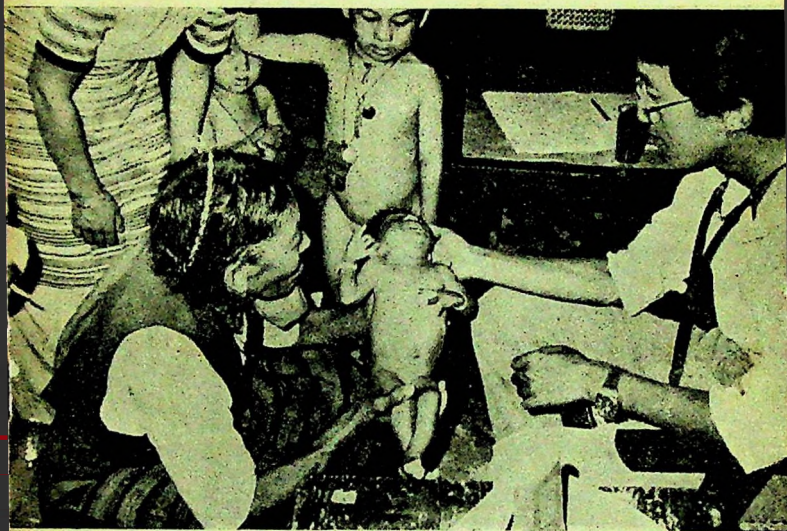


# † Tuberculosis Control Project



Tibetan Delek Hospital  
Dharamsala H.P.  
INDIA

March 1984

1355

# Defeat TB

*now and forever*



All of her family members died of Tuberculosis.

NYIMA is the only survivor. She also has TB.

the same tragedy !

## **BACKGROUND HISTORY OF TIBETAN DELEK HOSPITAL'S TUBERCULOSIS CONTROL PROJECT**

### **Tuberculosis Problem Among Tibetans In India**

In the twenty five years following the arrival of nearly 85,000 Tibetan refugees in India, tuberculosis has been a major health problem resulting in high mortality and sickness, and imposing added socio-economic burden as it is so debilitating and long lasting.

Tuberculosis still remains a common disease among the Tibetan refugees. The number of new cases of infectious TB in Tibetans each year is at least  $2\frac{1}{2}$  times that of the Indian National average and the prevalence of the disease is estimated at 3.6% of the total population. This is because Tibetans have low genetic resistance, live in an unfamiliar

environment, suffer over-crowding, poor sanitation, malnutrition and other infectious diseases which contribute to an even lower resistance. There must be only a few Tibetan families who are without a member with TB or its effects. Moreover, there is still much uncertainty and ignorance about TB against the Tibetan population, and this adds to the problems. Most of the Tibetan settlements are situated at prohibitive distances from Indian government TB Centres. For those who reach a TB centre, there are language difficulties, often resulting in inadequate understanding about treatment and prevention. Consequently, there is a high defaulter rate (insufficient treatment) and thus a high



95 TB patients from these settlements under treatment and the number is fast increasing. In order to ensure proper Health care and prevention, Delek Hospital has trained a number of health workers from these settlements where there are no nurses or health workers, and more will undergo training in the future. As we now have health workers or nurses in each of the settlements in Himachal Pradesh,

we are also able to take trainees from other Tibetan settlements in India. The whole training programme is being sponsored by the Tibetan refugee Aid Society, Canada, under their Brett Vocational Training Fund.

*Delek Hospital Tackles  
The TB Control problem  
By :*

**1. Health Education**

As one of the basic causes of  
Educating patients about the disease.



the high prevalence of TB among Tibetans is the ignorance of the people, the hospital is attempting to educate the community about the disease and its treatment in the form of lectures, slide shows, posters and pamphlets. The text and photos for an instructional booklet on TB are already prepared and the booklet is ready to go for printing.

#### **B. C. G. Vaccination**

The hospital also attempts to vaccinate all children with B.C.G. In areas where the B.C.G. vaccine is locally available the Community Health Workers arrange for all children to be vaccinated by the District Hospital. In other areas where vaccines are not locally available, the TB health team from Delek Hospital visits to vaccinate the children.

#### **Case-finding**

With an aim to find all active

cases of tuberculosis in each settlement, the Community Health Workers initially do a door to door community survey, asking for TB symptoms. All those with cough and sputum are screened by a visiting medical team from Delek Hospital who perform sputum microscopy and record the annual incidence of new TB patients and the percentage of children covered by B.C.G.

