

NEWSLETTER FROM KIYOSE



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The Research Institute of Tuberculosis, JATA
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NEW STRATEGY FOR TB CONTROL

Dr. M. Aoki, Director

Why unsatisfactory results in developing countries

Tuberculosis is still one of the biggest public health problems in many developing countries in spite of splendid developments in chemotherapy and other technologies in the last several decades. Dr. A. Kochi, Chief Medical Officer of Tuberculosis Unit, WHO Headquarters



presents his analysis of the reasons why tuberculosis has not decreased satisfactorily in many developing countries

Current methodology (case-finding and treatment prioritizing sputum-positive cases) has not been successfully implemented in the majority of developing countries with a poorly developed health service system. It is estimated that less than half of all TB patients who

started treatment either were cured or completed their treatment, and that less than half of all existing cases are receiving treatment.

This is partly because the current technical policies are largely focussed on "what should and could be done" and often lack the component of "how to do it", and partly because intervention technologies which are effective, simple and affordable in well-developed health service systems are not necessarily in poorly developed health service systems.

1990 WHO Meetings

To establish a new strategy for TB control, WHO has organized several important meetings one after another in 1990:

1. Informal Meeting on assessment of TB control technology, Geneva, 2-5, April 1990.
2. Workshop: Case studies for evaluation of TB Control in various primary health care settings, Sturbridge, Massachusetts, USA, 25-28, May, 1990.
3. Workshop on TB treatment in adults and children with the aim of developing WHO guidelines for TB treatment, Geneva, 2-4, July, 1990.
4. Consultation of TB research and development, Geneva, 23-25, October, 1990.
5. Meeting on TB control and research strategy; for 1990s, Geneva, 26-27, October, 1990.

Dr. Kochi expressed his willingness to improve the present TB control strategy which had been established in the 1960s, "The Ninth Report by WHO Expert Committee on TB" which was first published in 1974 will be revised in 1992.

Free from old dogma

Now, at the beginning of the year 1991, I take in the extraordinary circumstance and conclude that we are standing at the starting point of new era of TB control. We should not stick on to the old dogmas. Stimulated by the active attitude taken by WHO, we have to explore new strategy: as the first step, we can learn from successful cases of national TB control programmes implemented in several developing countries. (see page 2)

Biochemistry Division

Dr. H. Sanada, Division Chief

Our staff members are Dr. H. Sanada, Ms. S. Yamamoto, Ms. Y. Manki and Mr. K. Karaya. Mr. Karaya is studying at present in Chicago, USA under the Japan – USA Cooperative Medical Science Programme.

I would like to introduce our recent studies:

1. The mechanism of the lack of catalase activity in isoniazid resistant strain of mycobacterium tuberculosis has been found to be due to the lack of apoprotein in the catalase. Further work is being done to examine the relationship between the lack of catalase activity and the isoniazid resistancy.

2. The mechanism of liquefaction of tuberculous caseous foci has been studied. It was found that proteoglycan in a caseous mass played a part in the mechanism, working to keep the mass

solid because of its gel-character, causing the mass to liquefy simultaneously with proteoglycan decomposition. Proteoglycan lytic enzyme activity was detected mostly in granulomatous tissue.

3. The antimycobacterial activity of newly produced PZA derivatives is being examined to search for a new drug which is effective against M. tuberculosis and atypical mycobacteria.

4. The immunological aspects of tuberculosis has been studied, examining the relationship between the clinical state of pulmonary tuberculosis patients and the subpopulation of peripheral blood lymphocytes. New interesting facts are being obtained.



