CHAPTER II

HEALTH SERVICES

a. Health Policy, Delivery of Health Services & Health Care

087

- AU: Ukil AC
- TI: Legislation and tuberculosis.
- SO: All India Conference on Tuberculosis, 2nd, New Delhi, India, 20-23 Nov 1939 p. 216-223.
- DT: CP
- AB: This was a presentation made to the President and Chair of the TB Workers' Conference in British India, 1939. The presenter traced the history of the organized control of TB in many countries with reference to State legislation and, described the variations in laws passed and their impact on different aspects of the anti-TB efforts. The latter part of the presentation was focussed on legislation and TB in India. Defects in certain existing provincial laws were explained as also the negative impact of some of them on the patient and his/her family. It was considered premature to consider any comprehensive and useful TB legislation in India at the time before correcting existing provincial laws and recommendations were made to enforce laws concerning certain factors which promoted the spread of TB.

KEYWORDS: SOCIAL REFORMS; SOCIO-POLITICAL; SOCIAL ETHICS; INDIA.

- AU: Banerji D
- TI: Health problems and health practices in modern India: A historical interpretation.
- SO: INDIAN PRACTITIONER 1964, 17, 137-143.
- DT: Per
- AB: In this paper an attempt is made to examine how the data from the history of medicine in India can help in formulating health programmes that deal with health problems as an integral part of the overall causation. India's 5000 years of history provides an enormous perspective of the nature of man's struggle against his environment starting from Indus Valley Civilization, the influence of Vedic Way of life of Buddhism, followed by frequent foreign invasions and general decline in the living standards of people. At the time of independence in 1947, India faced on one side, staggering problem of poverty, hunger, illiteracy, size in population and, on the other side, advantage of having ready made technological knowledge which could create effective weapons for dealing with these problems. An ecological analysis of the history of medicine in India shows an expansion of population due to availability of abundant resources, which meant an increase in prosperity and social development. Public health facilities of the city of Mohenjodaro were superior to all other communities of the ancient orient. Almost all households had bathrooms, latrines, often water closets and carefully built wells indicating the extent of health consciousness of ancient Indian people. During Ashokan period, there is existence of social medicine along the line of Buddhist ideology. Emperor Ashoka states that "all over his dominions and adjoining territories, medical

treatment is provided for men and animals". However, the radical changes that followed after the introduction of British rule dealt a fatal blow to the practice of the Indian System of Medicine. A shift to practical western medicine during Nineteenth and Twentieth centuries led to neglect of Indian medicine and further decline.

These historical data help in providing a better understanding of the genesis of the present situation and are also of immense importance for forecasting the pattern of health problems and health practices in the context of ecological changes that are expected to be brought about by other social development programmes, e.g., mechanisation of coal mining might influence the epidemiology of ankylostomiasis through better standard of living; conversely, effective ankylostomiasis programme may bring prosperity by increasing the productivity of the coal miners. This is known as Positive Circular cumulative causation phenomenon. Today, Indian society stands on the threshold of far reaching social, cultural and economic changes. Utilization of the scientific knowledge generated by Industrial Revolution for dealing with the health problem is essential for practicing modern medicine. A sound medical and public health programme must have a very sound infrastructure of overall social, cultural and economic development. In a natural process of social evolution, medical and public health services cannot grow without such an infrastructure. Even if it were hypothetically possible to create artificially (at an astronomical cost) efficient medical and public health services without correspondingly developing the infrastructure, the social benefits accruing from such services will be of doubtful significance. What benefits will a hypothetical 'disease free' state bring to a population that is otherwise ill fed, ill clad, and ill housed and illiterate? KEYWORDS: HEALTH SERVICES; HEALTH CARE; INDIA.

089

- AU: Banerji D
- TI: India's National Tuberculosis Programme in relation to the proposed social and economic development plans.
- SO: INDIAN J PUBLIC HEALTH 1965, 9, 103-106.
- DT: Per
- AB: It has been shown that most of the infectious TB cases in a rural community in south India are at least conscious of the symptoms of the disease; about three-fourths of them are worried about their sickness; and, about half of them actively seek treatment for their symptoms at rural medical institutions. The existing facilities deal with only a very small fraction of even these patients who are actively seeking treatment. India's NTP has been designed to mobilise the existing resources in order to offer suitable diagnostic and treatment services to those who already have a felt-need. India's health administrators have to initiate suitable administrative and organizational reorientation of existing services to satisfy these already existing felt needs. Simultaneous social and economic growth will help in developing the epidemiological strategy and the rise in living standard itself may have a significant impact in controlling TB.

KEYWORDS: SOCIO-POLITICAL; HEALTH CARE; INDIA.

- AU: Rao KN
- TI: Tuberculosis problem in India.
- SO: INDIAN J TB 1966, 136, 85-93.
- DT: Per
- AB: The article provides a description of the health facilities including medical manpower available in India in the mid-60s. Given that the population was rising by 2.2% per annum, it was suggested that the social and sociological significance of the increase of TB morbidity be considered in relation to population growth. Since the Indian tubercle bacillus, while less virulent, varied from strain to strain considerably more than in the European countries, it was recommended that devising ways to combat TB be based on the specific needs of the country. Over Rs. 2,000 crores per annum was expected to be needed to combat TB in India. Therefore, it was more cost- effective to expend funds in the prevention and control of TB rather than used towards covering the cost of illness and premature death.

TB control was one of the priority items in the National Health Programmes incorporated in the successive Five-Year Plans covering 30 years. On reviewing the earlier history of TB Services in India, it was evident that, while the prevalence of TB was recognised in India from 2,500 B.C., the awareness of its existence as a major problem only occurred in the early part of this century. The establishment of the TAI in 1939 marked the first national voluntary effort and also when domiciliary treatment for TB patients was first offered. The break out of the Second World War and the aftermath of the partition of India in 1947 brought all nation-building efforts to a standstill. Subsequently, in 1948, the Indian Government set up a separate TB Section in the DGHS, encouraging rededication to providing TB services; at the same time antibiotics began to replace the use of pneumothorax treatment. By the mid-60s, the TB control programme in India covered wideranging activities such as Preventive Services, TB Clinics, Hospitals & Sanatoria, Rehabilitation, Research and Health Education. The emphasis was on providing preventive & clinical services and domiciliary, anti-microbial activity. A description of various other anti-TB measures taken by governmental, voluntary and international agencies completes the review.

KEYWORDS: SOCIAL PROBLEM; HEALTH CARE; INDIA.

- AU: Banerji D
- TI: Tuberculosis programme as an integral component of the general health services.
- SO: J INDIAN MED ASSOC 1970, 54, 36-37.
- DT: Per
- AB: Sociological investigations have revealed that more than half of all infectious cases in rural areas seek relief at various health institutions and that as many as 95 percent of them are conscious of the symptoms of the disease. These findings lead to the formulation of a felt-need oriented TB programme as an integral part of the services that are offered at the rural health institutions. Specialised TB institutions at the higher levels lend support to them by offering referral facilities. For a population of a million and a half, there is a DTC to give them administrative support. Such an integrated programme

is not only very economical, but it also grows along with the GHS. Its orientation to felt need makes it more acceptable. It also has a potential for covering some 95 percent of the infectious cases in the community, thus indicating that it can have an impact on the incidence rates of the disease.

KEYWORDS: SOCIAL RELIEF; HEALTH SERVICES; SOCIAL WELFARE; HEALTH CARE; INDIA.

092

- AU: Mechanic D
- TI: Sociology and public health perspectives for application.
- SO: AME J PUBLIC HEALTH 1972, 62, 146-150.
- DT: Per
- AB: Much of the content of sociology directly concerns man's adaptation to his changing environment and therefore, this field has important implications for public health practice. This paper reviews some major perspectives and some examples of research that illustrate how an appreciation of sociological variables can assist the public health practitioner.

KEYWORDS: HEALTH CARE; USA.

093

- AU: Ruderman AP
- TI: Health programmes and new directions in social and economic development.
- SO: BULL IUAT 1974, 49, 50-56.
- DT: Per
- AB: The changes in the place of health programmes in the international development process, over time, has meant that the role of health has come full circle, today. The paper describes this changing role of health, from the classic imperative of the medical practitioner to heal the sick and comfort the afflicted through a period when the justification for spending money on health programmes had to be sought in their contribution to economic development to the current period, in the 70's, when once again, health programmes can be justified without recourse to economic arguments. To support this view, several figures, presenting data on the comparative savings from BCG and standard TB treatment in Burma (in the 60s) and the prevalence of TB in the Indian labour force (in the early 60s) are illustrated to show how they might convince development economists to provide money for the TB health programme. KEYWORDS: HEALTH SERVICES; SOCIAL COST; HEALTH CARE; CANADA.

- AU: Newell KW
- TI: Development of health services.
- SO: BULL IUAT 1974, 49, 57-61.
- DT: Per
- AB: TB is a good example around which a discussion of change can take place. The health technology of TB already exists and is widely understood. Economic and effective

methods of prevention and treatment have been evolved, widely tested, and made available world-wide. The question is how to get this to the right people in the right way. KEYWORDS: HEALTH SERVICES; SWITZERLAND.

095

- AU: Nagpaul DR
- TI: A tuberculosis programme for big cities.
- SO: INDIAN J TB 1975, 22, 96-103.
- DT: Per
- AB: A City TB Programme (CTP) has been suggested that meets with most of the existing conditions in our big cities and is in accord with the principles underlying DTP and NTP. KEYWORDS: HEALTH CARE; HEALTH SERVICES; SOCIAL WELFARE; INDIA.

096

- AU: Banerji D
- TI: Public health perspectives in the formulation of the National Tuberculosis Programme of India.
- SO: NTI NL 1981, 18, 50-56.
- DT: Per
- AB: Formulation of a nationally applicable, socially acceptable and epidemiologically effective NTP for India involved use of a wide range of principles of the discipline of community health. These principles can also be very profitably applied in the formulation of nationwide programmes to deal with other major community problems. Government commitment to strengthening rural health services in India by using multipurpose health workers and by employing community health volunteers has further strengthened the case for adopting the approach developed for formulating the NTP on a much wider scale. This approach also gets further endorsement from the concept of primary health care contained in the Alma-Ata Declaration.

KEYWORDS: HEALTH CARE; HEALTH SERVICES; HEALTH SURVEY; INDIA.

- AU: Nagpaul DR
- TI: Problems and prospects of National Tuberculosis Programmes in developing countries.
- SO: BULL IUAT 1983, 58, 186-190.
- DT: Per
- AB: The purpose of the paper is to spotlight some of the problems of NTPs in developing countries and what to expect in the future. The paper presents a review of NTPs' problems with respect to whether they have achieved community-wide coverage, rural people's sociocultural expectations concerning the health centers, integration of NTPs with GHS and certain management aspects. The conclusion is that a majority of these problems are managerial and attitudinal in nature. For instance, the wide variability in the quality of TB services provided at the periphery because of insufficient knowledge or awareness of some GPs, the lack of equitable sharing between hospitals (urban or rural), with health centers (urban or rural), the reluctance of well-qualified staff to accept rural postings, irregular

supply of medicines and lack of staff supervision by senior officers have prevented NTPs from community-wide coverage. While all ingredients for physical integration with GHS are present, functional and attitudinal fusion, of the generalists with the specialists and of rural health centres with higher level institutions up to teaching medical colleges are still lacking. Managerial problems manifest in administration, operation and training are described and the need for political will or leadership is explained. Suggestions to overcome these problems include undertaking a number of operational studies to understand what has happened with regard to NTPs and why, improving training and/or supervision and making the GHS more quality-conscious and management-oriented.

KEYWORDS: SOCIO-CULTURAL; SOCIO-POLITICAL; HEALTH CARE; INDIA.

098

- TI: Hospitalization for pulmonary tuberculosis: Editorial.
- SO: INDIAN J TB 1988, 35, 1-2.
- DT: Per
- AB: The editorial describes briefly, the history of hospitalization for pulmonary TB, noting that this history, in the two succeeding centuries, had been chequered, as it was influenced by successive scientific advances. Currently, even the near revolution of modern chemotherapy has not made hospitalization obsolete. In the developing world, this may not happen for a long time, because admission criteria other than medical could have equal weight. Those who will not accept that hospitalization for TB may have become irrelevant were ignoring economic reality and sensible practicality. It is urged, therefore, that hospitalization for TB be confined to managing emergencies, as a part of general emergency services. In developing countries, all the beds thus released could be handed over to the GHS as contribution to newly emerging primary and secondary health services. KEYWORDS: SOCIO-POLITICAL; SOCIAL MEDICINE; INDIA.

099

- AU: Nagpaul DR
- TI: India's National Tuberculosis Programme- an overview.
- SO: INDIAN J TB 1989, 36, 205-212.
- DT: Per
- AB: The overview takes into consideration the historical, socio-economic, administrative and technical factors, which have played a prominent role in shaping India's NTP. It comprises an analysis of the current status, trend during the past ten years and discussion of some aspects that need further attention. Now, a majority of the constraints are administrative and not even operational, while the needed technical improvements are few. At the present stage of development, it would appear premature to say if the programme has succeeded or failed.

KEYWORDS: SOCIO-POLITICAL; HEALTH CARE; INDIA.

- TI: Health services for Indian middle class: Editorial.
- SO: INDIAN J TB 1989, 36, 1-2.
- DT: Per
- AB: Change is continuous and its ripples deep spreading in society far, wide and long, influenced as well as maintained by the factors that trigger the change. A society therefore needs sentinels to monitor the social changes and try influencing the sociopolitical thinking of those in power in order not to let events overtake people. Otherwise, the resulting adhocism is seldom capable of dealing with the national situations properly. The emergence of a large middle class in India is one such situation.