#### **4. Treatment**

The treatment success rate is greatly increased when regular drug taking is ensured. The supervision of the treatment programme is, therefore, very important. This responsibility lies with the trained Community Health Workers, who are on the spot in each settlement, and thus in an ideal position to closely supervise patients' drug taking, take prompt action against those who default on their treatment, monitor drug side-effect and take



Clinical case-finding in progress.

appropriate action according to a written protocol. Once a patient has been diagnosed at Delek Hospital or by a mobile team from Delek Hospital, or by an Indian District Hospital, they will be managed by the Community Health Workers. The patients who are 'sick' and not improving on the standard treatment are then referred to Delek Hospital for

further investigation and are usually initiated on the Reserve Regime. The cost of the project is closely tied to the percentage of patients requiring the Reserve Regime treatment and the total number of patients uncovered in the case finding phase.

### **Conclusion**

Delek Hospital's Community



Health and Tuberculosis Control Programme run concurrently. OXFAM has kindly provided a two year grant for Community Health Project and this includes the provision of a jeep ambulance from July 1982. With the availability of this transport, the Delek's Mobile Health team is able to get more actively involved in the other settlements in Himachal Pradesh. The Mobile Health team consists of a doctor, a Community Health

Nurse and a TB Health Worker.

Currently Delek Hospital has 228 TB patients on treatment with 50 of these patients on expensive Reserve Regime drugs. The total costs of Reserve Regime drugs per patient is US \$ 114.59, while that for the standard Regime drugs is US \$ 22.16 per patient. As the hospital itself runs on a shoe-string budget, help is URGENTLY needed !

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Delek's Mobile Health team on a settlement visit.



## SUMMARY OF DELEK HOSPITAL'S TUBERCULOSIS CONTROL PROJECT ANNUAL REPORT - 1983

### Evaluation Of The Project Over Previous Year

The main aim of the project is *control* of the tuberculosis problem. This means finding, treating and supervising all sputum positive cases (the only cases which are infectious) until they are cured. If all sputum positive cases are found quickly and cured then the spread of the disease is prevented.

#### *a) Case-finding*

The project's case-finding success with sputum positive cases is 56.25% for the settlements and 90.25% for the Dharamsala area. This is much better than the Indian success rate of 30%. The settlement rate is expected to improve as the project becomes more established in these communities.

#### *b) Case-holding*

The project's case-holding success for all TB patient is 87.3% in the settlements and 80.6% in the Dharamsala area. This reflects an amazing success for the Delek Hospital Community Health Workers. Being a part of the smaller communities where they know all the people, they are able to promptly follow-up any defaulters.

Again the project's case-holding success is much better than the Indian National Tuberculosis Programme rate of 35%. Clearly this indicates that the tuberculosis problem amongst Tibetans is generally much worse than amongst the Indians. In fact the Tibetan population has at least  $2\frac{1}{2}$  times more new sputum positive





Before treatment.



After treatment.

cases per year and perhaps upto  $4\frac{1}{2}$  times more. If it is compared with other areas of the world, this incidence in Tibetans is amongst the highest in the world.

#### c) *Chemotherapy*

The Delek Hospital policy of treating all patients with the cheapest regime first and only failures with the expensive drugs means that we have the most effective and yet cheapest protocol available. Chemotherapy success rates are 90.5% and 95.6% respectively for standard regime and reserve

regime. The disturbing feature is the number of reserve regime failures, we are uncovering. These cases are all due to the prescribing ill conceived reserve regimes and wrong drug dosages by private medical practitioners. This, together with no supervision and high drug costs, leads to defaulting and non-compliance and eventually the quick emergence of multiple drug resistant.

#### d) *BCG Vaccination*

In the Dharamsala area, the 1980 coverage rate for BCG vaccination was less then 40%

of under 5's children while by June 1983 it has risen to 93% of under 5's children. It is hoped that these results can be duplicated in the settlements.

*e) Public Education*

This is a very important part of Delek Hospital's work. Only an aware and informed public will be motivated enough to allow the Delek Hospital's TB Control Project to attain an even better success rate. A TB Educational slide show and talk is given on every settlement visit. TB posters have been made and distributed. An instructional booklet about TB written in simple Tibetan language with pictures has been prepared by Delek Health Media Services and is awaiting funds for printing and distribution.

CARITAS, INDIA has kindly funded the purchase of a movie projector and some films on health. Besides, the

hospital is already accepted as a member of the film Library of the Central Health Education Bureau of Ministry of Health and Family Welfare, Government of India, New Delhi, and this will enable us to have use of health education films on various health subjects. Therefore, with these facilities available, Delek is hopeful of promoting the health education further.

*f) The extent of the tuberculosis problem amongst Tibetans in Himachal Pradesh.*

On the 1st June 1983, an evaluation of the Tibetan Delek Hospital TB Control Project was carried out by careful analysis of the records for the past three years. It was discovered that the incidence of sputum smear positive cases (the number of new cases of tuberculosis per year whose sputum has demonstrable tubercle bacilli in it) was 0.6%.



