RESURGENCE OF TUBERCULOSIS IN WHO

Dr. Tadao Shimao, Chairman, Board of Directors, JATA

Why Tuberculosis Problem Neglected?

Tuberculosis problem had been neglected in spite of its magnitude even in WHO in the past decades, and the major reasons could be summarized as follows:

1) Due to chronicity of the disease, tuberculosis problem can be compared to an iceberg, whose only a part floating above the sea could be seen, so that it is difficult to know its real magnitude.

2) Success of tuberculosis control in industrialized countries produced an illusion that tuberculosis problem was already solved and there was no need for further research. Thus, scientific interest for tuberculosis was lost, and it had become difficult to recruit young research workers for tuberculosis.

3) Tuberculosis attacked mainly the weak, and their voice hardly reach the policy-makers in each government or international organizations.

Why given Higher Priority Now?

Tuberculosis problem has resurfaced first in the United States in the late 1980s, then quite recently in WHO, and the reasons of resurgence are the following:

1) Tuberculosis problem has been deteriorating due to epidemic of HIV infections particularly in Africa, and recent survey revealed that tuberculosis is still the biggest infectious disease both in developing and developed countries.

2) Tuberculosis was successfully controlled in some developing countries such as Tanzania, Malawi and Mozambique using existing technologies including short-course chemotherapy under the technical guidance of the IUATLD, though the success was masked recently by the epidemic of HIV infection in these countries.

3) The World Bank analyzed the cost-effectiveness of several intervention measures, and has found that passive case-finding and short-course chemotherapy for tuberculosis was one of the most cost-effective interventions. The data of tuberculosis control in Tanzania and Malawi was used in this analysis.

4) Recent advances in molecular biology and gene technology gave us hope that new methods of tuberculosis prevention, diagnosis and treatment could be developed by applying these new technologies in tuberculosis research.

Actions Strengthening Global Programme Tuberculosis Control

In January 1989, Dr. Arata Kochi was appointed as chief medical officer, tuberculosis unit, the division of communicable diseases of WHO. He started to examine in cooperation with world experts, the present epidemiological situation of tuberculosis, programme coverage, reason of failure in controlling tuberculosis in developing countries, existing technologies used for tuberculosis control and priority research area.

It was found that 1.7 billion people or roughly one third of world population, were infected with tuberculosis; approximately 8 million new cases of tuberculosis are coming out, and nearly 3 million are reported to be dying of...
tuberculosis every year, and the majority of them arising from the developing countries.

Commission on Health Research for Development (CHRD) which was organized in 1987 presented its final report in 1990, and it was emphasized that tuberculosis and malaria are two major diseases which were neglected in past decades in spite of its seriousness, and should be given high priority in global health strategy.

The Executive Board of WHO showed interest on global tuberculosis control, and adopted in its 67th session a resolution on tuberculosis control after examining a report prepared by the director-general. The resolution was sent to the 44th World Health Assembly which was held in Geneva from 6 to 16 May 1991, and it was adopted with minor amendment after active discussions to support it.

Dr. H. Nakajima, Director-general of WHO, took initiatives to strengthen the global tuberculosis control immediately after the adoption of the resolution in January, and organized CARG (Coordination, Advisory and Review Group) on global tuberculosis control, consisting of 12 members, 6 from each region of WHO and 6 others are members at large. I was nominated first chairman of CARG, and its first meeting was held from 2 to 3 May 1991 at WHO HQ.

New Target by the Year 2000

The situation analysis, objectives and target of the new strategy, programme activities and proposed future plan were discussed in the first meeting of CARG, and the approved global target by the year 2000 was the following:

1) First, to cure 85% of detected smear positive pulmonary tuberculosis globally and the cure rate in industrialized countries should be 95%;
2) Then, to improve the case-finding rate of existing cases to 70% globally and at least 60 to 65% in developing countries.

To reach this target, it is needed to strengthen training of key-personnel engaged in tuberculosis control, research and development in every country. Dr. Kochi is now trying his best to collect funds necessary for the implementation of the programme asking for participation of interested member states and donor agencies, to increase the staff at the HQ and to organize management structure of the programme. CARG will hold its meeting consisting of small groups and interested donor agencies in August, and its second meeting in November.

