GLIMPSES OF MY FIELD EXPERIENCE IN THE NATIONAL SAMPLE SURVEY TO ESTIMATE ANNUAL RISK OF TUBERCULOUS INFECTION

Lakshminarayana*

I work as an investigator/Team Leader in the Epidemiology Section which was given the task of conducting perhaps the most ambitious nationwide tuberculin survey planned in recent times. I was watching my section getting energized by both the Director and Senior Epidemiologist who were working over time to conduct the survey as per stringent schedule.

Field work of the survey began in the month of February, 2000 in Junagadh district of Gujarat State. I was lucky to participate as a trainer in the very first batch, which was sent to Junagadh. It was not easy for me to become a trainer. I really worked hard by studying all the materials required for the purpose. This gave me great insight into certain practical aspects of the survey, in which I was sure that I would also be sent for supervision.

I did not have to wait for long. The very next month, i.e. in the month of March 2000, I was asked to go to Rae Bareli (Uttar Pradesh) which was the first district selected for the survey in the North zone.

I was pleased that I would go to a nice place because Rae Bareli was ex-Prime Minister’s Constituency. I expected it to be a place with a modern look with decent civic amenities. However, when I went there I was aghast with what I saw. I did not find anything worth mentioning other than a branch of Indian Telephone Industry (ITI) and a park named after late Indira Gandhi. Rae Bareli is full of narrow roads, congested houses with no proper drainage system. The district is also quite backward with agriculture being the main occupation of the people.

The schedule of our survey starts from pre-planning & planning followed by registration, testing and reading.

Pre-Planning

Dr VK Chadha, Sr Epidemiologist and the Chief Investigator of the survey visited Rae Bareli and met the state officials like CMO, DTO, ADMO, discussed the survey aspects to elicit their co-operation. In this connection he also met the Hostel Warden, Department of Rural Development (Govt. of UP) where we had accommodation for the field staff. He also accompanied us to search for private accommodation; sometimes DTO and Hostel warden have been invited for get-together patty to develop harmony and necessary rapport with them.

He has visited the field till the completion of fieldwork. He has observed all the field activities and assessed each and every member’s discipline, nature of work involvement, performance, honesty, commitment to the cause, team co-operation among each other, behavior with community, harmony with team leaders, team spirit and motivation. He has also observed the Team Leader’s ability to organize the teamwork. During evenings he used to visit the camp to meet all the field staff & discussed many problems experienced by them and used to give further direction to team leaders to set right the problems within the framework of the rules.

I had two challenges to face - (i) to extract work from a newly trained team without field experience and (ii) to establish social rapport with local state authorities who were less serious and indifferent to attend to our basic requirements.

For instance, I made four visits to Chief Medical Officer’s (CMO) office to get a permission letter to depute Auxiliary Nurse Midwife (ANM) Multi Purpose Workers (MPW) to assist our team. I had to struggle hard even to get a vaccine carrier and refrigerator to preserve tuberculin used in the survey.

Somehow, we got accommodation in a State Government Hostel. When we occupied the
premises, it was full of dust. Toilets and bathrooms were filthy. Added to it, window glasses were broken and there was no electricity. We could not get sleep because of high temperature, mosquito menace and the traffic disturbance every now and then.

However, there was no water scarcity. We tried to get private accommodation but we could not succeed because we were 12 persons and needed two houses that too for only 3 to 4 months duration and also needed a place for vehicle parking. We faced these problems in almost all districts where survey work was conducted.

I had to use all my organizational skills to extract co-operation from the two BCG Technicians deputed from District TB Centre. In the beginning, I had to understand the local set-up and so I planned to take up two villages, which were not included in the selected list.

Planning

During planning, we found out the location of the selected clusters with the help of local health worker. I met Pradhan, Up-Pradhan, Social Worker and a few active youngsters in the village, Medical Officer In-charge of the concerned PHC PHI, explained them our programme, requested for their co-operation and convenient date for testing. Since meeting the village leaders is mandatory, we made more than two visits to meet the leaders, as they were not readily available.

Registration

For house to house registration, we have to commence the census work in the selected lane using a rough sketch map prepared earlier by the planning team. The presence of Local leader and ANM/MPW is a must, since we are strangers to the villagers. Estimating the correct age from the illiterate villagers and many times without the head of the family was real Herculean tasks.

Tuberculin testing

It is done among children of 1-9 years age group by injecting 1 TU RT 23 with Tween 800n the midvolar aspect of the left fore arm. Testing centre was set up adjacent to the selected lane and our target was to cover 85 children in a cluster. Some of the children did not report to the testing centre due to (i) long distance from their house, (ii) community feelings, (iii) different political backgrounds and (iv) personal problems.