Health education in progress

This meant that the annual risk of infection from tuberculosis was approximately 10%. It confirmed the suggestion by the Central Relief Committee's TB team who did tuberculin surveys a number of years ago that the infection rate was much higher than the Indian average. From the same Delek Hospital records the prevalence of pulmonary

tuberculosis (the number of people suffering from lung tuberculosis at any point in time) has been estimated at 2.95% (3.5% if all forms of TB are counted). A number of studies on the Indian population have shown the following statistics. Annual risk of infection is between 2% and 4%. The incidence of sputum positive tuberculosis ranges

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between 0.1% and 0.25% with an average of 0.13%. The prevalence of pulmonary tuberculosis is 3%.

### **Project Implementation Policies**

Project implementation methods and policies have been revised every year since the project started in 1980. This has resulted in a strong and sound project which is improving all the time and which has also been kept up-to-date with the latest scientific findings in tuberculosis research. In July 1983, a detailed revision was again undertaken. A number of new features will be summarized here.

In line with the World Health Organization Expert Committee on Tuberculosis policies, the standard regime has been reduced from 18 months to 12 months where appropriate and short course chemotherapy

has been adopted for the reserve regime (a reduction in duration from 12 months to 6 months). A biweekly standard regime has also been introduced in an attempt to use streptomycin injections as a complying force in non-compliers.

Actions against defaulters have been standardized into a set protocol with added features such as defaulters declaration forms and penalties for defaulters.

Culture/Sensitivity sputum testing has been arranged for double failure patients at reputable laboratories to give these patients some hope of cure as well as to provide appropriate treatment regime.

The protocol for contact follow-up has been completely revised. For the patients' own benefit, a patient treatment card will be introduced with

the patient himself being responsible for keeping it up-to-date.

Diagnosis protocols and patient supervision methods have been standardized for doctors so as to avoid confusion.

In line with Delek Hospital policy of cooperation with the Indian Government National Tuberculosis Programme, close liaison has been kept with the Kangra District Tuberculosis Centre. Also over the past years discussions have been made with the District Tuberculosis Centre Medical officers in Chamba (near Dalhousie) and Nahan (near Poanta Sahib, Puruwala, Sataun and Kamrao).

### **Current Project Funding and Facilities**

At present we receive TB drugs and funds from a variety of sponsors. These have been

gratefully received and have been enough to allow the major work to continue uninterrupted. To date, they have usually been funds earmarked for a single purpose or a single lot of drugs or funds with no promise of continuity.

A major sponsor for a longer period of time would relieve the anxiety related to maintaining Delek Hospital's Commitment to this project.

Unfortunately some areas of last years budget had to be curtailed due to insufficient funds and this perhaps prevented the project from reaching its potential. The most outstanding of these were staff salaries. Only one TB Health Worker could be employed while there is definite need to train and employ another one. This has resulted in patient supervision being less than optimal at times (particularly

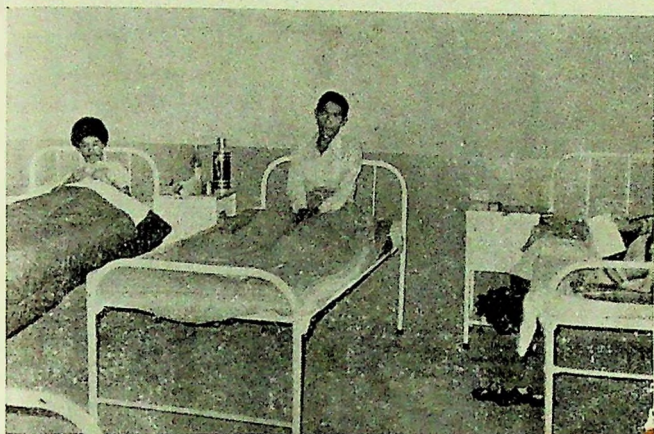
when the TB Health Worker is doing settlement visits). With more settlements to supervise this problem will become worse. The community health workers continue to survive and support families on amazingly meagre salaries, even by the standards of their own communities. A monthly stipend for TB patient supervision and treatment will definitely go long way to maintaining a high level of morale and add an incentive for continuing to do a good job. It should be added here that most of the Delek Hospital trained Community Health Workers have taken on the job out of concern for their fellow Tibetans and in the process of doing so have missed opportunities for bettering themselves financially. The extra field microscope has not been purchased as yet.