I am sure that the detailed plan of action of the global tuberculosis programme would be reported to you in the next issue of the Newsletter.
**APPEAL TO THE 1983 COURSE**

*Dr. Daniel Sokani Nyangulu, MALAWI (’83C)*

Let me first inform you that since saying “Sayonara” to each other eight years ago, I have remained very actively involved in my country National Tuberculosis Control Programme as a National Coordinator. Now, after picking up more skill from the “Advanced Course”, I intend to continue working even harder in order to reach/maintain the high cure rate and case detection levels currently recommended by the World Heath Organization.

Now, I am writing to ask all of my colleagues of 1983 course to make a reunion on the "VOICES" page of the Newsletter from Kiyose, which I hope you have read through. by sending your fresh news. I am sure your real activities, information, interests, problems at work would appeal not only to us but also to all other exparticipants.

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I am looking forward to seeing all my friends in the next Newsletter from Kiyose.

*Dr. Ayten Yarar, TURKEY (’83C)*

It is good to hear always from the mother institute, RIT, and most of all to hear from old colleagues of 1983 particularly from Dr. Daniel of Malawi.

I remember that our group of participants were unique in everything, character, language (English), ability, colour, statistics ability, etc... so unique as that film which was called “Mind your own Language” and I miss them all, though it is now a long time.

I am still working in Asmara TB Centre and Sanatorium with about 60 symptomatic patients attending every day. Our patients come from every part of Eritrea and at times they come also from the north part of Ethiopia, our neighbour country. Mostly I was limited to only our Institutions. And I should say our population are very much aware of tuberculosis.

At times I am trying to see how the other health institutions in the country are doing concerning TB integrated with their activities.

Though I don’t boast that I did enough as that of Dr. Daniel for the simple reason that we were in war. The war with the expansionist Ethiopia aided by the great powers as that of USSR your neighbour and I had no free movement. At last we won and we are free after 30 years day and night struggle.

Now at this time I am formulating a national TB control programme beside my daily task with our fellow health workers especially with those patriots who were in the country side. They know the whole population and they had a network of health service system up to the grass-root village level including primary health care (including TB) and it is my time to work fully and I am very enthusiastic.

*Dr. Bahlolf Kiflom, ERITREA (’83C)*

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We are very grateful to the exparticipants for the many letters we have received. We regret that all letters could not be published due to limited space.

The number of letters received in each course was as follows:

- C (TB Control Course): 12
- A (Advanced Course): 4
- L (Laboratory Course): 1
- I (Individual Course): 0
- S (Chest Surgery Course): 1
Dr. Enarson interviewed

Tuberculosis and HIV Infection
Making Emerging World Problem

Editor: What do you think of the combination of TB and HIV infection in the world?

– Dr. Enarson: I think it is very serious because it is going to bother the situation of TB very much.

Is there much difference in distribution or incidence of this problem in the world?

– It is quite different in different parts in the world for several reasons. First of all, there are different patterns of HIV infection. In Europe and North America, the pattern is such type as affects mostly homosexual men and drug addicts as the main target groups while in Africa and other developing countries the HIV affects general population and it is heterosexually transmitted disease. Secondly, its impact on TB is quite different because that largely depends on the prevalence of TB infection in the community where HIV enters. For example, in Europe and North America where the prevalence of TB infection is very low and where almost all the people infected with TB are over the age of 45 years, the impact of HIV entering community and infecting largely young people between the age of 15 - 45 will be very small with regard to TB. On the other hand, in Africa where the TB and HIV infection are involving the same age group, young people between the age of 15 - 45, the combination of two will be very dangerous.

In terms of the combination of two diseases, the situation would be much serious in the country where TB infection is quite common among younger age people?

– Exactly.

How serious is it in Asia and other countries in another part of the world?

– I think the potential impact is even worse in Asia as there are more people infected with TB than in Africa. One would imagine that HIV enters the community in Asia following the African pattern of the heterosexual transmission.

Clinical characteristics
Tell us clinical characteristics of presentations of the disease.

