

CHAPTER I

INTRODUCTION

Directly Observed Treatment Short-course (DOTS): A Strategy to Increase the Cure Rates among the TB Patient in Nepal.

The main issue in is how can the low cure rates in National TB control program in Nepal be raised. Cure rate is the number of patients cured divided by the number of patients treated. As defined by the WHO, a cured patient is a sputum-smear positive patient who has subsequently completed the treatment and had two consecutive negative smears, at least a month apart, the last one being at the end of the treatment (NTP TB Manual, 1996). At present, the cure rate is below 50 % (NTP Annual Report, 1996). The NTP has set a target to achieve and sustain a cure rate of 85 % by the year 2000 (NTP 9th 5 year Plan, 1997). Unless and until the desired cure rate of 85 % is achieved, it is not recommended to increase the coverage (case finding).

The benefits of curing the patients are the patient individually is free from the illness and suffering and he is able to work and fulfill his normal duties. The family benefits because there is no economic loss caused by the loss of working days. The community benefits because there is no more spread of the disease from that individual. Curing each and every patient will hasten the disappearance of the TB from

society and will strength the economy. Therefore, curing infectious patients is the best way of preventing additional infections.

The only way to prevent and control TB from spreading is to cure the TB patient. The only way to cure a patient with TB is to treat him/her with ant-TB drugs. Drug treatment is the only effective method of controlling TB. Other methods are chemoprophylaxis, BCG vaccination, ventilation, isolation of the patients. All these methods are preventive methods and not economically viable measures for control because in a society where TB is prevalent it is impossible to isolate, to give chemoprophylaxis or to hospitalize all of the patients. So the best method is to treat the infectious TB patient. By treating the TB patient, we are treating the source of infection and, thus, the chain of transmission is cut (Crofton, 1994)

The right choice of in the treatment contributes a great deal to the outcome of the treatment. Many factors like the cost of the treatment and side effects of the treatment have to weighed before choosing the right regimen. To have the chosen regimen sustained for a period of time, the regimen must be affordable for the government and not because some donors provided.

Nepal has chosen DOTS (Directly Observed Treatment Short-course) to be implemented in all the districts by the end of 2000 (NTP 9th 5 Year Plan, 1997). DOTS though a bit expensive has other benefits such as high cure rates and less side effects and, thus, low drop out rates, and low relapse rates.

To address this issue I have chosen this topic “DOTS: A strategy to increase the cure rates among the TB patients in Nepal. Chapter II talks about the problems of TB control. Chapter III talks about the proposed study and chapter IV is about the data-exercise.

My main argument is how can an ignorant TB patient complete eight months of treatment when we being health workers cannot complete a week of treatment with antibiotics for any health problem requiring treatment with antibiotics. Therefore there has to be someone to ensure and encourage that the patient completes the treatment.

National TB Program (NTP) with cure rates below 50 % is doing more harm than good because if left without any treatment we know that around 30 % will cured without any treatment. Though the NTP has a better cure rate than without treatment, the NTP creates more chronic cases. These chronic cases may have developed MDR-TB. MDR-TB is very expensive and difficult to treat.

DOTS (Directly Observed Treatment, Short-course) can cure the patients. There are many methods of delivering DOTS to the patient. DOTS by the health worker is the best method but the health workers are too busy and the patients cannot attend the health facility daily to swallow the drugs. DOTS by a family member is very convenient for the patients but it is not accountable to the health services. So I have proposed a method where the family member supervises the patient swallowing the drugs and the community monitors that it is being done properly.

Community participation in health care, one of the eight declarations proposed in Alma-Ata in 1978, is the key factor in resolving the problem of low cure rates. Community participation will encourage the people to complete the treatment.

The study proposed is a perspective cohort. Two villages are chosen for the study. Village Girbari will have DOTS by treatment supervisors (family member) with community participation. Village Koliya will have DOTS with treatment supervisors only. These two groups of patient will be followed for eight months and their outcomes will be measured. The expected outcomes are cure rates, default rates, conversion rates, death rates, and transfer out (see Appendix for Operational Definitions). The patients diagnosed September -December 1998 and fulfilling the inclusion criteria will be included in the study.

The existing forest council will choose a TB committee and the TB committee will choose community supervisors. Community supervisors can be anyone from the community like the activists of women's group, ex-TB patients, village head, political and social leaders. These treatment monitors will supervise and monitor the treatment supervisors delivering DOTS to the patients.

Data exercise was done in Cholburi Zonal TB center. Data exercise was done to understand how DOTS is being practiced in Thailand. Thailand has opted for DOTS by treatment supervisors (family members). In Cholburi when a patient is diagnosed having TB, he has to choose a treatment supervisors. Data exercise has

shown that most of the supervisors are the wives (39.5 %). The main function of these treatment supervisor is to see that the patient takes the drugs and mark it on the DOTS card.

Cohort analysis of the patients enrolled 1.7.'96-30.9.'96 shows that the cure rate in the group having DOTS is 87.5 % and without DOTS is 47 %. The cure rate is excellent and this is what is desired in NTP Nepal. To achieve, this a lot of effort has to be put in the NTP. Thailand is one of the pioneers of DOTS and Thailand has one of the well developed PHC services. The per capita income of Cholburi is US \$ 6400 highest in Thailand (US \$ 2400), whereas per capita income of Nepal is only US \$ 180. Therefore, the treatment supervisors have to be supervised by someone from the community. The community supervisors or the treatment monitors will chosen by the community.