Dr. Sanada



Ms. Yamamoto



Ms. Manki



Clear target setting according to the country

Dr. A. Kochi, Chief Medical Officer, Tuberculosis Unit, WHO Geneva explains new WHO strategy:

(He is also an exparticipant of the TB Control Course in 1975)

We have divided the countries in the world into four groups according to the epidmiological status on TB and health resource availability , and set up

TB EPIDEMIOLOGICAL PATTERN

Countries/areas	Current level of ARI* (%)	Annual reduction trend of ARI (%)	Health resource availability
I. Industrialized countries	0.1 – 0.01	> 10	Excellent
II. Middle-income countries in Latin America, West Asia and North Africa	0.5 – 1.5	5 – 10	Good
III. Middle-income countries in East and South-East Asia	1.0 – 2.5	< 5	Good
IV. Sub-Saharan Africa and India Subcontinent	1.0 – 2.5	0 – 3	Poor

* ARI (Annual Risk of Tuberculous Infection)

new TB control strategy and target for each group. For example, three groups other than the industrialized countries need to set up the priority in raising the cure rate up to 85%. In India Subcontinent and African countries, the prevalence can be halved in 15 years if 85% of the patients are cured, even when only 50 – 60% of the patients are detected. (to be continued to the next issue)



I am very glad to receive the "News Letter" due to the following reasons;

a) it gives an exparticipant a sense of belonging to RIT by recognizing our views and appreciating our commen-

dations;

b) it's a means also of knowing new developments in the fight for TB;

c) and to keep us reminded of our past memories too.

Dr. Melecia B. Estepa-Uypanco, PHILIPPINES ('71C)

While I was in the Advanced Course in 1975, I had the insight in depth. At that time there was no national policy on tuberculosis programme in Nepal.

In East Nepal, Dr. Shimao as a delegate from Japan indicated the significance and need of National Tuberculosis Institute in Nepal. With the strenuous efforts and the blessings of RIT, JATA, the dream of 1978 came true in 1988. National Tuberculosis Centre in Bhaktapur and Western Regional Tuberculosis Centre in Pokhara were established. But yet I would not be happy till the real functioning of NTC and WRTC, as a whole, takes place.

Dr. Narbada Lal Maskay, NEPAL ('75A)

I am now working for TB control programme in my province as a doctor of the First Chest Unit, the Chest Disease Centre. I am also one of the members of the research on the 6 month regimen (2S(or E)HRZ - 4HR) instead of our conventional 9 months regimen (2S(or E)HR - 7HR).



Dr. Hikmat Abid Aboud, IRAQ ('80C)

New Technology in Mycobacteriology (No.2) was of my particular interest. I have only one regret; News Letter has only 8 pages. But I hope and certainly would like to see it scaled up to a periodical like a monthly magazine, to which all exparticipants and anybody also interested can subscribe.

Josaia N. Vluinceva, FIJI ('85L)



It was my first time out of my country when I left for Japan in 1989. The journey was too long and I was very lonely and unhappy. When I arrived at Tokyo, my feeling changed and I started admiring things. When I reached the TIC and mixed with different people of the world, I felt better and relaxed and it was at KIYOSE where I completely felt at home. I don't forget every one I knew at KIYOSE and every part of KIYOSE.

I am still working in the national TB control programme and my interest to work in TB control programme is still great.

Dr. Meaza Demissie, ETHIOPIA ('89A)

A new Tuberculosis Control Programme in Egypt starts 1st July, 1990, by coordination with Holland. A new pulmonary tuberculosis patient will be admitted to the Chest Hospital for two months to receive four drugs (SHRZ).



After discharge we will continue at the chest clinic for six months on HE only. If the patient is not admitted to the Hospital for any reason, he will be given at the chest clinic streptomycin (for three months) together with A and E for one year only.

Dr. Mohamed Abdel-Kader El-Gengaihy, EGYPT ('85C)

In May, 1990, I attended the World Conference on Lung Health in Boston, and to my big surprise and happiness, I met my professors, Drs. Aoki, Mori and Shimao. And I also remembered other good professors. I deeply feel sorry for the death of Dr. Kihara, I'm now working in TB Control Programme and Lung Disease; I'm trying to transmit the knowledge I learned during my training in Japan in 1985.

Dr. Mariam Latorre Pinto, PERU ('85C)

Dr. Umemura visited my country!

Really it was a very good experience for me and my Health Centre when Umemura Sensei visited my city, Kima-Peru. I showed him our TB programme in the South Area of Lima. I am working there as a Regional Coordinator trying to improve my Programme applying the knowledge from RIT. It is so difficult but the participants have learned the way to do it. We thank Dr. Umemura for his coming.



