

improve treatment completion rate beyond 50% under the programme conditions. DOTSi.e. Directly Observed Therapy Short Course under RNTCP appears to be effective, but a labour intensive intervention and lot of research is needed to determine its feasibility, applicability and cost effectiveness in a vast country with limited resources. Also, it is too early to take the efficacy of RNTCP for granted. Therefore, the present need is to improve treatment adherence by rejuvenating and strengthening the available strategies in the existing infrastructure of NTP until RNTCP is made applicable all over the country or till the latter proves its worth. We have identified those lacunae or areas of NTP where there exists a definite scope for improvement so as to achieve higher treatment completion rate and planned the present study accordingly. These areas included inadequate motivation and education of patients about disease, lack of incentives to boost treatment completion, lack of positive behaviour of health officials towards patients and insufficient provision for default retrieval.

A total of 100 newly diagnosed pulmonary TB patients residing in Rohtak district were inducted in the trial group during the period 1997-98. While on anti-tuberculosis treatment, these patients were subjected to motivation, education, incentives, positive attitude of health officials, efficient default retrieval and treatment adherence monitoring on a very systematic and regular basis. Control group comprised of all newly diagnosed pulmonary tuberculosis patients registered for treatment during previous one year. The results revealed 74% and 24% treatment completion rates in trial group and control group respectively. Default rate was 53% in trial group against 79% in control group and default

retrieval was 30% in trial group compared with 6% in control group. Attendance at counselling and education sessions by patients and their family members was very satisfactory. Disease-related awareness among patients improved from initial 18% to 86% at the completion of study.

It was found that the strategies used in the study improved treatment compliance significantly.

Estimation of Plasma Levels of Glutathione-S-Transferase in cases of Malignancy Lung

KB (Jupta, S Tandon, H Lai and Varti Garg

(Paper will be published in full in a subsequent issue)

INH-resistant *M.tuberculosis* isolate from Rhinoceros

Vijay K Challu

Tuberculosis is reported to occur in rhinoceros mainly due to *M.bovis*. At the National Zoological Garden, Mysore, a fatal case of pulmonary tuberculosis in a rhinoceros revealed Isoniazid (INH) resistant *M.tuberculosis* from the lung tissue after subjection to culture and drug resistance investigations at National Tuberculosis Institute, Bangalore. The finding indicated the source of infection to be a person with pulmonary tuberculosis who was handling the animals.

In view of this, the possibility of transmission of tubercle bacilli from workers attending to the zoo animals and vice-versa can not be ruled out elsewhere.