KEYWORDS: HEALTH SERVICES; SOCIO-POLITICAL; SOCIAL CHANGE; INDIA.

101

- TI: A national task force for NTP: Editorial.
- SO: INDIAN J TB 1990, 37, 173-174.
- DT: Per
- AB: The editorial comments refer to the 1989 Ranbaxy-Robert Koch Oration given by Dr. William Fox, titled "TB in India Past, Present and Future". Dr. Fox highlighted most of the major aspects of TB in India, being familiar with the TB scene in India for over 35 years. Emphasis was placed on the need to improve research, training and evaluation aspects of NTP and on improving programme administration and management based on these findings. However, Fox's recommendation to establish a long term National TB Standing Committee with various powers is considered to reveal his unfamiliarity with various aspects of the Indian administrative and political climate and the social upsurges prevalent at the time. The editorial suggests an alternative way to manage the TB programme, while supporting Dr. Fox's views, in general.

KEYWORDS: SOCIO-POLITICAL; HEALTH POLICY; HEALTH SERVICES; INDIA.

102

- AU: Desai VP & Khergaonkar KN
- TI: Urban tuberculosis programme: The greater Bombay set up.
- SO: INDIAN J TB 1991, 38, 235-238.
- DT: Per
- AB: The article provides a detailed description of the urban TB programme established in 1986 in Bombay and covering the city. The existing health infrastructure was inadequate to deal with an estimated 1,50,000 cases of TB, of which 40,000 were infectious to others. The organizational structure of the city TB programme is explained and the duties of the city TB officer are listed. A review found that since 1986, about 70,000 newly diagnosed patients were put on treatment every year, of which, only about 205 were able to complete the treatment. While there was good public awareness and an excellent transport service, poverty among a majority of the city dwellers and constant rural-to-urban migration were major problems in TB control. Future plans to improve the TB programme are listed.

KEYWORDS: HEALTH CARE; HEALTH SERVICES; HEALTH POLICY; INDIA.

- AU: Chaudhuri K
- TI: Tuberculosis programme: meeting the demand for its review.
- SO: INDIAN J TB 1991, 38, 189-190.
- DT: Per
- AB: The article decries the concept of an episodic assessment of the NTP, done in an ad-hoc manner, with the definite potential of changing the very course of programme development, thereby, weakening rather than strengthening it. Instead, it is recommended that the NTP's existing in-built monitoring be revamped, reactivated and strengthened. KEYWORDS: HEALTH CARE; HEALTH MONITORING; INDIA.

104

- AU: Nagpaul DR
- TI: Towards a rational national drug policy.
- SO: INDIAN J TB 1992, 39, 65-66.
- DT: Per
- AB: The editorial offers some considerations that should go into the making of a rational, National Drug Policy (NDP). Primacy must be given to the National Health Policy in the formulation of the NDP and the task of producing adequate quantities of essential/lifesaving drugs, of good quality and at reasonable prices, must be placed as a challenge before the pharmaceutical industry under market-friendly controls. The production of non-essential/fancy formulations could be left to the demand-supply mechanism, at the same time, stressing rational prescribing practices as part of NDP. KEYWORDS: HEALTH POLICY; INDIA.

105

- AU: Nagpaul DR
- TI : Surajkund deliberations.
- SO: INDIAN J TB 1992, 39, 1-2.
- DT: Per
- AB: This is an editorial on the Workshop organised by the DGHS, 11-12 September, 1991, to thoroughly review the NTP with respect to its overall achievements and shortfalls from expectations. Based on the deliberations, attended by representatives of various international agencies, several recommendations for action, to improve the NTP, were made. It was suggested that a Task Force be set up, with proper terms of reference and a suitable budget to oversee that the recommendations were implemented and that necessary corrective actions were taken, till the time of the next review.

KEYWORDS: HEALTH POLICY; HEALTH SERVICES; VOLUNTARY ORGANIZATION; INDIA.

- AU: Stevens A, Bickler G, Jarrett L & Bateman N
- TI: The public health management of tuberculosis among the single homeless; is mass miniature X-ray screening effective?
- SO: J EPIDEMIOL COMMUNITY HEALTH 1992, 46, 141-143.
- DT: Per
- AB: The aim of the study was to test the assumption that mass miniature X-ray screening of the single, homeless (hostel residents) was a cost effective means of controlling pulmonary TB. The study was a prospective experimental screening exercise to identify new cases of active TB, completing treatment. The setting was eight hostels in South London. A mobile X-ray screening facility was set up outside the hostels. Subjects were 547 single, homeless residents in the hostels. They were encouraged to attend for chest X-ray and for active follow- up of abnormal X-rays. No new cases of active TB were found leading to the conclusion that mass, miniature X-ray was ineffective in controlling TB because of its unacceptability and increasing inaccessibility to this population. KEYWORDS: HEALTH POLICY; UK.

107

- AU: Uplekar MW
- TI: Tuberculosis control in India: the urban viewpoint Guest Editorial.
- SO: INDIAN J TB 1993, 40, 59-60.
- DT: Per
- AB: The guest editorial considers that the NTP, while a well-designed one, has been deficient in implementation of the programme, that the blame for this deficiency should go to the general conditions under which the programme has to function and not the programme itself. Therefore, those who wish to improve the functioning of the NTP should direct their attention to improving the GHS. Regarding the TB control programme in urban areas of India, three trends that have emerged are described. Given these trends, it is considered that only a consensual approach based on mutual understanding towards achieving a common goal could bring about the desired change in the programme. A set of interventions to improve the programme are included.

KEYWORDS: HEALTH SERVICES; HEALTH SYSTEM; HEALTH CARE; INDIA.

- AU: Nagpaul DR
- TI: Tuberculosis programme in metropolitan cities.
- SO: INDIAN J TB 1993, 40, 99-102.
- DT: Per
- AB: The paper explains why the predominantly rural average Indian district received greater attention under the NTP than large cities. Also, why the DTP, as the basic unit of NTP, has not performed upto expectations on account of management weaknesses and not technological shortcomings. It has been shown why it is not necessary to think in terms of separate rural and urban TB services. The manner in which the existing TB services in most big cities can and should be made a part of DTP/NTP has been discussed. In metropolitan cities, where the operational environment is different, the principles of NTP

can still be applied, after due operational and sociological studies, but it is preferable if such studies are made a part of overall health services systems research. KEYWORDS: HEALTH SERVICES; INDIA.

109

- AU: Left DR & Left AR
- TI: Tuberculosis control policies in major metropolitan health departments in the United States V. Standard of practice in 1992.
- SO: AME REV RESPIR DIS 1993, 148, 1530-1536.
- DT: Per
- AB: Since 1978, in the United States, 28 metropolitan health departments initially reporting greater than 250 cases of TB per year were surveyed to determine the standard of practice in the control of pulmonary TB and factors affecting treatment policy. In this survey, results were compared with data obtained in 1978, 1980, 1984 & 1988. As in the previous years, all departments completed the survey. The predominant treatment regimen was 6 months of chemotherapy (64 + or - 1.33% of patients) involving isoniazid (I), rifampin (R) and pyrazinamide (Z). Estimated duration of treatment, which had decreased from 20.2 + or - 2.1 months in 1980 to 7.58 + or -1.02 months in 1988, increased to 9.34 + or -2.32 months in 1992 (p< 0.01). This was attributed to an increased incidence of HIV infection during the previous 4 years. In 1984, HIV infection was estimated to coincide with TB in 2.54 percent of all patients, 7.72 percent in 1988 and 17.42 percent in 1992. Several other major departures from prior perceived practices were reported. In 1980, 32.1 percent of all patients were hospitalized initially for TB treatment, and this number decreased progressively to 17.8 percent in 1988; in 1992, 34.2 + or -1.32 percent of patients with TB were hospitalized for initial treatment. In 1988, no program reported regular use of alternative therapy to isoniazid for chemoprophylaxis; in 1992, 21 programs used alternative regimens (predominantly R-containing). In 1992, nine programs reported increased funds for treatment of TB (27.2+/- 1.97 percent inflation), whereas 16 reported a mean decrease of 14 percent after inflation. The conclusions were that TB treatment in the major metropolitan health departments consisted predominantly of SCC utilizing I, R and Z and that overall mortality was not greater because of initially drug-resistant organisms. However, HIV-associated disease now was a major etiologic factor in TB, and the number of hospitalizations had doubled in 4 years. The lack of increase in funds for treatment was expected to exacerbate the problems in TB control, in the future.

KEYWORDS: HEALTH POLICY; USA.

- AU: Nardell EA
- TI: Beyond four drugs. Public health policy and the treatment of the individual patient with tuberculosis.
- SO: AME REV RESPIR DIS 1993, 148, 2-5.
- DT: Per
- AB: Two extremes of the TB propagation cycle taking place simultaneously in different areas of the United States are illustrated. One illustration represents hypothetical, ideal

epidemiological conditions wherein the applied TB control measures bring about the desired cure in the expected timeframe. Actual conditions prevalent in the US, over the past several decades until recently and still existent in many areas, have been similar to this scenario. The other, more complicated diagram illustrates some of the factors responsible for the current TB resurgence and for the emergence and transmission of multi-drug resistant organisms in the US. Under these conditions, lack of health insurance and other barriers to primary health care often delay the diagnosis of active TB, allowing longer-term transmission. After diagnosis, many potential barriers exist to successful therapy including homelessness, financial and cultural barriers. Patients, not on effective treatment, often transmit multi-drug resistant TB (MDR-TB) in a variety of settings including hospitals and clinics, homeless shelters, jails, chronic care facilities etc. Based on different studies, it was found that among patients with AIDS under treatment for TB, the time period between infection and active disease was so short as to preclude treatment. Studies using genetic finger-printing showed new drug-resistant disease could result from exogenous infection. Vastly different strategies and resources are suggested to achieve control in the two different TB scenarios.

The TB situation in Massachusetts and two features of the control efforts are described in detail. The article by Graves et al (1993) on drug-resistant TB in Puerto Rico is also elaborated. Based on these two sources, it is urged that four-drug (Isoniazid, Rifampicin, Ethambutol and Pyrazinamide) initial therapy and universal drug susceptibility testing be given for all patients. DOT is recommended for previously treated persons and those living outside Puerto Rico and the US mainland. A progressive, step-wise, case management approach to TB treatment, from least to most restrictive, is listed. KEYWORDS: HEALTH POLICY; USA.

111

- TI: Forum on Demand and supply of drugs (this title is constructed by the indexer for identifying the article as the information is without title).
- SO: INDIAN J TB 1993, 40, 172-173.
- DT: Per
- AB: Keeping the list of drugs available in the market to the bare essentials, reducing practices (such as hosting of conferences, advertising, peddling of samples and literature, etc.) which add huge overheads to the cost of production of drugs, rational drug prescription policies and consumer awareness as well as education are the essential ingredients which can ensure availability of low priced drugs.

KEYWORDS: SOCIAL COST; HEALTH POLICY; INDIA.

- AU: Norregaard J, Grode G & Viskum K
- TI: Restrictive treatment policy for pulmonary tuberculosis in a low prevalence country.
- SO: EUR RESPIR J 1993, 6, 23-26.
- DT: Per
- AB: In Denmark, treatment of TB is generally recommended only if the diagnosis is confirmed bacteriologically. This policy may cause a delay in treatment if the patients are smear

negative. The duration of the treatment delay, and whether the delay would cause any serious health problems for the individual or risk of contact infections, in a retrospective examination of 324 cases of pulmonary TB was investigated. The mean treatment delay was longer in the oldest age group. Concerning death due to delay, there was no risk for those patients who were not weakened by other disease or old age. Only 11 patients (3.6 percent) over the age 10 years were treated without bacteriological confirmation (1 percent for Danes). The infection risk from the smear- negative but culture-positive patients was minimal as only one subject was definitely infected from a smear-negative patient. However, a risk of transmission exists from patients who are initially culture-negative but later become smear-positive. In conclusion, the epidemiological and individual risks were sufficiently low to continue the rather restrictive treatment policy. KEYWORDS: HEALTH POLICY; DENMARK.

113

- AU: Madico G, Gilman RH, Checkley W, Cabrera L, Kohlstadt I, Kacena K, Diaz JF & Black R
- TI: Community infection ratio as an indicator for tuberculosis control.
- SO: LANCET 1995, 345, 416-419.
- DT: Per
- AB: The relative importance of within-household and community transmission of infection among children aged 6 months to 14 years living in a Peruvian Shanty-town, was investigated. The prevalence of mycobacterium TB exposure among 175 contact children (sharing a household with a person who had confirmed pulmonary TB) and 382 control children (living in nearby households free of active TB) was defined as the proportion of children with a positive purified protein derivative (PPD) skin test.

Ninety-seven (55 percent) contact children and 129 (34 percent) controls were PPD positive. Living in a contact household (odds ratio 1. 74, 95 percent CI 1.11-2.73) and age (1, 11, 1.06-1.18) were significant risk factors for PPD positivity. The community infection ratio (CIR) was calculated as the odds ratio of PPD positive controls to PPD-positive contacts:

CIR = <u>Prevalence in controls/ (1-prevalence in controls)</u> (Prevalence in contacts/ (1- prevalence in contacts).

A low CIR therefore suggests mainly household spread of infection, whereas a high value suggests frequent transmission outside the household. The adjusted odds ratio (for age, sex, within -household correlation, and household size) was 0.40 (95 percent CI 0.26-0.64), compared with values of 0.18-0.37 in studies elsewhere. Currently recommended TB control strategies are suitable for areas with low CIR's. Different strategies may be needed for areas such as the one studied here, with high values.

