

A JOURNEY THROUGH MEMORY LANE OF HISTORY OF TUBERCULOSIS IN INDIA

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ABSTRACT

Tuberculosis, an infectious disease has got a special place in the medical bibliography. Its history dates back to 5000 B.C. of neolithic period. Even in modern world with advancement of the knowledge of Tuberculosis with specific drugs to treat and programmes for its prevention, this disease is top listed on public health problems in all the developing countries. Its sad impact was felt by the human race throughout the world and in all ages. Thus the people of all countries and so also India fought back against this disease.

INTRODUCTION :

'Tuberculosis' the term coined by Schonlein of Germany (1807-1850), an infectious disease has got a special place in the medical bibliography. Its history dates back to 5000 B.C. of neolithic period. Ancient genius philosophers and physicians like Hippocrates (?460-?377 B.C.) dark and middle age physicians like Claudius Galen (?130 - ?200 AD), Persian physicians Rhazes (850-932 A.D.) Avicenna (980-1037 A.D.) Morbid anatomists like Andreas

Vesalius (1514-1564 A.D.) and many more unravelled the mystery of the disease to the extent of their imagination. But the Renaissance and after with more inventions like microscope by Leeuwenhoek (1632-1723 A.D.) Stethoscope by Rene Laennec (1781-1826 A.D.) and his art of auscultation, Louis Pasteur's (1822-1895 A.D.) germ theory of contagion, Jean Antonie Villenin's (1827-1892 A.D.) contact theory and the discovery of T.B. bacilli on March 24, 1882 by Robert Koch, a German scientist paved final crack

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down of its exact causative factor--the bacilli. In spite of the advancement of knowledge of Tuberculosis, with specific drugs to treat it and programmes for its prevention, this disease is top listed on public health problems in all the developing countries. Its said impact was felt by the human race through out the world and in all ages. Thus the people of all countries and so also India fought back against this dreaded disease i.e. "Tuberculosis".

FIGHT AGAINST TUBERCULOSIS IN INDIA :

Our country India is known for visionaries and our Vedas are the profound treatises on the mundane and mystic sciences. Thus in India, Tuberculosis was described as early as 3000 B.C. In-fact the Rigveda which dates back to 2000 B.C. consecrates a Hymn to cure 'Yakshma' or Tuberculosis. Sushruta a medical genius of ancient period who was also pioneer of many surgical operations described 'Yakshma' as a difficult disease to cure.

Tuberculosis as a serious public health problem was noticed in the early years of 20th century. The All-India sanitary Conference, held in Madras in 1912 had passed a resolution stating that, "Statistics appears to show that T.B. has rapidly increased in India especially in Urban areas".

TO KNOW THE PREVALENCE OF TUBERCULOSIS :

Dr. A. Lankaster a Missionary was directed by the Government of India to enquire into the problem of T.B. in the country. The enquiry lasted between 1914 and 1916 and the prevalence was found to be alarmingly high in various parts of the country.

Epidemiologic data, from different parts of the country, based on sample surveys of morbidity mortality, tuberculin test, are too inadequate to reflect the magnitude of community tuberculosis.

Finally, the Indian Council of Medical Research in 1955-56 has undertaken a sample survey of different parts of the country which included big cities, small towns and rural areas. The summary of the data is well known to every tuberculosis worker. It paved the path to evolve national tuberculosis control programme.

EARLY ATTEMPTS TO FIGHT T.B. :

During the early 20th century, there were no specific anti-T.B. drugs and in the west 'Open-Air Treatment' was gaining popularity. But it used to be effective only in the early cases. Advanced cases had grim prognosis despite prolonged hospitalisation. The knowledge and

experience of Western countries paved way to start Sanatoria for T.B. patients.

SANATORIUM TREATMENT :

In view of above reasons, in order to help the helpless victims of T.B., some private philanthropic organisations and individuals started 'Open-Air-Institutions' to isolate and to treat T.B. patients.

A Christian Mission was the first such Philanthropic Institution which had started a sanatorium in Tilaunia near Ajmer. But it was mainly intended for girls from schools and orphanages connected with this mission in North India. In 1908 sanatoria in Almora in the Himalayas and Pendra Road in the Central Province (now in Madhya Pradesh) were started simultaneously mainly for women and girls. One of the most popular sanatoria was Union Mission Tuberculosis Sanatorium Arogyavaram.

