Madam,

1 feel proud to have recently undergone intensive training in controlling tuberculosis (TB) from your prestigious institute, which is an institution of excellence in our country. Initially, I was of the opinion that this training would only be helpful to officers in the TB control programme, but by the end of the training, I had changed my views that this training would be helpful to me in carrying out anti-TB activities. The training also changed my attitude. I have learnt that an assertive, affirmative and optimistic approach is required while dealing with such a gigantic task in the community. The credit for imparting such exhaustive and able guidance goes to you and your team whose untiring and unstinting efforts deserve high commendations.

Last but not the least, I appreciate the generous hospitality of the senior officers, technical staff and the lower staff who made me feel at home during my 8 day stay in the campus.

With profound regards,

Dr RK Chaturvedi
Senior Medical Officer
New Government Hospital Campus
Shahjahanpur-242 001, UP

Respected Madam,

I take this opportunity to express our gratitude to each and every member of the National Tuberculosis Institute for the warmth shown during their interaction with Armed Forces Medical Officers, while we were there for being trained as nodal officers. We never felt that we were in a different set of environment and we all, without exception, felt at home during our stay there and in fact, in a short period of ten days we started liking the environment and faculty members.

Madam, we salute you with reverence for administering the institute with great efficiency, devotion and commitment, a rare quality to be found. Please convey our regards and respects to all the members of staff of the Institute.

We all have gained sufficient background knowledge of the RNTCP and we shall consider the suggestions made by Dr GR Khatri, DDG (TB) with all seriousness.

Col PB Pillai
Director
Armed Forces Medical Services
Ministry of Defence, 'M' Block
New Delhi - 1 JO 001

Dear Madam,

Trust this communication finds you and the Institute in good health and spirits. It has been almost a week since our return from the modular training at your Institute and I am sorry for the delay in writing.

Please do accept our most heartfelt thanks for the way you and your entire team looked after us during our stay with you. Having attended various courses at most government and private Institutes across the country, I had never :ome across the type of warmth and hospitality displayed by you personally and the entire staff. This personal feeling itself made our stay most memorable. Each member of your team went out of their way to ensure that we were given the best, whether it was teaching or had to dc with our stay.

Once again, I would like to express my sincere gratitude and hope we meet again sometime.

With deep regards,

Surg. Cdr. Pralap Tomar
Officer in Charge
Station Health Organization (Navy)
Gandhigram P. O.
Visakhapatnam

Sir,

Kindly accept my regards from the very core of my heart for visiting our district - North-24 Paraganas, West Bengal. Kindly also convey our best wishes to our colleagues of NTI. When I came to know that the appraisal team for our district comprised of one NTI officer, I was very happy, but I felt sorry when I had only few seconds to talk with you during your visit. Having got trained at NTI, I feel NTI's personnel are our close relatives and all our thinking is on the programme related to tuberculosis (TB). With very much superficial knowledge, when some officials declare with certainty that the National Tuberculosis Programme (NTP) is a failure, I am very much astonished. If a district had been divided into Tuberculosis Units (TUs), administrative attention, proper policy and supervision had been given, then NTP would not have been a failure. Having neglected NTP from the beginning, digging its grave, it is not correct to spread the propaganda of its failure. This is very painful for me.

I have a doubt, under RNTCP, 135 cases are expected to be diagnosed in one lakh population (pulmonary sputum positive :50 + pulmonary sputum negative 50 +

failure, relapse and treatment after default 25 + extra pulmonary 10 = 135 cases). In the Introduction to DTP Manual (published by NTI in 1994), in its epidemiological considerations says 'sputum positive patients are about 4/1000 i.e., 400/1 lakh' whereas in RNTCP, it is only 50 sputum positive/1 lakh. I am confused on this concept. I have not been able to understand this calculation even though I was given an explanation.

The other aspect of RNTCP I would like to highlight is that sub-centres from where DOTS will be provided to patients are opened once a week and the rest of the 5 days multi-purpose health workers are engaged in different **types** of activities according to government policy. My worry is if this schedule is not changed, how DOTS will be given to a patient thrice a week in its intensive phase. I keep worrying why this primary hurdle of the programme has not been thought of as yet. I also fear that if the sub-centres are not opened thrice a week, there is a possibility of increase of MDR-TB cases in our rural community.

Being a paramedical person, I should not venture to speak out too much. But I had a desire to discuss this with you during your visit, but the opportunity did not arise. I cherish the hope that my plan for a trip with family to my beloved Bangalore will materialize and I will get a chance to discuss these things.

Lastly, 1 would like to say that along with our energetic DTO, we will try our level best to make this programme successful. Our district is very vast with nearly one crore population and also covering the Nevarine belt of Sundarbans. I also hope to get out of this pessimism which is dogging me.

My letter has been extremely personal and I do not know if I have crossed my limits. I have explained my attitude to this programme in my personal way.