KEYWORDS: HEALTH MONITORING; SOUTH AFRICA

- AU: Ete K & Khrime TC
- TI: Utilization of changing health infrastructure by National Tuberculosis Programme
- SO: NTI BULLETIN 1995, 31, 7-13
- DT: Per
- AB: Since NTP is integrated with GHS, any improvement in GHS is bound to improve NTP. Similarly, if GHS suffers from any inadequacy, it gets reflected in NTP. In other words,

NTP will sink or sail with GHS. Thus, to achieve the objective of Health for All by 2000 A.D. through primary health care, the existing infrastructure for GHS should be strengthened as per the recommendations and utilised effectively. This becomes all the more compelling in view of the AIDS epidemic which is knocking at the doors of India. KEY WORDS: HEALTH SERVICES, HEALTH INFRASTRUCTURE; INDIA

115

- AU: Diez E, Claveria J, Serra T, Cayla JA, Jansa JM, Pedro R & Villalbi JR
- TI: Evaluation of a social health intervention among homeless tuberculosis patients
- SO: TUBERCLE & LUNG DIS 1996, 77, 420-24
- DT: Per
- AB: The setting is Homeless and other fringe groups are a priority in the global strategies of TB prevention and control in big cities, as a consequence of their generally poor adherence to treatment and concurrent multiple social and health problems. The objective is to evaluate a social care and health follow-up programme targeting homeless TB patients in Ciutat Vella District, Barcelona, which covered 210 patients from 1987 to 1992. During directly observed treatment, primary health care and, if necessary, accommodation was provided. The design of the study is the differential TB incidence rate between Ciutat Vella and the other districts of Barcelona, the percentage of successfully completed treatments and the days of hospitalization saved by the programme were measured.

There was a significant decrease in the TB incidence rate among homeless patients in Ciutat Vella (from 32.4 per 10^5 inhabitants in 1987, to 19.8 per 10^5 in 1992, P=0.03), compared to an unchanged rate elsewhere (1.6 per 10^5 inhabitants in 1987, compared to 1.7 per 10^5 in



Interaction with TB patients

1992, P=0.34). A smaller than expected proportion, 19.6%, of patients failed to complete their treatment, and a decrease in the mean period of hospitalization for TB in the district hospital was recorded, falling from a mean 27.1 days in 1986 to a mean 15.7 days in 1992. The programme appears to be both effective and efficient, as it has enabled a large number of homeless patients to complete their treatment successfully, at the same time saving twice the amount of funds invested.

KEY WORDS: HEALTH POLICY; SOCIAL ASPECTS; HOMELESS TB PATIENTS; BARCELONA.

116

- AU: Jagota P
- TI: Sociological research conducted in the field of tuberculosis in India
- SO: STC NEWSLETTER 1999, 9, 5-15
- DT: Per
- AB: The paper presents a comprehensive analysis of the sociological research on TB conducted in India between 1956-1998. Human suffering; health seeking behaviour, factors affecting and improving treatment compliance are the important sociological aspects of TB that have been investigated. The genesis of DOTS has been traced to the long-standing efforts to try different strategies to overcome the problems associated with treatment completion for e.g., development of supervised, intermittent and SCC regimens. Following are the salient conclusions given in this paper:

In the early 60s, the visionary approach of researchers to focus on the sociological and epidemiological aspects of TB ensured that the NTP, from its inception, was socially relevant and epidemiologically effective.

The level of knowledge of TB does not necessarily lead to patients seeking relief or taking treatment regularly. It is the physical suffering which is found to be associated with the action taking. Cough is found to be one of the most important chest symptoms of TB as it prompts patients to take action for relief.

Organizational and administrative factors such as insufficient facilities for management of TB, inadequate and irregular supply of anti-TB drugs, long distance to travel for seeking relief, drug intake or drug collection act as barriers and prevent patients to be adherent for treatment. Training of health providers is essential so that they give accurate advice to patients concerning treatment and manage the TB activities. Certain other actions to improve treatment adherence include decentralization of TB services while ensuring regular supervision of programme activities.

Increased research efforts in sociological aspects of TB are needed for successful implementation of DOTS programme. There is a need to explore the feasibility of including diverse groups such as private practitioners, social & leprosy workers and dais (birth attendants), as DOTS supervisor. We can also investigate the utilization of other agencies like STD booths and pan shops. The barriers to the expansion of DOTS programme should be removed.

KEY WORDS: SOCIAL RESEARCH; HEALTH SERVICES; INDIA

- AU: Weil DEC
- TI: Advancing tuberculosis control within reforming health systems
- SO: INT J TB & LUNG DIS 2000, 4, 597-605
- DT: Per
- AB: In developing nations, diverse health reform programs are affecting the design, financing and delivery of health care services as well as public health practice. This paper summarizes the characteristics of major reform strategies seeking to improve efficiency, equity and quality. Opportunities and risks for TB control are identified, as are responses in managing the reform transition. Recommendations are provided to advance TB control in this dynamic environment. These include participation in the planning process; demonstration of synergy between reform objectives and TB control; articulation of core functions to be protected; technical, managerial and leadership capacity-building; documentation of effects and best practices; and collaboration with those pursuing other public health priorities and reform analysis.

KEY WORDS: HEALTH REFORM, HEALTH SYSTEM; USA

No.of Records: 31

b. Community Participation & Role of Voluntary Organizations

118

- TI: The Tuberculosis Association of India.
- SO: Bhore Committee Report 1946, 1, 104-105.
- DT: M
- AB: This is a segment of the Bhore Committee's report pertaining to TB and focussing on the history of certain TB organisations and their services. The desirability of establishing an All-India association for anti-TB work and of promoting closer co-operation between Government and voluntary agencies engaged in fighting TB was emphasised by Dr. Lankester as the result of his survey of its incidence in India. This suggestion was implemented in 1929 when it was decided that the funds, raised by public subscription, should be devoted to the promotion of anti-TB work in the country and the King George V Thanksgiving Anti-TB Committee was formed. The organisation consisted of a Central Committee (CC) in New Delhi and of branch Committees in the Provinces and States. The CC undertook the organisation of special training courses in TB for medical men at the All-India Institute of Hygiene and Public Health and the preparation of propaganda material. The CC's Organising Secretary focussed attention on the TB problem through various activities. The next step in the All-India, organised, TB work occurred when, the excellent responses from the people and Princes of India to an appeal, led to the organisation of a broad-based campaign, in turn, resulting in the formation of the TAI, in 1939. The King George V Thanksgiving Anti-TB Fund was merged with the funds of the TAI. The CC of TAI provided expert advice and co-ordinated the activities of the Provinces and States. TAI's main functions were the standardisation of methods, the promotion of consultation by conferences, the training of various types of TB workers, the stimulation of research and education of the public in anti-TB measures. The outbreak of the second World War crippled TAI's activities to some extent. Nevertheless, three measures (the establishment of a TB clinic in New Delhi, the creation of the Lady Linlithgow Sanatorium at Kasauli and the formulation of the home treatment scheme as an essential part of the anti-TB campaign), attributed to Dr. Frimodt Moller, TAI's Medical Commissioner, significantly impacted TB work in India. KEYWORDS: VOLUNTARY ORGANIZATION; INDIA.

- AU: Benjamin PV
- TI: The role of non-official organisation in the campaign against tuberculosis.
- SO: Tuberculosis Workers Conference, 10th, Mysore, India, 2 Feb 1953, p. 28-29.
- DT: CP
- AB: This paper, read at the 10th TB Workers' Conference in Mysore, 1953, emphasises that, typically, non-official agencies in most countries have initiated the fight against TB and lists the essentials of TB services. The government's responsibilities in TB control are described and there is a detailed account of the origin and history of non-official anti-TB effort in India. Three key factors are offered for consideration in planning the future of TB Associations and their work in India: 1) The importance of definite programs such as educative propaganda, welfare activities and, starting and running institutions for TB

patients, 2) The composition and control of TB Associations, 3) The functions of the central Association.

KEYWORDS: NGO; VOLUNTARY ORGANIZATION; INDIA.

120

- AU: Cariappa BM
- TI: Tuberculosis in India-as seen by a layman.
- SO: Tuberculosis and Chest Diseases Workers Conference, 17th, Cuttack, India, 31 Jan-3 Feb 1961, p. 93-97.
- DT: CP
- AB: The focus of this paper is to make known the extensive incidence of TB in India in the early sixties. Various prevailing factors such as a lack of sufficient anti-TB clinics that are properly equipped and adequately staffed, unsatisfactory housing conditions and Government efforts to counter TB, non-availability of sufficient treatment drugs and lack of patients' access to these drugs, have contributed to the high prevalence of TB. To overcome the huge problem, it is recommended that voluntary bodies and individuals should work, in addition to the Government, to strengthen the campaign against TB. Particularly, TB workers could help in strengthening voluntary TB Associations in the country, so that these Associations can really form the people's movement against TB and fill the lack that exists at the moment between anti-TB schemes and the individual patient.

KEYWORDS: COMMUNITY PARTICIPATION; VOLUNTARY ORGANIZATION; INDIA.

- TI: Voluntary organisations and tuberculosis control programmes: Editorial.
- SO: INDIAN J TB, 1961, 9, 1-2.
- DT: Per
- At the International Congress on TB held in Sept. 1960, the place of voluntary AB: organisations in the anti-TB campaign, in view of the changing pattern of social life in different countries, was discussed. Both newly independent countries and countries where TB was more or less controlled, emphasised the need for voluntary organisations everywhere to redouble their efforts against TB. Other key conclusions were that voluntary organisations should have wide representation drawn from different sections of the community including medical personnel to provide technical assistance, they should organise practical service programmes such as health education, case-finding, social services and rehabilitation, they must be independent of government control but work in very close co-operation with government agencies in planning and executing TB control It was opined that voluntary organisations can demonstrate the programmes. effectiveness of different types of programmes in many fields and these could be handed over to the government after a time, if necessary, and, that international conferences were a useful forum to help these organisations in formulating their plans and programmes. KEYWORDS: SOCIAL WELFARE; VOLUNTARY ORGANIZATION; INDIA.

- TI: Tuberculosis associations and domiciliary services: Editorial.
- SO: INDIAN J TB, 1961, 9, 185-186.
- DT: Per
- AB: The co-operation of non-governmental agencies which are generally represented through TB Associations is considered essential in making domiciliary service programmes successful in all aspects. It is recognised that the government has not been able to ensure an adequate supply of treatment drugs. Even when an adequate supply exists, there is a problem in getting these drugs to individual patients and ensuring that they take the drugs regularly for the prescribed period. Therefore, these non-governmental organisations can help in the distribution of drugs, in monitoring drug intake and checking drug default. They can organise constructive programs yielding tangible results such as the TB Seals Campaign. It is suggested that each district have a set of voluntary or paid workers who would assist in the above activities. For the TB control programme to be successful, there should be active co-operation and partnership between official and non-official organisations and, the TB associations should re-orient their programme in order to fit in with the scheme for domiciliary treatment of TB patients.

KEYWORDS: VOLUNTARY ORGANIZATION; TB ASSOCIATION; INDIA.

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- AU: Banerji A, Shawndilay AK & Basu Chaudhuri SK
- TI: Organised home treatment in a small community: preliminary report.
- SO: INDIAN J CHEST DIS 1962, 4, 181-186.
- DT: Per
- AB: One hundred twenty-five cases of pulmonary TB from residents of Vrindaban, UP, who attended the Out-Patient Department of the Shri Brij Sewa Samiti TB Sanatorium in May 1961, were reviewed to assess the value of an organised home treatment scheme. Observations regarding age, sex, stage, cavity and bacillary status and, socio-economic conditions of the patients were recorded. Results of treatment under ambulatory conditions were analysed. Cavity closure was observed in 12 out of 65 cavitary cases and there was sputum conversion in 26 out of 51 cases recorded positive originally. Some problems of organised home treatment, however remain and are indicated. KEYWORDS: COMMUNITY PARTICIPATION; INDIA.

- AU: Meijer J
- TI: The prospective role of voluntary tuberculosis associations throughout the world.
- SO: BULL IUAT 1962, 32, 271-275.
- DT: Per
- AB: The article describes the two views of voluntary TB associations and focuses on the role of voluntary associations viewed as the all-level type, wherein, local voluntary units are confederated in the National TB Association. The government, the medical profession and the general public or the voluntary association, as its representative, are the three partners in the TB programme with specific functions. The voluntary associations are roughly classified into two groups based on whether the TB control programme in the

specific country is recent or has been well-established for long. The prospective role of voluntary associations in developing countries include setting up and encouragement of local voluntary units, co-ordination of the local units, stimulating the government by initiating certain pioneering activities, maintaining a close relationship with the medical profession and promoting international contacts, especially, within the International Union. The work of the TAI is mentioned as a stimulating example that the above ideas can be realized in a developing-country context. The suggested role for voluntary organisations in developed countries include promoting epidemiological research after consultation with epidemiologists, the adoption of a sister organisation in one of the developing countries and extending activities beyond TB control to incorporate other respiratory or vascular diseases.

KEYWORDS: VOLUNTARY ORGANIZATION; HOLLAND.