AROGYAVARAM, MADANA PALLI :

Popularly known as Madanapalli T.B. Sanatorium was started in 1908 and used to be ultimate place for T.B. patients. The history of the Arogyavaram sanatorium is that, Dr. Louisa Hart, missionary worker in Madanapalli town used to treat the T.B. patients in temporary buildings of her general hospital. Later in 1912

permanent buildings were constructed at Arogyavaram village which was very close to Madanapalli town. Dr. C. Fridmodt-Moller as Medical Superintendent of the Union Mission Tuberculosis (U.M.T.) sanatorium had transferred all the patients from Madanapalli town to Arogyavaram and thus it functioned till recently and now the same has been converted into a general hospital.

In 1902, under the management of "Consumptive Home society of Bombay", which was constituted by Bombay Philanthropists, mainly the Parsis started their first sanatorium at Dharampore in Simla Hills. The Government also started construction of sanatoria.

THE FIRST SANATORIUM UNDER GOVERNMENT SUPERVISION :

In 1912 with the money collected in Memory of King Edward VII, the first sanatorium was started under Government supervision at Bhowalli, Uttar Pradesh and was named as "King Edward Sanatorium".

Apart from the starting of sanatoria for T.B. patients by the Government, some private individuals also established sanatoria. Prominent among them were : A sanatorium by a private individual was started in Poona and opened by Dr. R. R. B. Billimoria and later it was shifted to Panchagani a hill resort of Bombay state (now in Maharashtra-state).

At the same time "Turner" sanatorium of Bombay was started with Dr. Turner as its physician.

Seth Bhagwandas Narothm Das a private individual also built a sanatorium at Deolali of Bombay state (now in Maharashtra state).

Thus many sanatoria were established to isolate and treat the unfortunate victims of Tuberculosis.

MOVEMENT OF TUBERCULOSIS DISPENSARIES :

Another important milestone in the history of T.B. in India was starting of the Tuberculosis dispensaries.

The first one such dispensary was opened in Bombay in connection with Bombay - Anti - Tuberculosis League.

FORMATION OF ANTI-TUBERCULOSIS LEAGUES :

In order to educate the public regarding causes and prevention of tuberculosis, many antituberculosis societies were formed in Bombay, Lucknow and Ajmer. The oldest one was, the Bengal Tuberculosis Association which was formed in January 1929.

It used to be a very pitied state of diagnosis and treatment of tuberculosis as there were no sensitive diagnostic aids like x-ray machines or specific anti-tuberculosis drugs.

The diagnosis was mainly based on physical examination even as late as 1920 and patients were kept in isolated huts on outskirts of the general hospitals and doctors and students used to visit them rarely.

The knowledge and experience of western countries in dealing with T.B. was much advanced at the time but it was not available for Indian patients. Methods like using Tuberculin, Sodium Morrhuate, Sanocrysin and other gold salts were used during the years 1910-1925.

It was Dr. Johannes-Gravesen of Denmark who was associated with Union Mission Tuberculosis sanatorium for few years popularised artificial Pneumothorax in the treatment of Pulmonary Tuberculosis, in 1921. During 1922 and 1932 methods like Thoracoscopy and Thoracoplasty were used and 1948 was the dawn of new antibacterial drugs in India and they were used in addition to surgical methods.

During middle of the 20th century there were epidemics of Cholera, Plague and Small-Pox and both Central and Provincial Governments were deeply involved in combating them. The problem of tuberculosis was alarming but resources to establish the sanatoria were meagre and there was no clear way as what should be done. By 1935 only 6000 beds were available in entire United

India. There used to be about 500,000 annual deaths and 2½ million patients needed attention.

BIRTH OF VOLUNTARY ORGANISATIONS :

There was public uprising against the increased menace of Tuberculosis. The organisation of King George-V thanks giving (Anti-Tuberculosis) fund in 1929 collected 9½ lakhs of rupees and with the help of the Indian Red Cross Society undertaken preventive and Educative activities. It also undertook to establish number of clinics in various states and training health visitors.

TUBERCULOSIS ASSOCIATION OF INDIA :

It was established on February 23, 1939. Lady Linlithgow was the Noble Lady whose initiative and enthusiasm helped to establish the T.B. Association of India.

Under the patronage of King Emperor, Anti-Tuberculosis Fund was launched and raised 85 lakhs of rupees. A major part of this was returned to the provinces and states from where the funds were collected and the balance along with the King George Thanks giving fund, formed the nucleus of resources of the Tuberculosis Association of India. Activities of the association could be divided under 3 stages.