Mr Pradip Sarkar
Treatment Organizer
DTC, North 24-Paraganas
PO Barasat, West Bengal

REPLY

This is with reference to the Sri. Pradip Sarkar's (Treatment Organiser, DTC, North 24 Paraganas, PO Barsat, West Bengal) letter dated 8-3-2001 regarding the clarifications pertaining to the number of smear positive cases in NTP and RNTCP. We congratulate Sri. Sarkar for his attempt to analyse the potential of case finding in NTP and RNTCP, Given below are our comments on his observations.

1) The first observation is on to the number of smear positive cases in NTP and RNTCP.

   a The calculations, as cited by Sri. Sarkar, given in the RNTCP module is based on the assumption that 1% Annual Risk of TB Infection (ARI) in the community represents about 50 new smear positive cases occurring annually per lakh population. The ARI for India is estimated to be about 1.7% and hence the estimated new smear positive cases occurring in the community is calculated to be 85/lakh-population (all ages)/ year. In RNTCP, 60% of new smear positive cases are expected to attend the Government Health Institutions, which works out to be 60% x 85 = 51 new smear positive cases or 50 cases are expected to attend annually for every one lakh population. These are new cases or incidence cases.

   b Traditionally, the teaching at NTI during DTP Training Courses, the following information is given. The prevalence of culture positive pulmonary tuberculosis cases is estimated to be 4/1000, in the population aged more than five years. It is known that 50% of these prevalent cases attend health institutions for relief of suffering (i.e. 2/1000). Among these, 80% could be picked up as smear positive cases, because the sensitivity of smear examination in clinic situation, which is about 80%. This works out to be 1.6/1000 smear positive prevalent cases among those aged more than 5 years. It is also known from the longitudinal surveys that incidence is about one third to one fourth of prevalence. Taking a higher figure of incidence as l/3rd of prevalence, the number of incident smear positive pulmonary tuberculosis cases would be (1.6/1000) x (1/3) = O.53/1OOO or 53/100,000. This is same as that calculated under RNTCP using the estimated ARI data. Hence there should be no apprehension that RNTCP is providing a lower figure compared to NTP.

   c It may be argued that the case finding based on incidence data does not take into consideration the point prevalence, which is likely to be about three times higher than the incidence of cases.

   Incidence in tuberculosis does not change immediately because it occurs among those who are previously infected with M. tuberculosis. Whereas It may be noted that prevalence - Incidence x duration of disease. In NTP, the case finding had been and is still about 30% of estimated prevalent smear positive cases and so

about 70% of smear positive cases would be still remain as smear positive for periods exceeding two or three years before they die or diagnosed. Hence, the high prevalence.

While the RNTCP encourages the programme managers to first cure smear positive cases to an extent of more than 85% before embarking on expansion of case finding to 70% of prevalent cases. The duration of smear positivity in RNTCP is reduced to two months because of 100% DOTS in the intensive phase. Using the same calculation of prevalence = incidence X duration of disease, it may be noted that prevalence in RNTCP would be equivalent to incidence in a matter of a few years. Therefore, we need to have data based on incidence and not on prevalence, in order to apply the calculations for many more years.

d) I hope this clarification satisfies Sri. Sarkar and his colleagues, who have been seeking answers some of the questions based on the above-mentioned points.

The following are some references, which may be useful to them.

1) Raj Narain et al: Tuberculosis prevalence survey in Tumkur district; Ind J Tub. 1963, 10,85-116.

2) National Tuberculosis Institute, Bangalore: Tuberculosis in a rural population of south India: A five year epidemiological study; Bull WHO 1974.51,473-488.

3) Chakraborty AK et al: TB Infection in a rural population of south India; 23 year trend; TB & Lung Dis. 1992,73,213-216.

4) Rieder: HL. Predictive epidemiology: modeling risk of infection in Epidemiological basis of tuberculosis Control, First Edition 1999 IUATLD, 68, Boulevard Saint-Michel, 75006 Paris. PP 49-62.

2) Sri. Sarkar has. raised another important issue of DOT providers in RNTCP. According to him, he has noted that it is not possible to provide DOTS in their sub-centers because they do not open thrice a week. Hence, there is a fear of increase in MDR-TB cases in their rural community.

RNTCP is allowed to start functioning only after identification of DOT providers and a complete list (Directory of DOT providers) is prepared by the DTO. This is verified by the appraisal team consisting of *a* representative from Central and State Governments, and a WHO Consultant.

The DOT providers need not always be Health Workers. They may be any one who is accessible (in terms of time and distance), acceptable and accountable to health system. A big list of type of such persons who can be enlisted as DOT providers, is available in the publication of DGHS entitled "TB India 2001". It is encouraged to make use of the strengths of the community in enlisting the DOT providers, who can be trained initially along with Health Workers and retrained as and when the need arises. Hence, Sri. Sarkar, as a Treatment Organizer, may help the DTO and his TB Unit area Medical Officer of TB Control (MO-TC), by identifying, training as many DOT providers as possible and supervising them so as to reduce future MDR-TB cases in his area.

(Dr VH Balasangameshwara)
CMO, NTI, Bangalore