Over the last six months the

hospital X-ray unit has broken down several times. It is antiquated and of foreign make and has become expensive to repair and maintain. It is feared that further breakdowns are imminent and the machine may finally become irreparable. Owing to this situation, the hospital is trying to purchase a new Indian made machine which would solve the problem of spare parts and maintenance. the UMCOR, New York has kindly agreed to contribute 4000 dollars towards this and the hospital is looking for the remaining funds required. The total costs of the machine is 15,000 dollars.

Due to generous construction and equipment funding from West Germany a new multi-purpose wing has been built at the hospital. Part of this wing provides separate TB wards. This was urgently





One of our new TB wards

needed and is operational now. For the first time we are able to separate infectious, non-infectious and resistance cases from each other.

### **Community Health Project**

It should be recognized that the running of a good TB Control Project is only possible through having a strong infra-

structure. Therefore, the success of the Delek Hospital TB Control Project is dependent on the success of the Delek Hospital Community Health Project. Delek has been organizing a regular (twice yearly) 3 month Community Health Workers Training Programme. The training give particularly emphasis to Tuberculosis case-finding, patient supervision

and treatment. Once a community has a Delek trained Community Health Worker then regular visits by the Delek's Mobile Health Team is arranged and that community is brought under the Delek Hospital Tuberculosis Control Project. It is therefore, fortunate for the TB Control Project that the Community Health Project has also been such a success. It is also fortunate that funds have been made available from Tibetan Refugee Aid Society, Canada, to train the Community Health Workers and OXFAM has funded the hospital ambulance jeep, petrol costs and expenses incurred on the Community Health Project.

#### **Contribution from the Beneficiaries.**

It has been found that patients are more compliant with treatment when that treatment represents something of value to

them. Therefore the hospital charges Rs. 8/- per month per patient for the Standard Regime and Rs. 32/- for the Reserve Regime. However, there are many patients who are unable to pay even this nominal amount and the hospital will continue to give free treatment to these cases. Contributions from the beneficiaries will be a very small fraction of the total budget.

#### **Conclusion**

The current 1st June, 1983 evaluation should not be construed as a rigid scientific study. It is recognized that many points need to be evaluated and validated. It is however based on facts gleaned through the records of Delek Hospital and the experience of Delek hospital staff. Light should now be shed on many areas which were subjected in the past to educated guess work and individual observation.

Because of the high annual risk of infection, many Tibetans have already been infected with tuberculosis (non-clinical tuberculosis infection) and therefore for many years yet clinical tuberculosis cases will regularly appear amongst the Tibetan population. There is also the problem of spread from a surrounding Indian population in whom tuberculosis still goes largely unchecked. Intensive case-finding will have to be maintained for many years so that infectious cases are controlled quickly.

Despite the daunting prospect of many years of hard work there is the satisfaction of seeing the immediate effects of a good tuberculosis control project amongst Tibetans. Already the hospital project has meant a large decrease in

mortality and morbidity from this terrible disease amongst the Tibetan population of Dharamsala. Many families now will not have the tragedy of the mother or father dying of tuberculosis and leaving the family without support. With high BCG Vaccination rates mothers and fathers will not have the anguish of watching their children die in the throes of tuberculosis meningitis (brain TB) or miliary tuberculosis (desemminated blood TB).

To past and current sponsors of the Tibetan Delek Hospital Tuberculosis Control Project, no matter how large or small the donation, the Delek Hospital staff sincerely thanks you for helping us control this devastating disease amongst Tibetans.



## How you can help

### YOU CAN :

- Sponsor a TB patient bed at US \$ 27 per month.
- Sponsor a food supplement for a TB patient at US \$ 10 per month.
- Sponsor a standard treatment for a TB patient at US \$ 22.16 for 12 months.
- Sponsor a reserve regime treatment for a TB patient at US \$ 114.59 for six months.
- Sponsor a stipend for a TB Health Worker at US \$ 38.46 per month.
- Sponsor a stipend for a Community Health Worker at US \$ 28.84 per month.
- Send contributions towards :
  - a) TB drug Fund.
  - b) Health Education & Teaching Aids Fund.
  - c) X-ray Fund.
  - d) Unspecified (to be used where we feel the need is greatest).
- Send TB drugs, food supplements and used clothing. (the hospital has DUTY EXEMPTION CERTIFICATE on gift supplies coming from abroad).

Financial contributions may kindly be sent by cheque, I.M.O. or Draft in favour of TIBETAN DELEK HOSPITAL and addressed, under registered cover, to the

Administrator  
Tibetan Delek Hospital  
Gangchen Kyishong  
DHARAMSALA - 176 215  
H. P., INDIA

NB : All contributions are exempted from Income Tax under section 80-G of the Income Tax Act 1961 of Government of India.