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

152
AU: Tandon RN
TI: The role of general practitioners in the control of tuberculosis in India.
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 cooperation 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.
keyboard: GENERAL PRACTITIONER; PRIVATE SECTOR; HEALTH CARE; INDIA.

153
TI: The role of general practitioner and public health services in tuberculosis control.
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.
155
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.
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.

156
AU: Glassroth Jeffrey
TI: The physician's role in tuberculosis prevention.
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 well-understood, 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 preventative 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.

157
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
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 thiacetazone 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
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.
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

160
AU: Uplekar MW
TI: The private medical sector and tuberculosis control in India
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
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.