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- AU: Holm
- TI: How can the voluntary bodies best assist in the global attack on tuberculosis.
- SO: BULL IUAT 1963, 33, 59-60.
- DT: Per
- AB: The abstract is for the segment of a panel discussion on the above topic, held in Paris, Sept. 20-21, 1962. To provide a broad picture of the TB problems globally, the percentage of children at the age of 14 showing a specific reaction to the standard tuberculin test as evidence that they have been infected with tubercle bacilli and, the proportion of adults excreting tubercle bacilli through the respiratory tract as found by the prevalence surveys of representative population groups, were presented. These figures indicated the highly uneven distribution of TB in the world. At one end, there were countries where 1-3% of all adults were sources of infection. In these countries, about half of the children were infected at the age of 14. At the other end, in some countries, the prevalence of TB was so low that only one of 2,000 or 5,000 adults were found to excrete tubercle bacilli and only 1-2% of the children at the age of 14 showed a reaction to the standard tuberculin test. Experience in the means for controlling TB was also unevenly distributed in the world, with an inverse relationship seen between the extent of prevalence of TB and the existence of experienced personnel and facilities. The main problem in the global attack on TB was to supply the developing countries with the necessary experienced personnel and the means to get the TB control programme started. It was suggested that the specific government should take the primary responsibility for the control of TB and that the official health authorities should provide the means and the personnel for implementing the programme. Also, the population must be prepared and educated to accept the programme, through voluntary efforts.

KEYWORDS: VOLUNTARY ORGANIZATION; GLOBAL.

- AU: Cariappa BM
- TI: Problems in the organisation and development of voluntary TB associations.
- SO: BULL IUAT 1964, 34-35, 374-375.
- DT: Per
- AB: Some of the problems in the organisation and development of voluntary TB associations, particularly, in developing countries, such as the problems in building up local and national associations and getting all voluntary work properly co-ordinated with national oganisations and with the IUAT, are discussed briefly. KEYWORDS: VOLUNTARY ORGANIZATION; INDIA.

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- AU: Williams H
- TI: The encouragement of voluntary tuberculosis societies in undeveloped countries.
- SO: BULL IUAT 1964, 34-35, 377-379.
- DT: Per
- AB: The author addresses some typical questions of overseas societies concerning the various roles and activities and the factors to be considered in constituting a voluntary organisation. It is concluded that while it is impossible to foresee every combination of circumstances which may surround the birth of a voluntary TB association, personal enthusiasm, patience, and mental flexibility can overcome every obstacle. In creating a voluntary society, the first step to educate the community as a whole, is being taken. Such a voluntary association can be thought of as a working model which reflects the state of general enlightenment. For this slow process of education, there is no substitute. No hygiene or medical services will be really effective unless the will-power and interest of a significant number of ordinary people are aroused.

KEYWORDS: VOLUNTARY ORGANIZATION, SOCIETIES; UK.

- AU: Chinachoti N
- TI: Problems in organization and development of voluntary tuberculosis associations.
- SO: BULL IUAT 1964, 34-35, 380-382.
- DT: Per
- AB: The Anti-TB Association of Thailand was organised by the senior members of the Thailand Medical Association in the forties. The main obstacles faced by the Association, from the beginning, were the scarcity of funds and a lack of sufficient volunteer personnel. Gradually, as these obstacles were overcome to some extent, the Association's activities expanded in many directions and a number of TB clinics, both static and mobile, were set up in various districts of Bangkok, allotted by the Health Department. Increasing awareness of Association members regarding the programme objectives helped gain their active support for programmes and, with expansion, the Association shifted its responsibilities to work with special groups of people such as school personnel and factory workers rather than the general population which was cared for by the Health Department. The recruitment of technical staff, especially, well-trained doctors and nurses was a major problem. To cope, the Association was getting the

Ministry to send doctors from the TB Control Division to work in the clinics run by the Association. The Association was attempting to develop local associations in various parts of the country.

KEYWORDS: VOLUNTARY ORGANIZATION; THAILAND.

129

- AU: Meijer J
- TI: The use of volunteers in programmes for tuberculosis control in voluntary and official organizations.
- SO: BULL IUAT 1964, 35, 404-408.
- DT: Per
- AB: There seems to be a wide field for volunteer activity in TB control, both in creating the right atmosphere as well as in actual participation in the TB programme. But in order to make the best possible use of volunteers, it is indispensable that the voluntary association has well defined, clear and practical ideas on technique and organization of a modern public health anti-TB programme. Only then, can the association give the necessary guidance to its volunteers who want to serve the cause.

KEYWORDS: SOCIAL WORK; VOLUNTARY ORGANIZATION; NETHERLAND.

130

- AU: Prafulla Chakrabarti
- TI: Quantification and social research : a trend analysis.
- SO: ECO & POL WEEKLY 1970, 5, 1571-1575.
- DT: Per
- AB: The increasing volume of researches in the field of Indian social sciences calls for a close look at, besides other aspects, the methodology followed in them. This paper makes an attempt to examine the extent of application of quantitative methods of data collection and presentation in social science studies in India. A survey of 3907 published studies found that most of them were primarily of descriptive nature and devoid of any quantitative work. The orientation for quantitative research is the need of the hour.

KEYWORDS: SOCIAL RESEARCH; INDIA.



Home Visits by the team (Doctors, Public Health Nurse & Health Visitor)

- TI: A scheme for community programme: Editorial.
- SO: INDIAN J TB, 1972, 19, 39-40.
- DT: Per
- AB: The Advisory Committee of the IJTB suggested an operational research project, in association with voluntary organisations, on the working of the DTCP, similar to the Tumkur Project in India and the Jaffna and Kinta project of Ceylon (Sri Lanka) and Malaysia respectively. The project was to be conducted simultaneously in 4-5 districts in different parts of the country, under the joint sponsorship of the Central Association and the State/District branches. The project primarily envisaged having a number of voluntary workers to assist in the implementation of DTCP by motivating people to attend health facilities for diagnosis, by monitoring patient's drug intake and checking drug default, by disseminating health education on preventive measures in TB, to improve people's health consciousness and to encourage people to avail of existing TB services and facilities, by raising funds to subsidise the project and to provide financial assistance to patients, if necessary. A detailed discussion of the suggested set-up for the project and estimated cost is included.

KEYWORDS: SOCIAL WELFARE; VOLUNTARY ORGANIZATION; INDIA.

132

- AU: Sen Gupta NC
- TI: Community participation in the tuberculosis programme.
- SO: BULL IUAT 1972, 47, 102-106.
- DT: Per
- Several reasons for the failure to achieve the expected results in TB control, globally, are AB: presented and discussed in detail with reference to the three basic components of a TB programme- BCG vaccination, case-finding and treatment. They include the failure of decision-makers and administrators responsible for formulating and implementing NTPs to establish proper and realistic priorities reflected in the choice of control measures and the allocation of available resources to them. For instance, many developing countries have opted for an expensive screening method (mass chest radiography) rather than achieving effective results by provision of basic health facilities within easy reach of everyone and by using direct microscopy sputum examinations. Several countries have focussed on construction of sanatoria when out-patient treatment has been proven to be as effective as institutional treatment. The failure to bring the TB programme to the most peripheral regions and to apply it on a country-wide basis, the failure to orient the consumer sufficiently to the services offered, and several socio-economic and patient factors have contributed to limited success in anti-TB efforts. Given this background, a community participation programme can help increase the success rate of TB programmes by using volunteers in case-finding and in reducing treatment default rate as demonstrated in Ceylon (Sri Lanka) and Malaysia.

KEYWORDS: COMMUNITY PARTICIPATION; SRI LANKA.

- AU: Yamaguchi M
- TI: The role and functions of voluntary tuberculosis associations.
- SO: BULL IUAT 1974, 49, 264-265.
- DT: Per
- AB: The contribution of voluntary organizations to the success of control programmes in the past, in countries where TB prevalence is now low, has been appreciable and this fact should be recognized. The Japan Anti-TB Association and its activities are described to highlight the importance of voluntary organizations in fighting TB. The mortality and incidence rates of TB are still fairly high compared with other low-prevalence countries. Therefore, the Japan Association is urged to fight the loss of interest in TB observed in the country (similarly observed in other low-prevalence countries), as it created serious problems in carrying out TB programs, through utilizing all possible media. Encouraging the activities of women's anti-TB societies, composed mostly of housewives in the community and having its own research institute that conducts research on TB and disseminates all the necessary information, are two unique achievements of the Association. It also conducts an international training course for participants from high-prevalence countries abroad. Fund-raising is a big problem for the association. Ways to overcome this problem are suggested.

KEYWORDS: VOLUNTARY ORGANIZATION; TB ASSOCIATION; JAPAN.

134

- AU: Jeanes CWL
- TI: The functions and roles of voluntary tuberculosis associations.
- SO: BULL IUAT 1974, 49, 266-267.
- DT: Per
- AB: Even in high economic industrialized countries, TB is far from eradication, while in many developing countries it remains the greatest public health problem and disabling and killing disease. In all countries even those with low TB incidence, there is need for the continuance of active anti-TB programmes at a reasonable level, with government operation of the actual programmes, but with continued public interest and support through voluntary TB associations.

KEYWORDS: VOLUNTARY ORGANIZATION, TB ASSOCIATION; CANADA.

- AU: Tani P
- TI: The functions and role of voluntary tuberculosis associations.
- SO: BULL IUAT 1974, 49, 268-269.
- DT: Per
- AB: The Finnish Anti-TB Association and its activities are presented to discuss the functions and role of voluntary TB associations. The primary goals of the Finnish Association are:1) improved TB programme, 2) integration of TB programme into public health services and, 3) greater co-operation with the IUAT. The operational approaches to achieving the goals include information and co-operation, for instance, in amending TB legislation, practical work directed towards patients and scientific activity. The various

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anti-TB activities of the Association conducted with the State Medical Board such as the BCG programme, radiophotographic programme and other independent activities of the Association are described.

KEYWORDS: VOLUNTARY ORGANIZATION, TB ASSOCIATION; FINLAND.

136

- AU: Song D
- TI: Role of the voluntary association in fight against tuberculosis in Korea.
- SO: BULL IUAT 1974, 49, 275-277.
- DT: Per
- AB: The experience of the Korean National TB Association (KNTA) in fighting TB provides some useful insights on the role of voluntary associations. It is recommended that, similar to the KNTA, voluntary associations in other developing countries should cultivate intimate working relations with their respective governments. While the KNTA invested sizable financial inputs into critical sectors of the TB project at the government's request, the latter greatly assisted KNTA's fund-raising effort. KNTA found that people contributed more freely if they could see visible proof, immediately, and on a sufficiently large scale, of their money being utilized for their good. It is urged that voluntary associations must constantly improve to be an example to others. KEYWORDS: VOLUNTARY ORGANIZATION, TB ASSOCIATION; KOREA.

- AU: Radha Narayan
- TI: Changing perspectives of voluntary tuberculosis associations.
- SO: JOURNAL BENGAL TB ASSOCN 1975, 38, 129-130.
- DT: Per
- AB: Since 1850, voluntary organisations have largely benefited victims of TB. In India, the joint family system provided comfort and protection to the TB patient. However, there is an increased awareness for the patient to receive such protection and assistance from society as evidenced by the popularity of sanatoriums and other types of care provided outside homes and families. Christian missionaries took the initial step in providing systematised care of the tuberculous in India followed by several non-governmental efforts. The formation of the TAI in 1939 was a welcome centralised move on an all-India basis which also served as a link to international TB organisations. The Government of India provided active support to all voluntary activities in the country while evolving statutory TB services. The launching of the NTP in India was a turning point in the co-existence of government and voluntary agencies in the common fight against TB. The NTP's approach to consider TB as one of many illnesses to be overcome within the GHS mobilised the services of thousands of health workers throughout the country. As the government exercises statutory powers over increasing areas of social services, there is a need for reappraisal of the concept and activities of the voluntary organisation. New ways by which the voluntary organisations can support the NTP, particularly, with the emphasis on domiciliary treatment, are recommended. KEYWORDS: VOLUNTARY ORGANIZATION; TB ASSOCIATION; INDIA.



Home visits by the Community Volunteers

138 AU: Mora EO

- TI: Volunteers associations in the fight against tuberculosis.
- SO: BULL IUAT 1976, 51, 691-694.
- DT: Per
- AB: The article describes the organization and activities of the Mexican National Committee in the Fight Against TB. The Committee undertakes various activities with three entities, the government, the medical and clinical personnel and the community. Additionally, the Committee encourages meetings of scientists in this field to exchange new methods, techniques and provides information to private doctors to incorporate them into the national programme. The financial contributions of the Committee for anti-TB activities reflects the priorities in the TB programme such as the insufficient health structure of the country and of the health personnel and, the scanty participation of private doctors in the programme. This approach is in contrast to developed countries such as Sweden, where the priority is placed on the field of investigation since social assistance covers the necessities and the costs. The Committee's main income is from the sale of the stamps that it prints annually and which are available to the public during 8 months. This event is publicised through all possible media to encourage people's participation and awareness of the TB programme. A society has been formed to promote the value of collecting various stamps and it is expected to help acquire financial resources for the TB programme.

KEYWORDS: VOLUNTARY ORGANIZATION; MEXICO.