Dr. Rodolfo Rios Perez, PERU ('88C)

We have received letters from exparticipants in each course as follows. We regret all letters are unable to be shared here because of the limit in space.

- C (TB Control Course) : 91
- A (Advanced Course) : 26
- L (Laboratory Course) : 34
- I (Individual Course) : 12
- S (Chest Surgery Course) : 4

1990 Advanced Course

The largest international conference on lung health held in Boston, May, 1990

Low prevalence and High prevalence Countries

10,155 experts on lung diseases from 85 nations gathered in Boston, USA., for the "World Conference on Lung Health" which was held from May 20th to 24th, 1990. This conference was "the largest international conference ever to be completely devoted to lung health", and it is also the largest conference ever to deal with tuberculosis. Tuberculosis control activities now fall into two categories. The first presentation is among low prevalence countries, exemplified by the "Elimination plan" presented by USA and the presentation "The last Fight against Tuberculosis until its elimination" presented by the IUATLD-Europe region and WHO. The second concentration is, of course, among high-prevalence countries which account for the majority of world. These two aspects were reviewed and discussed in more than 10 symposia and one Plenary Session, Tuberculosis and AIDS. The worldwide burden of tuberculosis and the urgent need to fight against tuberculosis were confirmed and emphasized.

Dr. Nakajima, Director-General of the WHO, stressed these points in his address given at the closing ceremony. He indicated that tuberculosis is "the most



neglected of all health problems" for more than 10 years. Utilizing the latest WHO data, he demonstrated that the present prevalence of infection reached the 1.7 thousand million people, which is one out of every three persons in the world, and the prevalence number of tuberculosis, incidence and mortality cases are estimated at 20 million, eight million and three million people respectively. He emphasized that from the global point of

Renewed Commitment in the Fight

From "Resolution on Tuberculosis and Aids" presented at the World Conference on Lung Health, 1990.

While many nations have launched campaigns to control TB and AIDS, the threat continues to outpace steps to contain it. To signal renewed commitment in the fight against these diseases, the World Conference on Lung Health calls upon the World Health Organization and on governments and non-governmental organizations worldwide to endorse the resolutions of this conference, namely :

That governments respond to the needs of people afflicted with AIDS or tuberculosis by insuring that patients with both diseases receive high-quality care;

That governments protect the uninfected by strengthening programs aimed at controlling the spread of both diseases;

That governments and NGOs throughout the developed world keep pace with the growing threat from these diseases by supporting health programs in those

developing countries where AIDS and TB have reached pandemic proportions;

That governments and NGOs provide the practitioners needed to fight these diseases by training more health care professionals to diagnose and treat TB and AIDS;

That governments and NGOs lift the ignorance under which these diseases are spreading through stronger programs of public information on AIDS and TB;

That governments and NGOs support more basic research on AIDS and TB, and apply the resulting knowledge to the search for improved diagnostic tools and treatments; and

That governments and NGOs contribute to the conquest of both diseases by research to create an AIDS vaccine and develop a more effective vaccine for TB.

view, "95% of tuberculosis patients and 99% of tuberculosis deaths are in the developing world". He also emphasized the socio-economic impact of tuberculosis saying that "more than 80% of them are among the economically most productive age, between 15 to 60 years old, and that among them tuberculosis accounts for more than one quarter of avoidable deaths". He pointed



out the present critical situation of AIDS epidemic in relation to tuberculosis problems.

Dr. Nakajima then criticized the recent attitude among academics as having been neglecting the problem of tuberculosis due to "political invisibility" in the industrialized world and "intangibility of short term tuberculosis programmes achievements". But, because of changing situations such as "the rapidly deteriorating tuberculosis situation in areas stricken by the AIDS epidemic, the US elimination programme which influences the development of similar programmes in other industrialized countries and the presence of "tangible results even in the nations poor in resources" cited by Dr. Styblo, Dr. Nakajima stressed the need to strengthen the tuberculosis control programme.