At the testing centre, 98% of the parents were willing to give their consent to test the children. Most of the children cried and screamed and were shaking their hands at the time of testing. Children were scared at the site of syringes and a few even ran away from the centre, because of fear psychosis. However, distribution of chocolates attracted the children. We checked for the presence of the BCG scar on both the shoulders of the children before administering the test, since they would never allow us to examine them after the test because of the fear of being pricked again.

A few parents enquired about whether (i) we are using disposable syringes, (ii) children will get fever after test, (iii) they can bathe the children, (iv) any diet restriction etc. The team answered to all their queries politely. After all community as a whole are masters and we are its servants. In some clusters, we were able to meet our target just in two lanes while in some other clusters we were forced to move to the adjacent village.

When I went along with the testing team on a particular day, in the absence of Panchayat Leader and the ANM, the village that was dominated by a particular community blindly resisted for the setting up of testing centre. They were afraid that we had gone to propagate birth control and our tuberculin test may make their children childless in future. I, however, talked to them patiently and explained to them about our survey and to got their cooperation and achieved our objective.

Reading

I was thinking that reading would be easy because no pricking was involved. However, I found that children being children, a few ran away at the sight of us fearing that we would prick them again. We had to give high coverage and so it was not easy task to trace panic stricken and hiding children.

In one such instance, 20-25 eligible children
ran 1% kms away from the village to hide. I spotted 2 smart boys, and made them leaders to bring back the children for reading, and I am happy to express that I succeeded in my effort.

Rocks

Roads were very narrow, most of them were country mud roads and were very difficult to access. Even the inter-state connecting roads were bad. In rainy season vehicles could easily skid. One particular day I walked along with the team more than ½ km by carrying furniture, vaccine carriers, child cards and other miscellaneous materials to reach the rural cluster.

Team

The Contractual Health Workers who were appointed and trained at TRC Chennai were from the nearby district of Lucknow. They were honest, well behaved and hard working. However, at times they quarreled among themselves for petty reasons.

For instance, we used to carry drinking water to field every day. There used to be difference of opinion amongst them as to who should fill and carry the water. To solve this problem, I prepared a roster and they were asked to shoulder this responsibility in turns. I also constituted a mess committee. I used to conduct weekly meetings to have better interaction and understanding among team members.

The team has used every skill and its power to get the required number of children for testing. It was mandatory that day’s work would end only after testing 85 children. The team had to go in hot sun and work throughout the day so that one cluster is completed. Added to this hard work, upon return from fieldwork, every member had additional task of filling of forms, sorting out child cards, filing of the cluster file and other work as required by the work instructions.

Nagpur

My second assignment was at Nagpur of Maharashtra State, which is a central city of India. It is also called Orange City. It was the first district of the East zone selected. What a contrast Nagpur was with several industries, even an Ayurvedic medicine manufacturing plant, from Raebareli! When I saw Deekshabhumi and beautiful parks I felt astonished. Even the government authority was extremely helpful and extended their co-operation. In contrast to Raebareli not only the roads to the village were better, but somehow we could get the maximum co-operation from the community as well. I found that here everything was better organised and there was no lack of educated persons in any village I visited in the district.

Dr Authkar, the Chief Medical Officer, District TB Centre, was taking personal interest to oversee the smooth functioning of our survey. He deputed Mr Gajanan Jagatap, Senior Health Assistant, DTC to assist our team. I was astonished at Mr Jagtap’s in-depth knowledge of entire district. He was well-experienced, honest and enthusiastic worker.

The field work in the district was organised and supervised by Dr (Mrs) Pratibha Narang, Professor and Head of the Department of Microbiology, Mahatma Gandhi Institute of Medical Sciences (MGIMS) Sevagram, Wardha. The team selected by her was extremely good and she was taking care to provide all requirements, so that the survey work could proceed without any problem. She had deputed Mr Rajendra Naik an eminent Team Leader who was an honest, well experienced and a capable person to organise the teamwork.

There was also Mr AN Shashidhara, Retired Investigator, NTI who was deputed to initiate the survey work. He introduced some new techniques in fieldwork to boost up the study. Being a very well read person and disciplinarian, he was always our friend, philosopher and guide. Though old in age he was always young in spirit.