- AU: Spinosa AV, Bales V, Pesanti E & Hadler J
- TI: Treatment of tuberculosis by community workers.
- SO: BULL IUAT 1976, 51, 695-700.
- DT: Per
- AB: A TB control project was undertaken in 1971 in South Western United States, in the reservation of the Navajo Indians (120,000 living in a vast, high, arid land). The specific

problems in treating TB among the Navajo are described. The specific problem was that, despite efforts of medical personnel and available treatment facilities, only 25% of the active TB cases at home were taking their medications. The cause was found to be the inadequate number of trained personnel to do the necessary tasks to keep patients on medication. To achieve the project's goal of increasing the percentage of patients at home, taking medication in one year, to 80%, job analyses were done to develop outlines of the duties, knowledge and skills required of TB workers, the case register clerks and the project Director, by interviewing the physicians, nurses and administrators working on the project. Subsequently, 4 weeks of training (carefully designed around the job requirements of the trainees) was given. An evaluation of the project indicated that 80% of active cases at home were on medication after a year and 96% in the fourth year. Only 4% of cases were lost to supervision, active cases in the hospital were down from 50% to 15%, hospital stay was down from 70 to 18 days, a quarter of active cases were on intermittent therapy, new case rates were down from 150 to 73 per 100,000. A subjective evaluation performed through the use of interviews and questionnaires revealed positive and negative feelings of the workers to different issues of TB work. The conclusions were that TB workers, recruited from the indigenous population and carefully trained, could greatly benefit a TB programme; such a project was best implemented by an objective-oriented approach focussing on the problem, cause, objective, solution and evaluation. These concepts could be successfully utilized in any TB programme, whether it be rural or urban, in a developed or developing nation.

KEYWORDS: COMMUNITY PARTICIPATION; SOCIO-ECONOMICS; USA.

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- AU: Deshmukh MD
- TI: Voluntary agencies in tuberculosis.
- SO: Textbook of Tuberculosis, TB Association of India, 1979 p.167-173.
- DT: M
- AB: The first organised voluntary association was formed in UK in 1898. His Royal Highness, the Prince of Wales who was the founder president, at the time of inaugurating the 'National Association for the Prevention of Consumption and Other Forms of TB', raised the famous question "If preventable, why not prevented"? We might as well ask ourselves the same question even today in India.

KEYWORDS: VOLUNTARY ORGANIZATION; INDIA

- AU: Cariappa BM
- TI: Place of tuberculosis associations.
- SO: Textbook of Tuberculosis, TB Association of India, 1981, p. 592-596.
- DT: M
- AB: The first section of this chapter is devoted to a brief description of the historical background of TB associations world-wide. The rest of the chapter is concerned with the genesis and activities of the TAI. TAI's noteworthy include the annual organisation of conferences of the TB and Chest Diseases Workers in different parts of India, the regular programme of health education activities conducted from its inception, the starting of the

IJTB, a quarterly that is globally respected, and the setting up of the Technical Committee to review questions relating to the teaching of TB at various stages of medical education. Above all, the most effective and outstanding contribution by TAI has been the TB Seal Sale Campaign, started in 1950 and conducted during Oct. 2 - Jan. 26, every year. This Campaign has been the single, sweeping, all-India propaganda effort with potentialities to involve the masses in the anti-TB movement and canvass their full participation in implementing the National Control Programme. Every year, the people of India buy over 30 million TB Seals on an average and use them on their mail, though the seals have no postal value. It is suggested that the TAI take up a wide variety of measures including serving as watch-dogs of official programmes, determining the community's needs concerning TB control, educating the public to promote domiciliary treatment and to reduce drug-default.

KEYWORDS: VOLUNTARY ORGANIZATION; TB ASSOCIATION; INDIA.

142

- AU: Trivedi SB
- TI: Role of non-medical voluntary body in active case detection and case holding in tuberculosis control programme.
- SO: Eastern Region Conference of IUAT, 15th, Lahore, Pakistan, 10-13 Dec, 1987, p. 403-405.
- DT: CP
- AB: Community involvement in the TB control programme has always been considered to be a very important factor. The Rotary Club of Surendranagar District, Gujarat, was entrusted with the work of organising active case detection camps in the district. The case detection work was done by a mobile odelca unit and the laboratory team. The results were handed over to the Rotary Club. The Rotarian volunteers, with the help of the DTC, supervised the regularity of collection and consumption of treatment drugs. Fifteen(15) such camps were held for the chest symptomatics. A total of 5,648 mini Xrays were done and 5077 sputa were examined. A total of 1,395 radiologically active cases were detected. The involvement of volunteers significantly helped in: 1) Early and increased detection of cases, 2) Reducing the financial burden of the treatment by providing the needed drugs to all detected cases, 3) Increasing case holding by voluntarily contacting all the patients in the area, 4) Increasing the public's awareness about the TB problem and helping in providing the necessary health education. This collaborative effort resulted in 78.3% of the cases completing the treatment. It was concluded that community involvement, as in this study, improved the performance of the TB control programme.

KEYWORDS: COMMUNITY PARTICIPATION; VOLUNTARY ORGANIZATION; CASE HOLDING; INDIA.

- TI: Horizon for voluntary organisations: Editorial.
- SO: INDIAN J TB 1990, 37, p. 1-2.
- DT: Per
- AB: Volunteerism is what is most noble in humans. And it stands to reason that volunteerism is fully exploited in the service of mankind. That voluntary organizations can meet many needs and aspirations of the people needs no demonstrated proof. The idea to make these

organizations the corner stone of social development has been attempted but not fully exploited yet. That is why our government has decided, as policy, to associate voluntary organizations in all their programmes for the people, and help them financially to participate. Should voluntary organisations allow a dilution of the voluntary spirit by having in their organizational structure too many people to hold position of power ;in an ex-officio capacity? It goes without saying that some officials are as good as any run of the mill volunteer.

KEYWORDS: VOLUNTARY ORGANIZATION; INDIA.

144

- AU: Kamphuis M
- TI: Case-study of three voluntary organisations doing anti-tuberculosis work in Gujarat.
- SO: INDIAN J TB 1990, 37, 21-28.
- DT: Per
- AB: The inadequate collaboration and co-ordination between the voluntary and governmental institutions should be highly detrimental to patients who after receiving some treatment soon get lost to further treatment because they are not properly referred to health centres near their homes and cannot continue their treatment at voluntary institutions, either, for obvious reasons. The apparent inability of a few voluntary organisations to adapt their activities in line with the modern concepts of TB control may work to the disadvantage of the TB programme of Gujarat state.

KEYWORDS: VOLUNTARY ORGANIZATION; HEALTH EDUCATION; INDIA.

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- AU: Nagpaul DR
- TI: NGOs: partners with government in NTP.
- SO: INDIAN J TB 1993, 40, 1-2.
- DT: Per
- AB: The editorial makes a case for encouraging the partnership of NGOs with the NTP to fight TB. The attitudes and perceptions of the Government, on one hand, and the NGOs, on the other, make this a complex proposition. Several reviews of the NTP's performance over the last three decades concluded that the NTP's achievements were below expectations despite notable progress made in some directions and that the programme was not likely to improve without better programme management and active participation in TB control activities by the people. Therefore, the Government, after the Surajkand deliberations in September 1991, accepted the recommendations of the TAI, one of which was the necessity to develop partnerships with NGOs. The changed facade of the NGOs, today, because of the large number of professionals that have joined them, adds to the benefits the NGOs would bring to a partnership. How the partnership should begin and the various mutual benefits for the Government and the NGOs in becoming partners are described.

KEYWORDS: VOLUNTARY ORGANIZATION; NGO; INDIA.

- AU: Rouillon A & Ogasawara FR
- TI : The role of non-governmental organizations.
- SO: Tuberculosis a comprehensive international approach edited by Reichman LB & Hershfield ES, New York. Marcel Dekker, Inc 1993, p.669-698
- DT: M
- AB: In the fight against TB, a partnership exists among three important sectors: the public, the health professionals, and the government. This chapter will deal with two of these three partners: the public and the health professionals.

A simple relationship between a patient and the doctor as individuals through community-oriented national TB programmes is part of the global fight against TB. The responsibility for having a national programmme rests with the government; it is up to the health authorities to design, staff, implement, assess, and orient the programme. Although this is generally accepted and would seem fully logical today, it is remarkable that the first organized effort against TB (which in many instances led the way to other public health measures) originated from the voluntary combination of the energy of physicians and the public in an attempt to relieve suffering, prevent disease, and disseminate information. Thus were created at the end of the past century and the beginning of this century, voluntary associations that gather together lay individuals and professionals to develop the first elements for the concerted effort to fight TB. In most countries, even though governments have taken the responsibility for providing health services in relevant programmes, the success of any governmental programme continues to depend on the competence and attitudes of professionals who are delivering the programmes and on the active and understanding participation by the people in the measures offered them.

Voluntary NGO are the best means of ensuring high standards in the application of the professional and governmental measures and the widespread participation of the public in any control programme. This includes lobbying for improvements and acting as a "watchdog" for the programme. KEY WORDS: NGO; FRANCE

- AU: Sheela Rangan & Sushma J
- TI: Non governmental organisations in tuberculosis control in Western India.
- SO: FRCH, Bombay, 1995
- DT: M
- AB: A study of NGOs was undertaken in Maharashtra and Gujarat to assess the extent and the type of NGOs' contribution to TB control and to determine ways to strengthen it. The analyses of responses to a mailed questionnaire by 77 NGOs in Maharashtra and 57 from Gujarat and, in-depth case studies of 13 NGOs, selected purposely to understand their functioning and to evaluate the effectiveness of their approaches to control TB, are presented. Regarding the nature of anti-TB work by NGOs, about 50% were dependent on public health services for one or more of their programme components and, about 40% had activities comprising case-finding, treatment and case-holding. Variations in

NGOs contribution between the two states were marked. One-third of all cases detected and started on treatment by the Gujarat State TB Programme were reported by NGOs, while in Maharashtra, case-detection by NGOs was an insignificant 3.5%. More organizations and better facilities were available in Gujarat. The NGO approaches for offering anti-TB services fell into four categories: 1) Institution, Hospital or Clinic-Based programmes, 2) Use of Community-based workers, 3) Use of Public Health Services and, 4) Involving Private Doctors. Concerning technical aspects, all NGOs depended on Xray as a diagnostic tool and most NGOs used SCC for all their patients. The weakest aspect of most NGO programmes was non-maintenance of records and failure to use proper records to assess or improve programme implementation. To improve treatment adherence by patients, NGOs used various approaches such as using part-time villagebased functionaries of another health care programme and home delivery of drugs. For the NGOs, individual donations formed the most important source of funding. Ways by which NGOs and governmental agencies could support each other are suggested. KEYWORDS: VOLUNTARY ORGANIZATION; NGO; INDIA.



Community Health education by Volunteers

- AU: Dick J, Schoeman JH, Mohammed A & Lombard C
- TI: Tuberculosis in the community: 1.Evaluation of a volunteer health worker programme to enhance adherence to anti-tuberculosis treatment
- SO: TUBERCLE & LUNG DIS 1996, 77, 274-79
- DT: Per
- AB: A voluntary health worker project (Operation Elsies River) was started in a high incidence TB area in the Western Cape of South Africa, in order to assist the local TB control programme with case-holding. The objective is to evaluate the effectiveness of this group of volunteers in enhancing adherence of notified TB patients to TB treatment. A cohort study was conducted with 351 TB patients (203 children and 148 adults). The data from

the child and the adult groups were analysed separately. The child group was more adherent to TB treatment than adults. The supervision option with staff dedicated to the treatment of TB, such as the clinic and the SANTA creche, achieved better adherence results for pre-school children. The supervision modalities for adults did not differ in their adherence performance even following adjustment for confounders.

The supervision option provided by the volunteers did not significantly improve the adherence of adult patients to anti-TB treatment.

KEY WORDS: COMPLIANCE; ADHERENCE; HEALTH WORKER; VOLUNTARY ORGANIZATION; SOUTH AFRICA

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- AU: Dick J & Schoeman JH
- TI: Tuberculosis in the community: 2. The perceptions of members of a tuberculosis health team toward a voluntary health worker programme
- SO: TUBERCLE & LUNG DIS 1996, 77, 380-83
- DT: Per
- AB: The setting is a voluntary health worker programme, in the Western Cape South Africa, utilizing volunteers to administer directly observed therapy to TB patients. This study describes the perceptions of health team members regarding the voluntary community health worker project. A qualitative, participatory research study utilizing focus groups.

TB was perceived by the health team to be a stigmatized disease causing some patients to be reluctant to be associated with the TB control programme. Despite the project's dedicated approach to case-holding volunteers expressed the need to develop skills in providing more comprehensive care. The volunteers appear to administer a more personalized service to TB patients and can bridge the gap between TB patients and the health agency. Sustained evaluation and support seem to be a vital tool in integrating a volunteer project into a health team approach. Its effectiveness appears to depend to a large degree on the people involved.

KEY WORDS: VOLUNTARY ORGANIZATION; SOCIAL AWARENESS; HEALTH TEAM; HEALTH WORKER; SOUTH AFRICA.

- AU: World Health Organization, SEARO, New Delhi
- TI: NGOs and TB control Principles and examples for organizations joining the fight against TB; New Delhi
- SO: World Health Organization, SEARO 1999, p.1-49.
- DT: M
- AB: NGOs make a vital contribution to disease control that is increasingly recognized by governments and international development partners. This booklet provides examples of the important contributions NGOs are making to TB control in the region and provides guidelines for NGOs wishing to get involved in the fight against TB.