Finally, Dr. Nakajima cited Dr. C. Murry's article concerning the cost analysis of tuberculosis control programmes (Bulletin of IUATLD, Vol.1, 1990). This article confirmed the wisdom of cost-effective short course chemotherapy even in the developing world, and encouraged our fight against tuberculosis by improving programme implementation.

TB and AIDS - One of the five Plenary Session topics was tuberculosis and AIDS. The magnitude of the dual infection

with tuberculosis and HIV was reported from several countries mainly in sub-Sahara Africa. In some of these countries, tuberculosis incidence and mortality seem to be increasing in number and rate, and these deteriorating situations have become an extraordinary threat not only to tuberculosis control programme but also to workers in the field. The resolution adopted by this session appealed for an urgent worldwide fight against this problem involving the WHO, national governments, and NGOs.

Exparticipants meet - The success of the conference extended beyond the above issues, facilitating the exchange of experiences among exparticipants of tuberculosis control courses. On the night of the 22nd, many of our colleagues and exparticipants, attended the symposium titled "International Tuberculosis Training". It is our utmost pleasure both to realize that ours is the largest international course devoted to tuberculosis and to meet many of our friends and be blessed by our activities together. "We have to have this kind of meeting whenever we can.

That is our responsibility." Course director Dr. Ishikawa commented.

We are honored to announce to all of our friends that our distinguished leader Dr. Shimao, director emeritus of RIT, was awarded the IUATLD medal for his distinguished contribution to tuberculosis control.

Tuberculosis has come back to the battle field. Actually it has never disappeared from the battle field; only forgotten and neglected. Many hurdles still exist in this battle. And we still have a long way to go to eradicate tuberculosis. We must totally commit ourselves to fight by concentrating all our knowledge in research and in practice. The fight has started in many countries as shown by Dr. Styblo's tangible results, and by many international organizations represented in papers like the 10th WHO technical report on tuberculosis control. We are the strongest platoon in this fight.



The meeting place for the next conference to be held in four years has not yet been announced. But till that time comrades, God bless tuberculosis control! Finally, to all who missed this conference, we must point out that you missed the truly marvelous Boston seafood!

(Dr. A. Seita, International Cooperation Department)

1990 Advanced Course

Group Training Course in Tuberculosis Control for Administrative Medical Officers began on the 14th May and finished on the 22nd June, 1990 as scheduled.

WHO, gave lectures on Chemotherapy. In addition, 18 RIT staffs and 4 domestic lecturers participated.



From left: first row - Dr. Kagawa (JAPAN), Dr. John (UGANDA), Dr. Kriangsak (THAILAND), Dr. Francisco (PHILIPPINES), Mr. Ito (RIT), second row - Dr. Hasani (YEMEN), Dr. Daranee (THAILAND), Dr. Iqbal (BANGLADESH), Dr. Vera (BRASIL), Dr. Aoki, Dr. Sarin (CAMBODIA), Dr. Denis (MALAYSIA), third row - Dr. Hudojo (INDONESIA), Ms. Takeda (RIT), Dr. Matsuda (RIT), Dr. Iwai (RIT), Dr. Roberto (PARAGUAY)

There were 12 medical officers from 11 countries including 3 expatriants. A Japanese medical doctor also attended who then went to Nepal as a member of the medical cooperation team organized by the Japanese Government.

Curriculum content was basically almost the same as previous years, but to encourage active participation of participants in focusing the plan and evaluation aspect of NTP, each participant had to write an "Evaluation Report" for another country as a foreign evaluator. Some sessions were allocated for tutorials. Epidemiology and evaluation of NTP occupied almost one third of the total amount of time allotted, followed by another third for tuberculosis control measures.

Dr. H.T. Lin, former course coordinator of the course gave a lecture on administration. Dr. Hong, provided by



Visit to the Habikino Hospital in Osaka Prefecture

Course participant comment:

My study course in Kiyose

In Kiyose I met one of the most well trained staff in the world, in a single situation of Research Institute of Tuberculosis (JATA). I feel it was quite a good privilege for me to have gained useful knowledge from the highly trained teachers. The warm hospitality of the staff in Kiyose and the patroness HIH Princess Chichibu was rather remarkable.

