J Nep Med Assoc 1996; 34: 1-2

Tuberculosis: Another Major Threat

"Youth grows pale, and spectre thin and dies"

John Keats

Since the introduction of streptomycin from mid 1940s the once termed 'captain of all these men of death' disease, had hope in the whole world that by few years, tuberculosis will be a disease of past. With further availability of the drugs like INH, PAS, thiacetazone, ethambutol and rifampicin the hope further turned into a reality. Tuberculosis became a least important disease in many parts of the developed world, where as it continued to be an important public health problem in all developing parts of the world. Contrary to the hope in 1993 WHO declared tuberculosis a global emergency.

The main causes behind this unsuccessful story is the launching of the national tuberculosis programmes without any definite objectives and strategies. An important public health problem was handled inappropriately, unsystematically and unscientifically making it a major public health problem not only in developed countries but also in developing countries too. The unsuccessful story also led to significant percentage of multi-drug resistant tuberculosis. Another unfavourable situation is the epidemic of HIV/AIDS in the whole world, which has increased the burden of the disease in some parts many fold. It was also found that less resources were allocated to tuberculosis control in comparison to other diseases. So, the answer on tuberculosis control is much complicated and tortuous than pre-HIV/AIDS era.

The multi-drug resistant tuberculosis can be a big threat to tuberculosis control programme as the stigma against tuberculosis in community will rise again and question of occupational safety among health workers also can arise. So, the present strategies to control the T.B. programmes according to the national guidelines should at least involve the family if not individual and the health workers also need some sort of safety assurance.

Early diagnosis of tuberculosis and management is a most important element in tuberculosis control. BCG vaccination and socio-economic development help on control of tuberculosis but till now the main basis of control is chemotherapeutic intervention. In fact, it has been found that BCG vaccination has reduced the prevalence of severe forms of tuberculosis like tuberculous meningitis in children and the prevalence of pulmonary tuberculosis or other forms of tuberculosis is not much different in vaccinated or non-vaccinated group.

Multi-drug resistance either to isioniazid or rifampicin or both with or without resistance to other anti tuberculosis drugs is a big threat in the national tuberculosis programme. One of the objectives of the national tuberculosis programme should be to reduce the multi-drug resistant strains. Till now, the quality care in tuberculosis control has been given less priority, so if quality care could be introduced in the tuberculosis management, it will certainly reduce the drug resistance problem in a remarkable manner.

Short course chemotherapy (SCC) is now the main therapeutic intervention in tuberculosis control. A combination of anti-tuberculosis drugs which includes rifampicin

and isoniazid is very effective if administered strategically yielding a very few multi-drug resistant tuberculosis cases. One of the main strategy to obtain at least 85 percent cure rate is to prescribe short course chemotherapy by direct supervision. Direct observation treatment of short course (DOTS) has given promising results in many developing countries. So, to attain a high cure rate in tuberculosis treatment it is very necessary to introduce direct observation therapy as early as possible all over the country to alleviate the problem of tuberculosis in Nepal.