– We did not at first know any difference about cases. We just noticed there were so many more cases than before. Each year the number of cases would rise. And yet the clinical presentations of cases did not seem to be very different from the cases which had been before HIV came into the community. There were some exceptions of some unusual types of cases. These were particularly cases of severe TB Plicarditis and TB Pleurisy. But these were the least common types of TB. Biggest effect was the increase in the total number of cases.

Clinical features or presentation are not necessarily very different?

– No. There are some unusual cases, but if you didn’t have the serum test, it would be difficult to say so.

Response to chemotherapy
Can we say that chemotherapy is as effective to HIV positive TB patients as to the HIV non-positive patients?

– The response to chemotherapy is basically the same between two groups with the exception of fatality. Those who are HIV positive are much more likely to die of their diseases. Patients would initially improve on the chemotherapy and become sputum negative and then would die at a later time. It is not strictly TB fatality. As many as one thirds of HIV positive patients would be dead by the
end of 8 months treatment. Next, there was serious side effect of thiacetazone. And increasing number of patients as many as 1% would develop Stevens-Johnson’s syn-
drome and die of it. Because of this, we have changed our practice with thiacetazone and those patients who are known to be HIV positive had to abandon the use of thiacetazone.

Do you think that TB infection hastens the immunode-
ciency ?

That is possible. Many of the patients with indication of AIDS die while they are on TB treatment.

How important is it to give preventive chemotherapy to the HIV and tuberculosis infected people ?

There is no answer to that at this moment. But it is quite clear that HIV infected persons who are also infected with tuberculosis constitute the highest risk ever identified for the development of clinical tuberculosis. One thirds of the patients seem to develop clinical tuberculosis. So they constitute the group ideal for preventive chemotherapy. They are at present under clinical trial.

For that, what kind of medicine and for how long is it recommended ?

I think it is basically the same as compared with HIV negative persons.

Can rifampicin be recommended ?

I would not recommend to use rifampicin for preventive therapy alone, though some investigations have been undertaken to look at rifampicin and pyrazinamide as a preventive therapy.

BCG vaccination

Can BCG be given to children who might be HIV positive ? How BCG vaccine programme can be carried out ?

BCG vaccine is probably one of the most widely used vaccines in the world, and there was much fear that at the outset of HIV epidemic, patients would develop systemic disease with BCG. This has not seemed to be the case. There are only very few case reports of systemic BCG infection. WHO recommends that if a child is known to be HIV positive, BCG vaccination should not be given to him. On the other hand, WHO also recommends that BCG vaccination programme be continued even in an area where there is high prevalence of HIV infection.

For Asian workers

Do you have anything to say to those people working at the front in district or regional level in Asian countries, where HIV infection problem is not yet a big social problem ?

First of all, although HIV infection is not a large problem at this moment in Asian countries generally, it is quite likely that it could become a large problem in not distant future. Secondly because this is likely to become a problem in some Asian countries, and because HIV infection seem to be concentrated among TB patients, health care workers should always take caution in caring for patients, in dealing with blood and other body tissues to protect themselves. It doesn’t mean any special protection against HIV – just use proper sterilization technique and other normal care, that they would use to prevent themselves from getting Hepatitis infection. Thirdly, because TB care almost always is integrated into general health service, it is important that people looking at TB patients should know something also about HIV. The most important information about HIV is that HIV is a sexually transmitted disease and prevention of the spread of HIV is the same as prevention of the spread of any other sexually transmitted diseases. There is so much need to talk about it in community and information need to be shared in the community. It is not a subject that should be hushed up and not be discussed because it can only be prevented by people taking caution and preventing the spread of sexually transmitted diseases. So not to talk about will make the situation worse. So it is good to be aware of it, to know what it is, how it spreads, how it is prevented, and make the community aware in terms of health education even at this early stage, because it is far better to make people aware and prevent to spread it than start to do something after it spreads all over the places like in Africa.

Do you mean that for TB specialists or TB workers in those countries where AIDS is not yet a big problem, now is the right time to start a kind of preparation to include it as a part of health education ?

I think so because where HIV infection is not a general problem at the moment, it would likely enter the community in sub-group of the population who practice high risk sexual behaviour and it is these groups particularly who need to be targeted in terms of health education so that they modify their behaviour. But if they don’t modify the behaviour, for sure they will introduce this infection into the community and it will be deadly infection.