Once I visited a rural cluster near Ramtek, a well-known religious place. In the absence of Local Health Worker/ANM/MPW for testing, the local people were unwilling for the tuberculin test. Again, the next day I made a second visit to the same cluster and negotiated with the village leaders but could not succeed. Later, we convened a meeting with a local religious leader and explained them the purpose of our programme and its benefits. Through him, we were able to convince the community and complete our work. Motivation by the team was excellent.
The Contractual Health Workers who were appointed and trained at TRC Chennai were from a nearby district of Nagpur and Wardha. They were all graduates and a few were postgraduates. They were well determined, honest, disciplined and hard working Team. They lived in the camp like one family. They were professionals in fieldwork. I was surprised that they would not take their lunch without achieving their fixed target. I am happy to say that I have lead such a team.

My third assignment was at Delhi. I went with Mr Venkatachalappa, Statistical Assistant to initiate and supervise our work in Delhi City, the capital of India. I was unusually scared when I saw in the cluster list the names of areas like Jumma Masjid, Chandini Chowk, Chanukyapuri, RK Puram, Sisganj, M.P Servant quarters, Jantar Mantar, Rastrapathi Bhawan servants quarters etc.

I wondered as to how our team would face the people living in big Bungalows, multistoried buildings and in narrow lanes in and around Jumma Masjid. I thought it was a challenging work for me, a great opportunity to prove my organizational skills and to develop self-confidence to do the survey work in urban areas. I was also inspired by Dr VK Chadha, Sr Epidemiologist and Mr Shashidhar Savanur, Statistical Officer, who visited Delhi for supervision of the survey. I gathered courage and made a plan of action for the team to face the people who were living in Juggis and Bungalows. Fortunately the team members belong to Delhi and Dr SK Agarwal, Director of New Delhi TB Centre (NDTC) helped by deputing two health workers to assist our survey.

I encountered the following additional problems there.

1. Addresses were not traceable in some clusters.
2. The fieldwork was hampered due to heavy traffic and by the Bandhs & Demonstrations held by various governmental/non-governmental organisations.
3. There used to be too many checking by traffic police. Big vehicles like Tata Sumo could not reach some clusters and we were forced to engage cycle rickshaws/auto rickshaws to reach the clusters.
4. In old Delhi, most of the selected clusters were very congested and we were even unable to set-up a testing centre.
5. There were too many commercial establishments and offices where almost no children available for registration.
6. While census taking, a few people spoke through microphones and refused to provide necessary information saying that they are busy and in few houses they asked us to visit again since head of the family / children were not available.
7. Admission was restricted in some of the posh areas, where watchman and pets came in the way of our registration.
8. In multi storied buildings lift facilities were not available, we were forced to climb up 6 to 7 storied buildings. It was a real challenge to achieve the planned target.
9. We took prior permission while doing testing in Parliament Street, President’s servant quarters and a few apartments.
10. A few families refused tuberculin testing on pretext that their children may get fever and may have after effects and doubted about the testing ability of the team.
11. A few vigilant households checked the tuberculin vials, syringes, study cards, authorization letters and identity cards to confirm about the authenticity.

My fourth assignment was at Thane of Maharashtra State. It is a vast district. The city of Thane with its apartments and commercial shops resembles Mumbai. Local health worker Mr Yeshwantha Rao, retired District Health Supervisor was very helpful to our survey.

On one occasion when I went to Mumbai...
airport along with Mr Rajendra Nayak, Team Leader to pick up Dr Preetish S Vaidyanathan, Senior Medical Officer (SMO) and the Co-Investigator of the survey on the way police caught our vehicle and ceased the documents. We were forced to pay the fine and collect back our vehicle. A rich experience indeed. This was a lesson, which made me to be extra careful while hiring the private vehicle.

On another occasion while collecting tuberculin vials from the airport, our consignment was checked by commercial tax authorities and they asked us to produce authorization slip and other documents. Dr Preetish, SMO convinced them by showing his identity card and the consignment was released.

To put it in a nutshell, through this survey I have developed self-confidence and my organisational skills have improved. As I was usually sent to supervise or initiate survey work in new districts like Raebareli (UP), Nagpur (MH), Delhi, Thane (MH), Purbhisingh Bhum (Jarkhand), Ratnagiri (MH), Cuttack (Orrisa), I had to develop additional communicational skills to maintain public relations with state authorities. Since I had to lead different teams, I slowly developed motivational skills. The challenges I faced in big cities like Thane, Nagpur and Delhi have made me fit to face any eventuality with a planned approach. Since most of the time I was living with the teams it gave me opportunities to develop team building and co-operative spirit.

I did not take this as a job to be performed because I held a job at the NTI, but something deeper in me appreciated the importance this ambitious project has to the nation. I am therefore indebted to Dr (Mrs) P Jagota Ex Director and Dr VK Chadha, Sr Epidemiologist of NTI for providing me this opportunity.