This was an experience for me never to be forgotten for the rest of my life and career as a medical doctor, for the rich knowledge I gained can profitably

be applied in my country and the rest of the world for the betterment of health for the human race.

The information and experience I also gained from the other fellow participants from various countries through workshops, (tutorials and evaluation reports) are of course not to be forgotten. I intend to keep a regular contact with RIT for the achievements of our future goals.

(Dr. Lukuugi-Senyonga John, UGANDA)

(Continued from page 7)

the "learning in the classroom is comparable to the knowledge acquired in the KITCHEN", where after four months of Short Course Stomach Therapy, which had 100% case holding, with very high patient motivation and compliance, Null's hypothesis was applied to the evaluation of:

"3 eggs-per-meal-per-day" regimen of one participant
 "4 chicken-limbs-daily" regimen of another participant
 compared to "Standard Regimen" of all participants.

It was concluded that there were no Statistical Significance between the regimens, so all participants were asked to go and carry out Pilot Studies in their Stations and come back (hopefully) in 2 years time for the Advance Diploma Course with their Survey reports.

So colleagues,

"In Japan	Their country and lastly,
Everybody runs,	Themselves and families
To go to work.	Leading to prosperity
They love their work ↗	Of the country"

That is the final message for all of us.

1990 TB Control Course

The 28th Tuberculosis Control Course was held from 2nd July to 12th October, 1990. 29 doctors participated from 19 countries; Bangladesh, Cambodia, China, El Salvador, Ethiopia, Indonesia, Malaysia, Nepal, Nicaragua, Nigeria, Pakistan, Papua New Guinea, Peru, Philippines, Sudan, Thailand, Turkey, Uganda, Yemen, Japan.

Course participant comment:

Kekkaku Astronauts

"In this moment", as some participants would say, we set our targets as "Planet Kekken" with the general objective of collecting the final and most important souvenir of all, the "Kekkaku Taisaku". We needed a plan, and this was provided by JICA; and strategies which were provided by Statistics using the formula: (JICA + RIT) (ISHI + MATSU)

(SEI + MORI) plotted on a Semilog Scale to give a universal constant of - 10. Since the objective of Tuberculosis Control (and this Course) was to reduce Annual Risk of Infection and Tuberculosis Prevalence, a slope of - 10 achieved in 4 months is a great achievement; except when that constant becomes applicable in class test. Otherwise, from 19 countries in four continents to produce a mini-United Nations with the Symbol of Unity expressed in the anthem titled "Haruo-Aisuru Hitowa".

The fourteen week course was an astounding success. Testimonies to which led participants to promise, to be faithful to the knowledge acquired and to apply it to the best of their ability.

It all started on the 11th of June 1990 at Tokyo International Centre with a 3 week orientation session which included information about different aspects of Japanese life. But, the beautiful lectures and accompanying video films never prepared us for the discipline, hard work and hospitality of the Japanese people. The orientation included an intensive course in Japanese language.

So much was learned in that short period and so much

was equally forgotten in the mycobacterial classes at RIT; but a few words and phrases survived: like opening the day with "Ohayo gozaimasu" and the ubiquitous "Ikura-desu-ka?" of Souvenir Shopping and the participants' gratitude for the Japanese hospitality which is expressed in "Arigato-gozaimasu".

After the orientation session, the programme shifted base to the Research Institute of Tuberculosis at Kiyose on the 30th of June for the technical training in TB Control. The technical training covered half of Japan, from Gotenba through Nigata (and Sado Island) to Tohoku District, so broad was the content of the course, so well organized and so readily understood that newcomers to TB Control became experts on the subject such that everyone talked authoritatively during class seminars on practical application of the training. The class lectures, which attracted lecturers from every part of the world were educative. The supportive field trips were even more educative as they also broadened our knowledge of the Japanese and provided further opportunities to share in the Japanese sense of international brotherhood, (an infection which the participants contracted!).