Thank you very much.
We, happy family in a dormitory

We are so grateful that we express our point of view in the Newsletter From Kiyose. Seven laboratory technicians and one medical doctor were trained in Kiyose this year. Actually, we gained very good knowledge and skills of TB control that would enable us to overcome the health problems. As a matter of fact, the opportunity that was provided to master skill in our specific field was unique; not only through field training but also through exchange with many Japanese people including the administrative staff of RIT. It was a fine opportunity to experience the real Japanese through day to day living in Japan and field trips.

In the meantime, we also learned so much from each other that these people who came from several countries, as an international participants, had different cultures, traditions, behaviors, experiences, etc. We did adapt to each other to be as a happy family in a lovely dormitory.

Finally, we would like to express our sincere gratitude to JICA through the RIT for our beneficial training which enhanced the development of human resources in our countries. We also appreciate the well generosity and hospitality that they have brought to us.

We look forward to hearing about all the staffs of RIT and participants through receiving the Newsletter from Kiyose. We are absolutely sure that the editor of the newsletter will welcome any article from exparticipants (doctors and technicians) to be written in the newsletter in order to know about the classmates and others.

Mr. Abdulaziz Yahia Najmaddin, Yemen

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A personal report on the 50 years survival of tubercle bacilli in a healthy-looking person

Dr. T. Iwasaki, Director Emeritus

One of my relatives, now 79 years old female, had a infraclavicular infiltration with smear positive sputum in 1937. She was treated successfully with artificial pneumothorax for a year and a half. The lesion healed cicastrically leaving a localized pleural shadow on pneumothorax on the treated side. She received periodical X-ray check up and there was no relapse for 50 years and she enjoyed healthy life throughout. On the last follow-up, which was carried out in 1990, an increase of the pleural shadow was found, and thoracic empyema was confirmed by thoracentesis. A few colonies of tubercle bacilli were cultivated from the exudate.

The aging might have lowered her natural resistance, as a result of which, there was reactivation of tubercle bacilli, which were in the dormant state for 50 years. Fortunately she recovered by daily treatment with HRE. We are fighting against the tubercle bacilli, which has such as obstinate nature.
Into the country of rising sun
Advanced Course (May 13 - June 21, 1991)

This nineteen ninety-one tale for you
Of gentlemen nine and ladies two
Of Indians, teachers, coordinator
Brought together by JICA JATA.

For TB training came doctors ten
Into the country of rising sun
Another came with a great big "yen"
To join the course and it was fun.

From South America but lingo of Spain
He went to "bed rest" with abdominal pain
Illness kept him away from the rest
When he returned he was one of the best.

Musical Filipino keen on TV
Always the pet of the warden was he
Humming a tune or singing a song
God fearing, church going, never doing wrong.

Always joking, provoking laughter
The Malawian was reacting faster
To "any comments:" - a very bright spark
With a short life span?? - that's a lark.

"Malaya" was his favourite girl
When singing at a party and doing a twist
The warden was "mad" but Tanzanian smart
Sleeping near the "Family Mart".

Clever, Artistic, no lassitude
Argentinean, no nonsense attitude
Collecting the maximum information
Presented she, a good evaluation.

The Sri Lankan, with a "Britishers talk"
She was always going for a walk
Elegant in Sari, Casual in dress
In Akihabara looking for the best.

Pearls he wanted, pearls he got
Mikimoto was his favourite spot
Good humored, cheerful Egyptian
None could beat him as a "Chairman".

Armed with a camera, dressed to kill
Making movies, not those stills
"I have no yen, but only dollars"
Yemeni Gentleman, example to scholars.

Enjoying art, music, life
Talking of the kids and wife
The Thai goes electronic shopping
By the evening, tired and dropping.

Monday morning on each one's table
Beauty soap that's Japanese pure
So smart and able, so "sweet" and stable
We'll never forget him, that's for sure.

A prof. he was, "Bucho" in class
The Pakistani was a big big brass
"Co-rect", "that's right" or "that's the answer"
At 4 p.m. to his room he would transfer.