This is not only a record of success, but also a call for action – a plea for more and more agencies to collaborate and develop partnerships with national TB programmes. And the plea goes out to all organizations – not only those with a historical interest in TB. All organizations – including those working in community development, advocacy, human rights, education – have a role. TB affects us all in one way or another – directly through its impact on the lives of friends and colleagues who have TB, and indirectly through the impoverishment of families and communities. All of us can be, and should be, involved. KEY WORDS: NGO; SEARO REGION; DOTS; INDIA

No.of records: 33

c. Involvement of Private Practitioners

151

- AU: Bordia NL
- TI: Role of the general medical practitioner in the control of tuberculosis.
- SO: MEDICAL DIGEST 1960, 28, 598-605.
- DT: Per
- AB: The medical practitioner has a major part to play in early diagnosis of pulmonary TB, thorough and systematic treatment of all detected cases till their disease is arrested, prevention of the spread of the disease by BCG vaccination to the uninfected, isoniazid chemoprophylaxis to all children below 5 years of age who are infected and to all adult contacts, health education of the people and finally in the rehabilitation of those who lose their jobs or require comparatively light work. He has to participate in this "Mahayagna" launched to eradicate TB from our land as speedily as possible.

KEYWORDS: GENERAL PRACTITIONER; PRIVATE SECTOR; HEALTH CARE; INDIA.

152

- AU: Tandon RN
- TI: The role of general practitioners in the control of tuberculosis in India.
- SO: SOUVENIR SILVER JUBILEE TB ASSOC INDIA, NEW DELHI, 1964, p.114-117.
- DT: Per
- AB: The importance of GPs in various aspects of TB control is emphasised. The majority of patients who go to a State Clinic have typically been under care of a GP at one stage or another. In an urban clinic in Uttar Pradesh, an average of about 10-15% of patients are in the first stage, 20-30% in the second stage and 55-70% in the third stage of TB. These figures have held constant for the past 15 years. Given this scenario, it is considered that unless the co-operation between the clinic doctor and the GP improves, there could not be any improvement in these figures (which are similar to figures in the rural areas). The GP is equally important at the last stage of TB, when only he/ she can instill the necessary discipline in the patient to continue regular treatment. GPs can be useful in providing notification of TB, in regulating the sale and dispensation of anti-TB drugs, treating patients in domiciliary care, participating in mass radiography and contact exams. Several advantages that would accrue from a liaison between the clinic doctor and the GP are listed and it is suggested that registered Vaids and Hakims in rural areas be enlisted to help the Government.

KEYWORDS: GENERAL PRACTITIONER; PRIVATE SECTOR; HEALTH CARE; INDIA.

- TI: The role of general practitioner and public health services in tuberculosis control.
- SO: Proceedings of the Tuberculosis and Chest Diseases Workers Conference, 28th, Ahmedabad, India, 3-5 Feb, 1965, p. 64-74.
- DT: CP
- AB: Today, the role of the GP in the TB control programme has increased from only providing early diagnosis as in the past. The GPs, perhaps due to fear of losing a patient,

typically show apathy in prompt and accurate diagnosis and there is inadequate treatment of diagnosed patients. The role of the NTI is explained to get an idea of how GPs could be involved in follow-up of treatment. While 105 teams of TB officers and staff of the District Clinic, Ahmedabad had been trained thus far by NTI at Bangalore, nearly half had not gone back to establish diagnostic centers in their districts, as expected. To include GPs effectively in the national TB efforts, it is necessary to integrate the control programme with the public health services as is done in Gujarat. Here, because the Public Health Services and the Medical Health Services functioned under one head, there was no problem in getting co-operation from the Medical Officer of the PHCs. Regarding GP training, offering GPs a general medical refresher course with a special part devoted to TB, issuing pamphlets periodically on the latest developments in TB control and providing training for GPs at the undergraduate and post-graduate levels in medical colleges are recommended actions. In teaching about TB, students should be taken to the TB Demonstration and Training Centers and emphasis should be on modern trends in the diagnosis and treatment, especially, at the community level. Some difficulties the GPs experienced in getting involved with the TB programme such as getting laboratory and X-ray exams for their patients are discussed. A voluntary body such as the TB Association could help by conducting post-graduate refresher courses, motivating defaulters and undertaking care and after-care work. Helping GPs update and expand their knowledge of TB, providing them with certain facilities will ensure their greater involvement in the NTP.

KEYWORDS: GENERAL PRACTITIONER; PRIVATE SECTOR; INDIA.

154

- TI: General practitioners and tuberculosis: Editorial.
- SO: INDIAN J TB 1975, 22, 133-135.
- DT: Per
- AB: The editorial emphasises the need for GPs to be provided with adequate knowledge and training (a responsibility to be shared by universities, medical colleges, the central and state governments and others involved in the anti-TB programme) so that erroneous diagnosis, leading delayed referral and, misuse of drugs, by GPs, may be prevented. Suggestions to accomplish this objective include replacing mere clinical teaching with community-oriented teaching in urban and rural practice fields, where the practice of the NTCP can be demonstrated, giving priority, especially to rural GPs to attend symposia and various types of orientation courses and holding State TB conferences in the District Centers with the participation of GPs and other specialists. The NTCP has no concrete plan to enlist the GPs' aid. The GPs could assist significantly by training qualified and popular practitioners in rural areas to hold TB Clinics, to refer cases and to manage these clinics without fear of losing the cases. Provision of proper record keeping schedules, facilities for X-ray and sputum examinations, if these cannot be arranged at the clinic itself, would encourage GPs to participate collaboratively with clinics so that the clinics could manage the diagnosis and treatment while the management of the cases including default actions could be the GPs' responsibility. The TAI, with the IMA, could jointly develop a strategy for the active involvement of GPs in the NTCP and forward it to the Health Directorate for implementation, with their co-operation.

KEYWORDS: GENERAL PRACTITIONER; HEALTH CARE; PRIVATE SECTOR; INDIA.

- AU: Alag, BS, Bhamburkar RN, Krishnaswamy KV, Mody JM, Panse GA & Pamra SP
- TI: Panel discussion on "Involvement of general practitioners in diagnosis, case-detection, treatment and prevention of tuberculosis.
- SO: INDIAN J TB 1981, 28, p. 109.
- DT: Per
- AB: The panel included two GPs, an administrator and specialists in private practice and in government clinics and the Technical adviser of the TAI. The panel discussed the problem in great detail and the following is the consensus of the discussion. KEYWORDS: GENERAL PRACTITIONER; PRIVATE SECTOR; INDIA.

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- AU: Glassroth Jeffrey
- TI: The physician's role in tuberculosis prevention.
- SO: CLINICS CHEST MED 1989, 10:3, 365-374.
- DT: Per
- AB: The greatest challenge in the United States, today, is to prevent those persons who have already acquired a TB infection from developing the disease. Physicians play a critical role in meeting this challenge. The natural history of TB infection is illustrated and discussed. The least well-understood aspect of TB transmission is that of host susceptibility. Although the precise mechanisms underlying the reactivation of latent TB infection are not wellunderstood, there are certain clinical and epidemiological factors associated with the development of TB and these are listed along with some general strategies for TB prevention. In this regard, air-control measures such as urging patients to cover their noses and mouths when coughing, the provision of adequate ventilation in buildings, are helpful. Two approaches for providing direct protection to uninfected persons, vaccination and drug treatment or primary prophylaxis are discussed in detail. While isoniazid preventive therapy has been found to substantially reduce the risk of TB at a generally acceptable risk to the patient, for several listed reasons, this therapy is not universally applied in the US. Alternative drugs for those resistant to isoniazid, identification of candidates for preventive treatment, prescribing and management of isoniazid preventive therapy are elaborated. Consideration of the social aspects of TB and continuing the search for new, effective, preventive therapy regimens that can be delivered cheaply, safely and for relatively brief durations are recommended for future TB prevention.

KEYWORDS: GENERAL PRACTITIONER; PRIVATE SECTOR; USA.

- AU: Uplekar MW, Juvekar SK & Shepard DS
- TI: Treatment of tuberculosis by private general practitioners in India
- SO: TUBERCLE 1991, 72, 284-290
- DT: Per
- AB: Early detection and optimal treatment constitute the most important measures in the control of TB. A study of doctors practicing in a large low income settlement of Bombay was carried out to find out the prescribing pattern for treatment of TB. The doctors selected by simple random were a mixture of those qualified in western medicine

(allopaths) and those qualified in indigenous systems such as Ayurveda, Homeopathy and Unani (non-allopaths). From the list of total 287 doctors, 143 were selected. The sample included 79 allopaths and 64 non-allopaths.

All the doctors were requested to write a prescription for a previously untreated adult case of sputum positive pulmonary TB indicating drug used, dosages and duration. The slips were collected by the Investigator on the spot and later analysed by EPI-INFO software. Of the 143 doctors, 31 (22%) refused participation in the study. The final analysis included 102 doctors (48 allopaths and 54 non-allopaths). Hundred doctors using two or more of the five anti-TB drugs (S, H, R, Z & E) prescribed 80 different regimens non-confirmed with standard recommended regimen except for two doctors who wrote indigenous drugs. None of them employed thioacetazone as the anti-TB drug or recommended intermittent regimen.

This study highlights that irrespective of their background and training, most of the doctors use modern chemotherapeutic agents in the treatment of TB. Most of the regimens were inappropriate, expensive and of long duration of 12-24 months.

This inefficient use of scarce resources may be avoided through Continuing Medical Education of private doctors by experts. Effective media and other possible modes of communication could be used to educate lay people about the disease, the importance of regularity of treatment. Ways need to be considered to make private doctors participate in effective implementation of programme, for which their curative functions could contribute significantly to control the disease.

KEY WORDS: PRIVATE DOCTORS; GENERAL PRACTITIONER; DOCTORS' AWARENESS; INDIA

- AU: Uplekar MW & Sheela Rangan
- TI: Private doctors and tuberculosis control in India
- SO: TUBERCLE AND LUNG DIS 1993, 74, 332-337
- DT: Per
- AB: Over three quarters of the 8 million registered doctors in India are engaged in private medical practice. In urban and rural areas alike people prefer private doctors to public health services for their health care needs. A majority of patients and those with suspected TB also report first to private doctors. A study on 'private doctors and TB control in India' was conducted in Dharavi a shanty settlement of Bombay metropolis to assess their knowledge and practice as regards the diagnosis and treatment of pulmonary TB, their awareness of the NTP and their impression of public health services. A population of 200,000 people was randomly selected. Among a total of 207 private allopathic and non-allopathic doctors serving the population, 143 were interviewed on a semistructured interview schedule on various aspects of TB, its diagnosis and treatment; 31 doctors refused and 10 could not give time. The completed schedules were obtained from 102 (70%) of doctors (48 allopaths and 54 non-allopaths). All of them stated to have come across TB patients in their practice and 25 stated correctly that it is not a notifiable disease. All the doctors were aware of the symptoms of early manifestation of

TB, about 20% replied that they would first investigate the patient before starting treatment, 60% would give antibiotic, 10% with cough mixture and 10% treat for eosinophilia. In response to confirm clinical diagnosis of TB all the doctors would subject the patients to X-ray, ESR & CBC, and 38% of them said they relied on sputum examination. All except 2 doctors employed 80 types of regimens containing SCC drugs, most of them were expensive, inappropriate and non-standard. Cost of drug treatment ranged from Rs.1500/- to Rs.5000/-, cost of diagnosis from Rs.50/- to Rs.200/-. Compliance by patients was reported to be in the range of 25% to 50%. The private doctors' perceptions for treatment default by TB patients were illiteracy, lack of funds, carelessness, relief of symptoms and ignorance.

The nearest government facility providing free diagnosis and treatment to TB patients with all the facilities was a Municipal Clinic with an OPA of 35 per day. About 500 TB patients were under treatment at that point of time. All anti-TB drugs were available in the clinic. A large majority of the private doctors referred those patients who could not afford treatment, to this clinic. Their opinion about public health service was as follows: half of them found unsatisfactory, 40% average, 10% would never refer their patients due to bad treatment. About 70% of private doctors were aware about NTP but could not elaborate on the activities of NTP. About updating their knowledge on TB, 65% mentioned medical representatives of drug companies, 25% through books, 5% through CMEs and 5% did not reply.

Although private practitioners are the first points of contact by the patients, few attempts have been made to involve them in the important national disease control programmes. As a result, although they treat the TB patients in their clinics, but poorly. The importance of notification is well known, yet none of the private doctors ever reported a case of TB. As a result, private doctors seem to be alienated from national efforts towards control of TB, there being no well-defined role for them in the NTP. It is evident from this study that private doctors cannot be wished away, as the people opt for their services, but at the same time they must not be granted total freedom to act as they see fit without caring for the consequences. There is a need for better communication between the private doctors and those implementing disease control programmes so as to enable them to follow appropriate clinical and public health practices.

KEY WORDS: PRIVATE DOCTORS; GENERAL PRACTITIONER; DOCTORS' AWARENESS; INDIA.

- TI: Tuberculosis management in private practice and its implications
- SO: INDIAN J TB 1996, 43, 19-22
- DT: Per
- AB: This study of 81 rural and 96 urban private medical practitioners, which included 67 allopaths and 110 nonallopaths, was conducted to understand how patients of lung TB are diagnosed and treated in their clinics as well as their interactions with and perceptions regarding the public health services available for TB control. A majority of private doctors gave little importance to sputum examination and considered X-ray of the chest as

AU: Uplekar MW, Juvekar SK, Parande SD, Dalal DB, Khanvilkar SS, & Sheela Rangan

the single most important diagnostic test for lung TB. They were neither aware of nor employed inexpensive standard regimens for treating their patients. While all private doctors used SCC in the treatment of lung TB, few regimens used by them conformed to the ones recommended under the NTP. Private doctors were aware of but sceptical about TB treatment available at public health facilities.

