EDITORIAL

The resurgence of tuberculosis

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Historical background

Tuberculosis has afflicted man since prehistoric times. Evidence of spinal tuberculosis has been found in neolithic skeletons as well as in early Egyptian remains. The ancient Greeks recognised tuberculosis and called it *pthisis* to characterise the wasting that occurs in the disease. Tuberculosis was not a major health problem until the Industrial Revolution when crowded urban communities were created thus facilitating the spread of the infection. In Europe, during the seventeenth and eighteenth centuries, as many as a quarter of all deaths could be attributed to tuberculosis. In 1865 Villemin demonstrated the infective nature of the disease when he successfully transmitted the disease to guinea pigs by inoculating them with diseased tissues but it was not until 1882 that Koch discovered the aetiological agent and elucidated the pathogenesis of the disease. With better living conditions and the advent of modern chemotherapy, the incidence of tuberculosis in many developed countries has, since the turn of the century, decreased dramatically. In many low income, developing countries however, there has been no observable decline in incidence.

The world situation

The current world-wide situation with tuberculosis gives rise to concern. The World Health Organisation estimates that 8 million new cases of tuberculosis occurred in 1990. In the same year tuberculosis accounted for 2.9 million deaths worldwide.[1] In many industrialised countries the declining trend has slowed down and in the case of the United States and Japan, the trend may have even reversed. In the United States the declining trend started to flatten out in 1986 and there are now some 22,000 new cases each year, the majority of which are believed to be the result of recent infection rather than that of endogenous reactivation.[2] The population at highest risk are individuals infected by HIV, the elderly, the urban poor, the homeless and migrant groups. It has been estimated that as many of 5 – 10% of those with tuberculosis in the United States may be infected with HIV. In the Sub-Saharan countries the AIDS epidemic has caused the number of reported tuberculosis cases to increase by 100% over the last 4 – 5 years.[1]

The situation in Malaysia and South East Asia

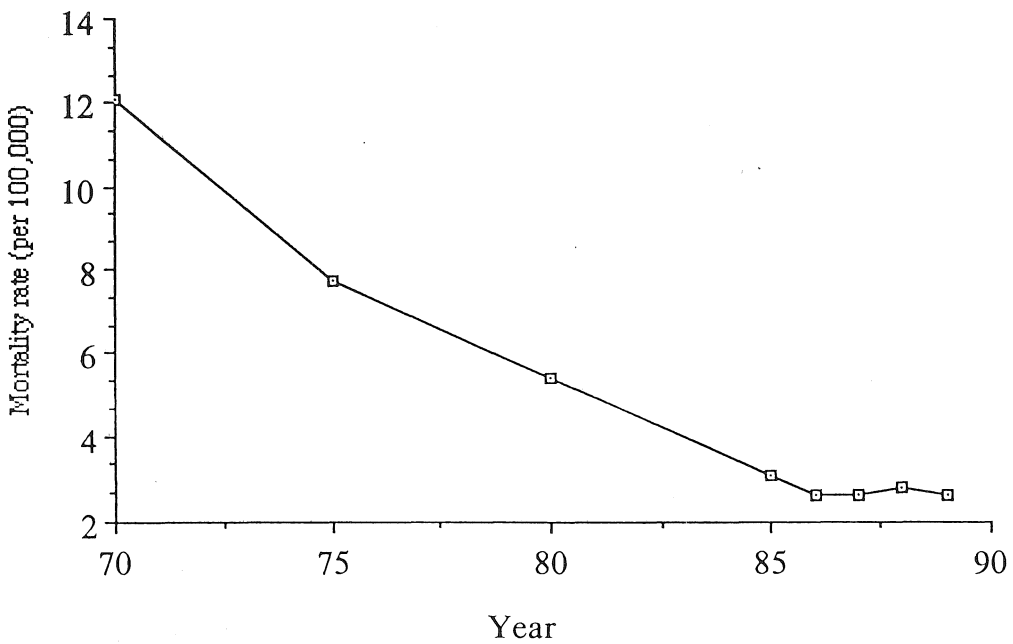
In South East Asia the decline has been in general rather slow and tuberculosis remains a major health problem. In these countries there is also a higher incidence of drug-resistant disease. Tuberculosis still remains among the ten leading causes of death in Malaysia, Indonesia, Thailand and the Philippines.[3] Table 1 shows the number of cases of tuberculosis in ASEAN countries in 1988.

