local context responsive to patient needs, priorities and expectations and responsive to provider resources and constraints(16). So far the DOT has been the weakest link in the strategy as most of the independent reviews from Delhi or AP suggest. In Delhi, it was initially seen that there was a pre-selection of cases for DOT based on a feasibility assessment by the providers.

RNTCP, Health Sector Reforms and Role of International agencies

The success or achievements of the RNTCP so far are also due to the support and monitoring by the funding agencies. The CTD has been catapulted into playing a very proactive role in program monitoring and implementation. This could mean that all such health interventions in the country will continue to run as vertical programs. This will also take away the leadership from the local levels. Relatively unsatisfactory success of the program in AP may in part be due to lack of local ownership and leadership. It needs to be debated whether (a) the lack of local/state level involvement is due to poor capacity or poor ownership or as a result of centre’s direct involvement, and (b) whether the funding agencies need to look at a need for a long term partnership for capacity building and sustainable improvement.

It may also be pertinent to ask here how the RNTCP fits in the World Bank’s strategy for health sector reforms in India?. The same may be asked for DFIDI and other donors. Does the World Bank treat the RNTCP as an independent intervention or part of a broader strategy contributing to health sector reform in India? Considering that health sector reforms have made limited progress in India, does the bank expect RNTCP to succeed in absence of these reforms? Is the bank using RNTCP or other projects in its portfolio, as a push mechanism to get the relevant health sector reforms and solve the systemic issues plaguing the health services delivery in India, which was me prime reason for the failure of NTP? Has RNTCP been able to contribute to this unstated, esoteric objective or is it being seen merely as a vertical programme driven either by the Centre or the States? After the mid term review, WB has asked for a major shift of responsibilities to the states(10). However, the recently announced National Health Policy would like to maintain the Central Ministry of Health lead on the management of the disease control programs. It is obvious that GOI has agreed greater role for States in RNTCP under the pressure of WB, but this has not been sufficient for making a fundamental health policy shift. Not as yet, atleast! The implications of this remain to be seen.

VIII. DISCLAIMER

The views expressed in this article as well as any errors, are solely those of the contributing authors and are in no manner views of the organisations they work for.

REFERENCES

3. ICORCI, In depth study on National Tuberculosis Programme of India. Institute of communications, Operations research and Community involvement. (ICORCI) Bangalore, India. 1988.
5. Revised NTP- operational considerations, Central Tuberculosis Division, Ministry of Health and Family Welfare, Government of India 1993


10. Aide Memoir: India Tuberculosis control project, Mid Term Review Mission September 4-22 2000, World Bank.