KEY WORDS: PRIVATE PRACTITIONER; INDIA

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- AU: Uplekar MW
- TI: The private medical sector and tuberculosis control in India
- SO: Proceedings of International CME on TB, 27th & 28th Sep. 1996, p.159-160
- DT: CP
- AB: This paper presents the findings of some of the first studies on the private sector in TB control in India, undertaken by the Foundation for Research in Community Health, in the rural and urban parts of Maharashtra. Two studies examined the management practices of private medical practitioners. One prospective study documented the treatment behaviour of TB patients under care of private medical practitioners and the third one evaluated two city-based TB projects undertaken by groups of private medical practitioners. KEY WORDS: PRIVATE SECTOR; INDIA.

161

- AU: Arif K, Ali SA, Amanullah S, Siddiqui I, Khan JA & Nayani P
- TI: Physician compliance with national tuberculosis treatment guidelines: a university hospital study
- SO: INT J TB & LUNG DIS 1997, 2, 225-230
- DT: Per
- AB: The Aga Khan University Hospital, in Karachi, Pakistan, is a 650-bed university teaching hospital. There is little data from Pakistan on the awareness and application of the WHO's TB treatment guidelines among physicians. This study evaluates physician compliance with these guidelines. A questionnaire to measure physician compliance was developed, pilot tested and standardised. Case records of all patients hospitalized with TB were reviewed (January-December 1995, n = 229), and were classified into WHO Category 1(n = 191), Category 2 (n = 9) and Category 3 (n = 29).

A total of 53 (23%) patients had a diagnostic bacteriological sputum smear examination, of which 38% were smear positive and 47% culture positive. Of 25 cerebrospinal fluid cultures 12% were positive. No sputum smear tests were conducted during treatment. Of 58 patients in Category 1 who completed therapy 74% received a 2-month intensive phase consisting of HRZE (isoniazid, rifampicin, pyrazinamide, ethambutol) (n = 43), while 41% received a 6 month continuation phase with HE (n = 24). Over 70% patients were lost to follow up, more than half of these during the intensive phase.

The study reflects poor awareness of the WHO guidelines and low compliance among physicians, and a high loss to follow-up. Efforts are needed to create physician awareness about the WHO guidelines and their use. This study can be used to assess the

effectiveness of any future physician education and to identify areas of weakness in health care.

KEY WORDS: TRADITIONAL HEALERS; HEALTH EDUCATION; KNOWLEDGE; ATTITUDE; PRACTICE; PRIVATE SECTOR; PAKISTAN.

162

- AU: Uplekar MW, Juvekar S, Morankar S, Sheela Rangan & Nunn P
- TI: Tuberculosis patients and practitioners in private clinics in India
- SO: INT J TB & LUNG DIS 1998, 2, 324-29
- DT: Per
- AB: This study is conducted in Rural and urban areas of Maharashtra, a large state in Western India. to understand TB management practices among private medical practitioners (PPs) and the treatment behaviour of the patients they manage.

Prospective study of help-seeking patterns and treatment behaviour among 173 pulmonary TB patients diagnosed in private clinics, and the TB management practices of 122 PPs treating these patients.

The first source of help for 86% of patients was a PP. The diagnostic and treatment practices of PPs were inadequate; 15% did not consider sputum examination to be necessary, and 79 different treatment regimens were prescribed by 105 reporting PPs. Sixty seven percent of the patients diagnosed in private clinics remained with the private sector, and the rest shifted to public health services within six months of treatment. The treatment adherence rate among the patients in private clinics was 59%. There were discrepancies between the reported management practices of the PPs and what their patients actually followed.

The study identifies and highlights the need to educate PPs and their TB patients, and indicates ways in which PPs could be meaningfully involved in efforts to revitalize the NTCP.

KEY WORDS: PRIVATE PRACTITIONER; MANAGEMENT PRACTICES; INDIA.

163

- AU: K C Mathur
- TI: Tuberculosis treatment management under a private medical practitioner
- SO: INDIAN J TB 2000, 47, 49-51
- DT: Per
- AB: Enlisting co-operation of TB patients in adhering to the prescribed drug regimen, dosages, regularity of drug intake and completion of treatment, under the condition of a private medical practice in India is of topical interest.

It is a common belief that private medical practitioners do not take adequate efforts to offer organized medical care to TB cases due to various reasons. The study was undertaken by a private medical practitioner himself to highlight the TB treatment management under a private medical practitioner. Of the study cohort of 307, 20-25% were from Bikaner city, another 25-30% from Bikaner district, rest were from neighboring districts. Of the total

patients, 211 comprised of newly diagnosed and 96 of previously treated patients. They were all registered at the author's private clinic from 1st Oct 1991 to 31st Dec 1995.

The SCC regimen chosen was 2EHRZ/4HER/3HR and self-administered at home. The regimen and the frequency of monitoring check up in the present study are somewhat different from those recommended under the NTCP. Around 20% of the expected irregularity in drug intake was sought to be covered by prolonging the treatment period from 6 months to 9 months so that each case has the best chance of completing at least 7 months treatment in 9 months. Great care was taken that patients take at least 3 drugs in the initial phase of 2 months.

Personal motivation was given by the private practitioner to the patient and/or family members at each visit and monthly visits which helped the practitioner to maintain a good level of health education and establishing motivational support with patients.

Patient co-operation during the study was quite satisfactory. More than 2/3 of the patients were regular in coming to the clinic. As told by the patients at the time of follow up visits, upto 80% had taken their treatment regularly for 7 months or more in 9 months. There was hardly any difference between the newly diagnosed and previously treated patients in this regard. Of the 307 patients in the cohort 244 (80%) were available for assessing the efficacy of treatment at the end of 9 months. The bacteriological conversion among those previously treated and newly diagnosed was 85% and 90% respectively.

This study demonstrates that a Private Medical Practitioner with minimum infrastructure too can provide anti-TB drug delivery and regular motivation at clinic without difficulty. Therefore, satisfactory results obtained comparable to any good public sector control programme are due to good services provided by the practitioner. Adherence to treatment was the same in both previously treated and untreated cases which suggests that if a reasonable care is provided, the previous poor experience is no bar to enlist co-operation to get good results.

KEY WORDS: PRIVATE PRACTITIONER; CASE HOLDING; INDIA.

No.of Records: 13

d. Health Economics

164

- AU: Andersen S
- TI: Some aspects of the economics of tuberculosis in India.
- SO: Tuberculosis and Chest Disease Workers Conference, 18th, Bangalore, India, 16-19 Jan 1962, p. 204-212.
- DT: CP
- AB: The present paper describes certain economic aspects of TB in India, but does not attempt to combine them in a model. The estimated direct costs (beds, clinics, BCG campaign, drugs, private practitioners, after-care, social welfare etc. and research, training and administration) and indirect costs (disablement, premature death) of TB services of all kinds in India, based on known number of physical units multiplied by estimated average cost, have been calculated. These calculations demonstrated that the TB control programme which the NTP was proposing, was not substantially more expensive to the nation than existing TB services. It was concluded that a far higher government share would be economical and that district programmes utilising and promoting the development of basic, GHS would also be economical. KEYWORDS: SOCIAL CHANGE; HEALTH ECONOMICS; INDIA.

165

- AU: Nagpaul DR & Vishwanath MK
- TI: Economics of health.
- SO: Tuberculosis and Chest Diseases Workers Conference, 22nd, Hyderabad, India, 3-6 Feb 1967, p. 277-300.
- DT: CP
- AB: Health has been defined as the state of perfect physical, social and mental well-being which is somewhat of an abstract definition. In this paper, economics of health is measured through economics of sickness. Because sickness is experienced, it can be measured and it inflicts physical, social and economic sufferings. In a community, economic prosperity is directly dependent on quantum of sickness and its prevention by health services. A sociological enquiry into the part played by disease in the socio-economic development of society was made by carrying out a study in two village population groups. The Social Investigators of NTI made deep, probing questions to elicit presence of symptoms, action taken by them, money spent on treatment and the loss of wages. In the first study, observation-participation technique was adopted. The investigators lived in the village for four months. In the second study, 20% households of those 22 villages which participated earlier in an epidemiological survey conducted by NTI, were interviewed.

Findings of the two studies are combined and presented. Illnesses were classified into major and minor on the basis of clinical severity and the duration of symptoms. In both the studies, 60% of all persons were asymptomatic during 2 months prior to the interview. About 18% had one minor illness, 13% had major illness and only 3% had one major and one minor illness. The quantum of multiple disease (3 or more) occurring in one person was less than 2%. Only 20% of living man-days were spent as sick man-

days. The average annual loss on account of health reasons per family has been estimated to be Rs.90/- and Rs.15/- per capita. The overall economic loss due to sickness, direct and indirect amounted to 3% of the per capita income in the poorer groups of villages and 6% in the economically more favourably placed villages. The material available here strongly suggests that the sizes of households will not have much influence over the sickness in the community. Another significant feature of this study was the phenomenon of substitution within the family whenever the wage earner could not go to work. The evidence examined in this paper suggests that the actual economic loss is only 1/3rd of the calculated loss. It also suggests that the overall cost of sickness to the individuals and family is far less than what is normally calculated and is influenced by the money available in the household.

KEYWORDS: HEALTH ECONOMICS; SOCIAL COST; INDIA.

166

- AU: Banerji D
- TI: Health economics in developing countries.
- SO: Tuberculosis and Chest Diseases Workers Conference, 22nd, Hyderabad, India, 3-6 Feb 1967, p. 301-311.
- DT: CP
- AB: It is now widely recognised that investment in health fields contributes to economic growth of countries by stimulating growth in "human capital formation" and by preventing economic loss due to sickness, disability, premature death and cost of treatment. An integrated plan, in which investment in certain key areas in health field is made side by side with investment in similar areas in other social and economic fields, is essential for reversing the vicious circle of poverty and sickness in developing countries. Health economists will have to work in close collaboration with social planners in other fields in order to develop certain common units for measuring health and other social and economic problems and to identify those areas for investment in health fields which have considerable bearing on social and economic development.

KEYWORDS: HEALTH ECONOMICS; SOCIOMETRY; INDIA.

- AU: Sen AS & Basu RN
- TI: Economics of health-the cost of tuberculosis.
- SO: INDIAN J TB 1972, 19, 144-158.
- DT: Per
- AB: In a study of the cost of TB in India, a direct cost of Rs. 29.68 crores annually has been estimated. The morbidity and mortality losses have been quantified taking into account the urban and rural population separately. The data on mortality in rural areas is very meager and is not available according to age and sex. This, and the expected working life for premature mortality have been calculated by the application of statistical methods. The morbidity loss has been estimated at Rs. 288.4 crores and the mortality losses at Rs. 420.41 crores at 4 percent deduction and Rs. 304.96 crores at 10 percent deduction. KEYWORDS: HEALTH ECONOMICS; SOCIAL COST; SOCIAL WELFARE; INDIA.

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- AU: Murray CJL, Styblo K & Rouillon A
- TI: Tuberculosis in developing countries: burden, intervention and cost.
- SO: BULL IUAT 1990, 65, 6-21.
- DT: Per
- AB: This is a report of the "Health Sector Priorities Review" that the World Bank undertook with a number of collaborators, over two years. The core of this review is a series of studies on the public health significance of major clusters of diseases in the developing world and on the costs and effectiveness of currently available technologies for their prevention and case management. This analysis of TB, supported as a part of these studies, revealed the tremendous burden of TB and the existence of interventions of proven efficacy that were some of the most cost-effective in the international public health armamentarium. KEYWORDS: SOCIO-ECONOMICS; GLOBAL.

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- AU: Dholakia R
- TI: The potential economic benefits of the DOTS strategy against TB in India edited by Almeida J
- SO: WHO/TB/96.218
- DT: WHO Technical Information Series
- AB: The DOTS strategy has been demonstrated to overcome most of the short-comings of selfadministered chemotherapy such as low cure rates, high relapse and fatality rates, drug resistance etc. There are several benefits from successful application of the DOTS strategy. The objective of this study was to estimate the direct economic benefits by the reduction in the prevalence of TB and deaths averted on account of DOTS. The methodology adopted has been the comparison of the two scenario "with DOTS" and "without DOTS" and deriving the benefits and calculating the discounted value of the contributions of the DOTS by applying the discount rates ranging from 5% to 16%. The estimates are generated by using the marginal productivity of labour and the deaths averted by DOTS among future workers in each age-sex-area category. The discounted value of the contributions of the future workers among the deaths averted in one year due to DOTS, the remaining years of their productive life are considered as the economic benefits of the deaths averted. The total benefits due to DOTS have been estimated as % of G.D.P. in 1993-94 and annualized benefits due to DOTS as % of G.D.P. The potential benefits are derived by using the most reliable 1993 estimates from survey of causes of deaths.

The potential benefits of successful DOTS in India are divided into two broad categories (I) Pure social welfare increasing effects of DOTS which do not generate direct tangible economic benefits. These would include reduced suffering of TB patients, quick and sure cure from the disease, lives saved, disability reduced for dependents and non-workers suffering from TB, the poverty alleviation, the psychic benefits of living in a more healthy way. (ii) Direct tangible economic benefits by improving the efficiency and productivity due to reduction in prevalence of disease and deaths and release of the hospital beds by averting hospitalization of TB patients. The method of calculation is based on the estimates of population for the base year 1993-94 by age-sex-area as well as of the workers and sectors. Aggregative macro-economic studies and estimates of productivity differentials are used to calculate rural/urban, adult/child, young adult/old adult and male/female workers output gains. These are applied to two groups 'with DOTS' and 'without DOTS' and the benefits in the improvements likely to occur 'with DOTS' have been estimated.