Table I
No of cases of tuberculosis in ASEAN countries, 1988

	No cases	Population (millions)	Cases per 100,00 population
Malaysia	8,004	16.92	47.4
Indonesia	439,760	174.68	251.8
Philipines	163,740	58.72	278.8
Thailand	19,125	54.54	35.1
Singapore	1,666	2.65	62.9
Brunei	126	0.24	52.5

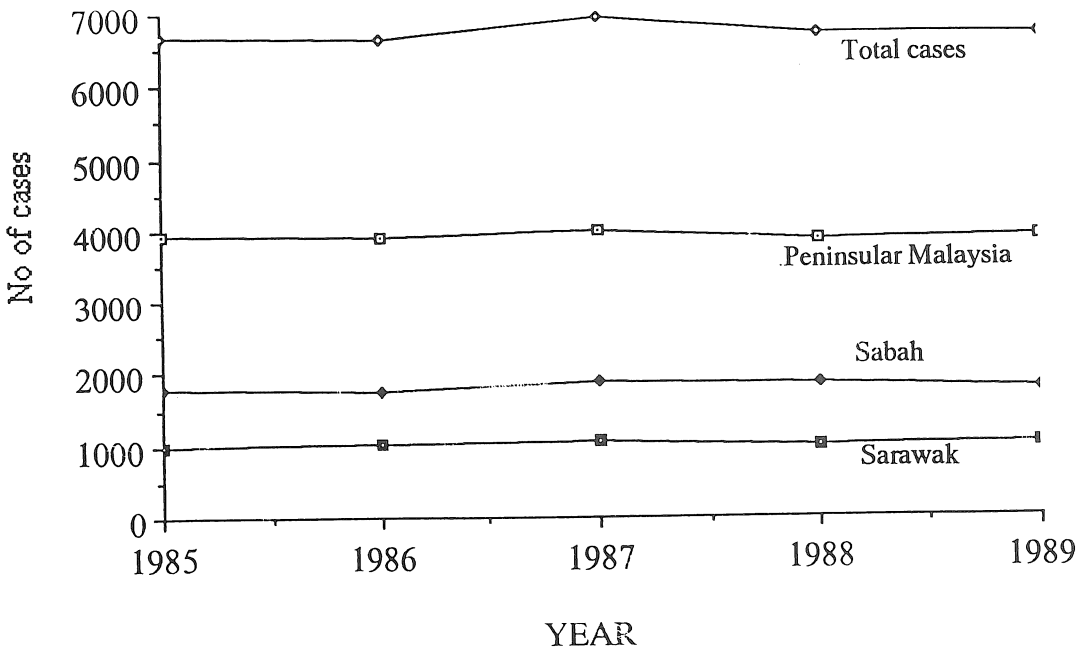
(Source: SEAMIC Health Statistics 1989)

In Malaysia the mortality rate of tuberculosis has dropped to 2.6 per 100,000 population.[4] The drop has been dramatic from 1970 to 1986 but since then the trend appears to have flattened out. (Fig. 1) There has also not been any significant decline in the number of annually registered bacteriologically positive cases of pulmonary tuberculosis over the years 1985 to 1989 (Fig. 2). Tuberculosis thus continues to be a major health problem in Malaysia. The following two articles in this issue of MJM reaffirms the importance of tuberculosis in our country. With the continuing increase in the number HIV infected individuals the problem of tuberculosis will definitely become more acute.



(Source: Ministry of Health Malaysia Annual Report 1989)

Fig. 1 : Mortality rate of TB, Peninsular Malaysia, 1970 – 1989



(Source : Ministry of Health Malaysia Annual Report 1989)

Fig. 2 : No. of bacteriologically positive cases of PTB in Malaysia 1985 – 1989

New WHO tuebrculosis control strategy

In view of the current tuberculosis situation, the WHO has decided to adopt new strategies for the control of tuberculosis.[1] These strategies include setting specific targets, identification of key activities and monitoring indicators. One of the prime objectives of the programme is to improve cure rates. The proposed target for developing countries is 85% whilst that for developed industrialised countries is 95%. Short course chemotherapy has been shown to be more cost-effective than conventional treatment and is more likely to be accepted by patients thus ensuring better patient compliance. This in turn will help prevent the emergence of resistant strains. Introduction of short course chemotherapy has to be coupled with an efficient management system to ensure regular supply of drugs and quality assessment programmes to assess outcome of treatment. The second objective of the WHO programme is the expansion of tuberculosis services in developing countries. For low income developing countries the target that has been set is a 65% case-finding coverage, while the target for middle-income developing countries is 85%. If these targets can be achieved, WHO expects the world annual death rate from tuberculosis to decrease by 40% and the world-wide prevalence rate to be reduced by 50%. In high and middle incidence countries, the incidence rates are expected to be halved in 12 years and 8 years respectively.

References

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3. SEAMIC Health Statistics 1989. Seamic Publication No. 57.

4. Ministry of Health Malaysia Annual Report 1989 : 69 – 74.