From left: 1st row - Dr. Li (CHINA), Dr. Sen (TURKEY), Dr. Heiwote (ETHIOPIA), Dr. Barroso (PHILIPPINES), Dr. Aoki, Dr. Matsuda, Dr. Rungnapa (THAILAND), Dr. Latif (MALAYSIA), Dr. Tahir (PHILIPPINES), second row - Dr. Otuka (NIGERIA), Dr. Islam (BANGLADESH), Dr. Haile (ETHIOPIA), Dr. Sinan (TURKEY), Dr. Naresh (NEPAL), Dr. Taj (PAKISTAN), Dr. Rustam (INDONESIA), Dr. Oyesanya (NIGERIA), 3rd row - Dr. Pineda (PERU), Dr. Abass (YEMEN), Dr. Homid (YEMEN), Dr. Bunthy (CAMBODIA), Dr. Tagoola (UGANDA), Dr. Sorasak (THAILAND), Dr. Perea (PERU), Dr. Hernandez (EL SALVADOR), 4th row - Dr. Matsuba (JAPAN), Dr. Yousif (SUDAN), Mr. Kambi (PAPUA NEW GUINEA), Dr. Aviles (NICARAGUA), Dr. Sulaik (PHILIPPINES), Dr. Feling (PAPUA NEW GUINEA)

It would be wrong not to mention the personal commitment of the teachers and non-academic staff who made these achievements possible. All of them exemplified the hard work and patriotic attributes that made Japan great; achieving almost miraculous development. The attributes are centuries old (visit

Sado Gold Mine for evidence). It is a lesson for all of us from our various developing countries. Indeed participants became so impressed that everyone has made a personal promise to apply the wealth of experience acquired when he/she returns home.

This essay will be incomplete without mentioning the social life of participants, the parties and songs, the meeting of the Video Club every 9:00 PM in the common room, and of course, (continues to page 6)

Obituary — Dr. H.T.Lin

We are really sad to inform you that Dr. H.T.Lin, our excellent teacher and ex-course director died of cancer in October, 1990 at the age of 70.



He had been admitted to a hospital in USA where his son, also physician, was working. After his 13 years service in WHO, Dr. Lin had worked for International Training Course in RIT from 1982 until his retirement in 1986.

Dr. Lin greatly contributed to the development of the course curriculum with his experiences as an administrative officer in WHO. During his service in RIT, participants were also benefited as he lived in the dormitory and was able to share his life after the class.

He was always a good teacher and advisor to all participants.

The address of Mrs. C.Y. Lin is as follows:
c/o Ms. WENLI LIN, #1600, ONE PACIFIC PLACE
88 QUEENSWAY, HONG-KONG



Retirement

Dr. M. Kawai retired in May, 1990. She had served for RIT for 7 years as Chief of Bacteriology Division and the course leader for the international bacteriology course.

Dr. I. Toida, Vice-Director and Head of the 2nd Research Department, retired in October, 1990. He had been engaged in research mainly in the field of biochemistry and immunology in tuberculosis during his service since 1952. His lecture on TB immunology had gained high reputation among the participants. Though he has shifted his major post to BCG Laboratory, he remains with us as a consultant to RIT, and is expected to appear in the class room to give lectures.



Individual Training

Mrs. H. Lin, Public Health Nurse from Taiwan took Individual Training on community nursing for 3 months from July, 1990. She also participated partially in TB Control Course.



Dr. T. Shimao Awarded

As mentioned earlier, Dr. Shimao was awarded by IUATLD for his contribution to the world TB fight with three other persons on the occasion of the World Conference on Lung Health in Boston, in May, 1990. He was sick for some time but now fully recovered. He has been appointed as chairman of JATA Board of Directors in December, 1990.



TB posters in Malaysia

Staff News



New Vice-Director

Dr. T. Mori, Head of the Epidemiology Department has succeeded to the position of Vice-Director in October, 1990.

Welcome:

Dr. T. Yoshiyama (International Cooperation Dept.)
Mr. Y. Suga (Administration Dept.)

Farewell:

Dr. M. Kawai (International Cooperation Dept.)
Dr. I. Toida (Vice-Director)
Mr. N. Nukui (Administration Dept.)
Ms. S. Hosojima (Bacteriology Div.)

Your news and voices are always welcome!

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