Five bright Indians came to join us
World Health Organization fellows
Late to bed and early to rise
Did they make a lot of noise?

Nhongo sensi "Ogenki Desuka?"
Once again "Kaimono Kinmau-ka"
We still remember "Ikura Desu-ka"
"Domo Aligato Gozaimashita".

"An important word is 'Alsuru'
That's the way to sing it thro'"
Singing songs or training doctors
Matsuda sensei - never cross.

"Enthusiasm is infectious
In international relations"
Bangladesh and Sawa-uchi,
He has "many" informations
Everyone did quickly like him
Doctor Ishikawa - that's him.

With love to all, malice to none
These few verses, in a hurry was done
Dear friends, my name can you guess
Yes, you are right, I'm "anonymous".

Dr. Chandra Pitigala, Sri Lanka
How much do you like?

Mr. A. Fujiki, Assistant Course Director

When I was working in Nepal this May, I visited a souvenir stall with my companions just to kill some time. A stall keeper approached us to sell fossils and we took keen interest in one of the fossils. It was an Ammonite fossil, small but the shape was clear. My companion asked him,

"How much?"

"300 rupees each (about 9 US$)" he answered.

".... ??"

"How much do you like?" he continued.

At first, we were looking for a bargaining price and suddenly my companion said to him, "I am not a tourist. I am a resident here. I know a real price." To our surprise, the stall keeper lowered the price soon to 100 rupees from 300 rupees and we started to challenge him on how much we can bargain from 100 rupees. But we did not realize that it takes us a risk since he was tough. Anyway there was no change with the price in spite of keeping a catch-ball of bargaining.

While we were busy bargaining, the weather was threatening to rain and soon we felt big rain drops falling on our heads. We almost gave up to continue bargaining. The stall keeper gave us final discount call, "90 rupees."

"50 rupees,"

"60 rupees," some two of us answered at one time.

".....!!??" We looked at each other and everybody was confused. It was too late and the game was over. The stall keeper smiled and said "Take it in between, for our happiness. 70 rupees.", and we agreed. We could not help ourselves to stop the challenge at 70 rupees due to some momentary disarray but we surely enjoyed spending time with him. With the fossils, gift from nature created more than a billion years ago, we hastened to ride the car for the rain was so heavy before long.

Well, we still don’t know whether it was a good bargain or not. How about you? How much do you like?

International Research Funds Raised

Research funds are being raised for the expatriates to promote anti-TB research activities. It was started by Mr. T. Kojima, the owner of a company, who had recovered from tuberculosis. This system provides the expatriates with seeds money (about 500 US$ per person each year) for his/her research activities. Furthermore, researchers who are recognized excellent by RIT, will be invited to study at RIT up to 4 months. The details for the application will be announced later when a suitable system is developed. Your suggestions for this new award system are welcomed.

The 30th Anniversary of the International Training Course

RIT is going to cerebrate the 30th anniversary of the International Training Course in May 1992. The number of expatriates of various courses counts to nearly one thousand. Workshops, publications and other programmes are being planned for this special occasion. The expatriates are welcome to write about memorable events or any comments for the next issue of the Newsletter.

Individual Course

Five doctors from India (WHO fellows) participated in the Advanced Course from May 27 to June 21, 1991.

Staff New

Welcome:
Ms. N. Sato (Epidemiology Div.)
Dr. H. Hoshino (International Cooperation Dept.)
Mr. K. Otomo (Pathology Div.)
Dr. T. Sakai (Pathology Div.)
Ms. K. Hirano (Bacteriology & Serology Div.)
Ms. N. Shimoji (Administration Dept.)
Mr. T. Suzuki (Administration Dept.)

Farewell:
Ms. S. Kurakake (Epidemiology Div.)
Mr. K. Karaya (Biochemistry Div.)
Dr. H. Nakano (Pathology Div.)
Mr. M. Abe (Pathology Div.)
Dr. K. Nakata (Pathology Div.)
Dr. H. Tokuda (Second Clinical Research Div.)
Mr. A. Yamazaki (Administration Dept.) (moved to the JATA central office)

Your news and voices are always welcome!

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