The benefits are based on twin optimistic assumptions: a) DOTS will succeed in tackling pulmonary TB in India (b) DOTS will reach about 90% of TB patients with full instantaneous coverage. It is envisaged to implement DOTS in a phased manner over a few years. As per the findings of the analysis the potential economic benefits of DOTS to the Indian economy is estimated to be around 4% of GDP in real terms or US \$ 8.3 billion during 1993-94. The economy gets a return of more than 16% per annum. Since the present value of all future costs attributable to DOTS is likely to be less than 4% of GDP, DOTS can effectively help step up India's future economic growth. Phasing in of DOTS over time reduces value of the benefits. Even with 10 years of phasing and 16% of discount rate all future benefits of DOTS turn out to be 2.1% of G.D.P. Projected incremental costs to the government for successful DOTS implementation throughout India are of the order of US \$ 200 million per year, compared to the tangible economic benefits of at least US \$ 750 million per year exceeding by several folds of the financial costs. KEY WORDS: HEALTH ECONOMICS; DOTS; ECONOMIC BENEFITS; INDIA

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- AU: Croft RA & Croft RP
- TI: Expenditure and loss of income incurred by tuberculosis patients before reaching effective treatment in Bangladesh
- SO: INT J TB & LUNG DIS 1998, 2, 252-54
- DT: Per
- AB: This small study undertook to assess the economic consequences of developing TB among patients presenting to the TB clinic run by the Danish Bangladesh Leprosy Mission in NW Bangladesh. The loss of income resulting from the illness, and the actual expenditure incurred by medicines and doctor's fees before registration for treatment, were estimated and totaled for 21 patients serially registered at the clinic. The results showed a mean financial loss to the patient of US\$ 245 an exorbitant sum for a village Bangladeshi. Perhaps economic deprivation suffered by TB patients could be used as a measure of success of the programme.

KEY WORDS: HEALTH ECONOMICS; BANGLADESH

- AU: Chadha VK, Preetish S V & Sanjay Singh
- TI: Tuberculosis control and economic issues
- SO: NTI BULLETIN 1999, 35, 3-7
- DT: Per
- AB: The health of its people is reflected in the economy of a nation healthy people produce healthy economies. It is unfortunate that in our country the effects of ill health on

economy have not been fully appreciated. The burden imposed on individuals, families and the community by disease like TB contains an economic dimension. TB extracts costs – invariably in an economic sense – al all levels of the society, either directly through expenditure incurred in providing health and social care and support, or indirectly in terms of lost opportunities such as loss of employment. Other intangible costs include the anguish and anxiety experienced by the patients and their families. The havoc wrought by TB on individuals, families, whole communities and economies is enormous. Economic issues related to the problem of TB and its control are discussed in detail in the paper.

KEY WORDS: HEALTH ECONOMICS; INDIA

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- AU: Catalani E
- TI: Review of the Indian market of anti-tuberculosis drugs : focus on the utilisation of Rifampicin-based products
- SO: INT J TB & LUNG DIS 1999, 3 (Suppl), S289-291
- DT: Per
- AB: There is a need to better understand the extent of the utilisation of Rifampicin in the market, particularly in Fixed-Dose Combinations (FDC). The objective of the study was to review the Indian market of anti-TB drugs, as this is the largest single market in the world of this therapeutic class where about 50% of global consumption of Rifampicin takes place. The study was designed to review and analyse the sales data proffered by the Indian market audit. Estimated data relating to public sector product usage were utilised in order to obtain a more complete scenario.

There are 3 Indian Rifampicin fermentation plants with a total capacity of about 340 metric tons, supplying to the demand of local market and export activities. It is estimated that there was a total consumption of 250-275 metric tons of Rifampicin in 1998. Other raw materials for the formulation of anti-TB drugs such as Isoniazid, Pyrazinamide and Ethambutol are also produced in India for local consumption as also for export. FDCs were particularly produced in India with sales of about US\$139 million in 1998 (public sector - \$60 million – HMR/India estimate), private sector - \$70 million.

Sales for Lupin Laboratories represents 41% of the private market followed by Novartis with a market share of 10%. Rifampicin + INH FDC group is the largest of all anti-TB drug sub groups. Exactly 50% of this market sub-group are represented by the sales of two leading double FDC brand names worth US\$25.8 million. Triple FDC (Rifampicin + INH + Pyrazinamide) sales of US\$10.4 million are characterised by a large variety of different dosage ratios for the 3 drugs and market leader has the market share of 14%. Two quadruple FDCs sales in India are limited and the AKT FD brand has 87% of this sub-group for the time being. Both the public and private sectors of anti-TB drugs are likely to grow in the future in volume and value and the Indian pharmaceutical industry is very active in the export of raw materials.

KEY WORDS : INDIAN MARKET; RIFAMPICIN; FIXED DOSE COMBINATION; HEALTH ECONOMICS; ITALY.

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- AU: Khatri GR & Frieden TR
- TI: The status and prospects of tuberculosis control in India
- SO: INT J TB & LUNG DIS 2000, 4, 193-200
- DT: Per
- AB: Much of the global strategy for TB control was established in India, but every year, there are an estimated 2 million cases of TB. To describe the policies, initial results and lessons learnt from implementation of a RNTCP using the principles of DOTS is the objective of this study. The RNTCP was designed and implemented starting in 1993. With funding from Government of India, State Governments, the World Bank and bilateral donors, regular supply of drugs and logistics was ensured. Persons with chest symptoms who attend health facilities are referred to microscopy centres for diagnosis. Diagnosed cases are categorized as per WHO guidelines and treatment is given by direct observation. Systematic recording and cohort reporting is done. From October 1993 through mid-1999, 146012 patients were put on treatment in the programme. The quality of diagnosis was improved, with the ratio of smear-positive to smear-negative patients being maintained at 1:1. Case detection rates varied greatly between project sites and correlated with the percentage of patients who were smear-positive among those examined for diagnosis, suggesting heterogeneous disease rates. Treatment success was achieved in 81% of new smear-positive patients, 82% of new smear-negative patients, 89% of patients with extrapulmonary TB and 70% of re-treatment patients.

The RNTCP has successfully treated approximately 80% of patients in 20 districts of 15 states of India. Treatment success rates are more than double and death rates are less than a seventh those of the previous programme. Starting in late 1998, the programme began to scale up and now covers more than 130 million people. Maintaining the quality of implementation during the expansion phase is the next challenge. KEY WORDS: DOTS; HEALTH ECONOMICS; RNTCP; INDIA.



RNTCP at Bangalore Mahanagara Palike Area

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- AU: Chaulk CP, Friedman M & Dunning R
- TI: Modeling the epidemiology and economics of directly observed therapy in Baltimore
- SO: INT J TB & LUNG DIS 2000, 4, 201-207
- DT: Per
- AB: From 1958 to 1978, Baltimore maintained one of the highest pulmonary TB rates in the US. But, from 1978 to 1992 its TB rate declined by 64.3% and its ranking for TB fell from second highest among large US cites to twenty-eighth. This TB trend coincided with the implementation of an aggressive DOT programme by Baltimore's Health Department through city based DOTS, community outreach, home based DOTS by public health nurses. By 1992, nearly 80% of Baltimore patients were treated by DOTS.

Modeling is used to estimate the range of TB cases prevented in Baltimore under DOT. Case estimates equal the difference between the observed number of TB cases in Baltimore versus the expected number if Baltimore's TB trend was replaced by the TB trend for the US (low estimate) or the TB trend for all US cities with over 250000 residents (high estimate). Economic savings are estimated.

It has been estimated that without DOT there would have been between 1577 (53.6%) and 2233 (75.9%) more TB cases in Baltimore, costing \$18.8 million to \$27.1 million. Cases prevented and expenditures saved increased with increased DOT participation.

This model predicts that Baltimore's TB decline accompanying DOT resulted in health care savings equal to twice the city's total TB control budget for this period. These results are most plausibly due to DOT, since it was the only major change in Baltimore's TB control programme and rising TB risk factors – AIDS, injection drug use, poverty – in a city where TB had been epidemic should have triggered a TB increase as in comparable US cities, rather than the observed decline. As national TB rates continue to decline it will be important to identify ways to capture and reinvest these savings to support effective TB control programmes.

KEY WORDS:; HEALTH ECONOMICS; USA.

- AU: Norval PY, Blomberg B, Kitler ME, Dye C & Spinaci S
- TI: Estimate of the global market for Rifampicin-containing fixed-dose combination tablets
- SO: INT J TB & LUNG DIS 1999, 3 (Suppl), S292-S300
- DT: Per
- AB: The WHO and the IUATLD have recommended fixed dose combination (FDC) tablets containing Rifampicin for TB treatment. However, due to variation in bioavailability of the Rifampicin and quality of Rifampicin in FDCs have prevented their large scale use resulting in lower production and higher prices beyond affordability in developing countries. In this paper, the authors estimate the potential size of the market for Rifampicin containing FDCs assuming that all the currently marketed Rifampicin will be sold in FDCs. The quantity of Rifampicin is estimated by the following equations : the quality of Rifampicin per treatment regimen multiplied by the number of TB cases treated in public and private sector. The future size of the market for FDCs will be influenced by trends in numbers of cases, the ratio of cases treated in the public v/s the private sector and the ratio of cases not treated at all. The future trends of the TB epidemic may be

influenced by several factors such as implementation of control strategy, commitment of government for TB control and the impact of the HIV epidemic. Hence, the authors have decided to provide an estimate of the present market.

WHO collected the information on the use of FDCs in public sector through a questionnaire; 85 countries representing about 90% of the world's TB cases responded to the WHO questionnaire. About 50% of the 85 countries use Rifampicin as FDCs in the public sector, however most of these are small countries. In the public sector, an estimated 23.8% of the total number of notified TB cases are treated with two or three drug FDCs. In the public sector it is estimated that the global amount of Rifampicin used yearly to treat 3.57 million TB cases is 123.7 metric tons, representing 78.9% million tablets of 150 mg Rifampicin or 34 g per TB case. In the private sector, it is estimated that 2.54 million TB cases are treated using 99.9 metric tons, representing 666.3 million tablets of 150 mg Rifampicin or 39 g per case. Thus, the potential global market for the four drug FDC tablet (R-150 mg, H-75 mg, PZA-400 mg and Emb-75 mg) is 305 million tablets per year, 105 and 200 million of which would be distributed in the public and private sectors respectively. The uncertainty of the estimate remains considerable, as shown by the 90% confidence intervals. In conclusion, the study demonstrated a large potential global market for FDCs that should encourage pharmaceutical manufacturers to produce WHO recommended dosages of FDCs at affordable prices. Current use of Rifampicin in the FDCs is only 25% of the total Rifampicin used in the world.

KEY WORDS: DRUG THERAPY; DRUG COMBINATIONS; BIOAVAILABILITY; PRIVATE SECTOR; PUBLIC HEALTH SECTOR; GENEVA.

- AU: Trebucq A
- TI: Requirements for anti tuberculosis drug tender requests
- SO: INT J TB & LUNG DIS 1999, 3 (Suppl), S358-S361
- As more and more institutions and experts advocate for the use of fixed-dose AB: combinations (FDC) of anti-TB drugs, it is expected that the market will change dramatically in the next few years. Prices should go down, but quality must remain an essential goal for managers in charge of the procurement process. In this paper, general essential requirements for suppliers submitting for competitive bidding are reviewed, in particular the WHO certification scheme. The expiry of patents on older drugs, the diversification of production sites and liberalization of the international pharmaceuticals' market has resulted in multi source generics. These are the only affordable and alternative drugs for low income countries. The main criteria while procuring drugs for the NTP should be price, quality and availability of anti-TB drugs. As in case of other drugs bids for anti-TB drugs should also take into account the specifications such as delay and reliability of delivery. The standard steps in the tender cycle are selection of suppliers to participate in the tender selection and issue of contracts to winning bidders, and monitoring of performance and product quality. The call for suppliers can be made through open tender, restricted tender and direct procurement from single supplier at the quoted price. There is an informal network between authorities, international organizations and NGOs to facilitate the selection of suppliers who qualify the requirements. For quality assurance for drugs, same regulations like Good Manufacturing Practices (GMP), Pharmaceutical product licence (PPL) and the WHO certification

scheme have been introduced from 1963 onwards in many developed and developing countries. The WHO certification scheme is based on voluntary participation of countries that import and export drugs by way of three different certificates. (i) Statement of licensing : it attests that a PPL has been issued by the regulatory authorities of the exporting country for use by importing agents; (ii) Certificate of a pharmaceutical product issued by the competent national regulatory authorities of the exporting country; (iii) Batch certificate – the manufacturer issues this certificate for each individual batch of a pharmaceutical product. It is a mandatory requirement and is provided with the bidding documents. It attests the quality and expiry date of a specific batch and should include the specifications of the final product. The cost of FDCs are likely to go down and would become accessible for the programme. For the NTP, different combinations of specified formulations of three or four drug combinations are recommended and can be made available on the basis of making request for the type of combination and dosage for each product. A contract taking into account of all the details of the drugs and of the services (labeling, packaging, shelf life, expiry dates, bid bonds, shipment specification, penalties for default) need to be signed between the provider and purchaser. Quality control of FDCs is essential. Bio-availability studies must be conducted for rifampicin according to the protocol recommended by the IUALTD and the WHO, whereas for other components dissolution tests are significant. This should be made as condition before bidding or before supply. Management of competitive tenders is an important and difficult task. Low prices and high quality drugs must be the result of this process in order to procure good drugs for TB patients.

KEY WORDS: HEALTH ECONOMICS; FIXED DOSE COMBINATION; DRUG TENDERS; BIOAVAILABILITY; FRANCE.

No.of records: 13