The 1st stage 1939-1942 had an advantage of propaganda done by the King George Thanks giving fund and later King Emperor's Fund. It had a golden opportunity of having Dr. Frimodt-Moller, the Medical Superintendent of U.M.T. Sanatorium Arogyavaram Madanapalli as its full time medical commissioner.

He visited almost all important places of India and was instrumental in establishing clinics, hospitals and sanatoria with local assistance. He was the advocator of organised home treatment of the tuberculosis and the formation of care and after care committees.

The World War II halted the activities of the T.B. Association, 6 months after its inauguration due to non availability of doctors, nurses, and health visitors, for tuberculosis work and added to it Dr. C. Frimodt Moller retired and the association had no full time Medical Commissioner. So all the activities were carried on a maintenance basis only with the advice of Dr. P. G. Benjamin as its Honorary Technical Advisor.

In 1945 he prepared a memorandum on tuberculosis problem and submitted to Health Survey and Development Committee of the Government of India. The activities of the T.B. Association continued.

1947 was epoch year in the history of India as India became independent. Smt. Raj Kumari Amrit Kaur became Union Health Minister who took special interest in tuberculosis work and became president of the Association. Dr. P. V. Benjamin became the advisor to the Government and thus all the activities of Association doubled.

DR. P. V. BENJAMIN was the doyen of Antituberculosis movement in the country and he was tuberculosis advisor to Government of India. He acted as Honorary technical advisor to Tuberculosis Association of India, after retirement of Dr. C. Firmodt Moller in 1941. He became technical advisor of Govt of India in 1948 and brought close association between Government and the voluntary bodies such as the Tuberculosis Association of India. Thus all the problems connected with tuberculosis were taken into consideration. He was instrumental in establishing National Tuberculosis Institute, Bangalore

Finally the Association developed close ties with International bodies like W.H.O. and UNICEF.

B.C.G. VACCINATION :

It was introduced as a preventive measure against Tuberculosis. Though Ukil gave B.C.G. vaccination to some children in 1928, but on large scale it was systematically introduced

in Madanapalli in 1948 and extended throughout India, with the assistance of International Tuberculosis Campaign.

B.C.G. vaccine Laboratory was established at King Institute of Guindy, Madras in 1948. Mass B.C.G. vaccination was launched in 1951.

In all Five Year Plans of the Government Tuberculosis problem was given prominence.

Tuberculosis Seal sale Campaign was started from 1950. In 1953 Publication of Indian Journal of Tuberculosis was started.

STATE ASSOCIATIONS :

Before independence there used to be thirty local associations affiliated to the centre. These associations are reorganised on the basis of the state setup after November, 1956. All state associations have complete autonomy. The factor which binds them to the centre is a sense of Voluntary Association.

ACTIVITIES OF TUBERCULOSIS ASSOCIATION AFTER INDEPENDENCE :

Since 1947 the problem of tuberculosis was given much importance. The International Organisations like WHO, UNICEF took up Tuberculosis as world problem and rendered great assistance to fight it in India.

B.C.G. vaccination programme, establishment of Central B.C.G. Laboratory and 3 training and demonstrative centres were their main contributions. B.C.G. campaign was stepped up as preventive measure and in First Five Year Plan (1951-56) prevention of T.B. and B.C.G. vaccination was top listed and a Central Laboratory for manufacturing B.C.G. vaccine was established at Guindy Madras. The Govt. of India also introduced National Programme Schemes like :

- Establishment of clinics and domiciliary services.
- Establishment of training and demonstration centres.
- Provision of beds for isolation and treatment.
- Facilities for after care and research.

Besides establishing 139 in-patient institutions, with the help of W.H.O., Thoracic Surgery centres were established at various places of this country. Two great worth mentioning tuberculosis institutions of India are as under.

1. National Tuberculosis Institute, Bangalore :

It was inaugurated on 16th September, 1960 by Sri Pandit Jawaharlal Nehru, the then Prime

Minister of India, having Dr. P. V. Benjamin as Tuberculosis Advisor. It has 3 important objectives :

- To formulate and evolve a practicable economically feasible and widely acceptable tuberculosis programme for the entire country.
- To train medical and para medical workers to efficiently implement the programme in rural and urban areas.
- To undertake necessary research to give substance and support to above two aims.

Thus National Tuberculosis Programme (NTP) was successfully implemented in case finding, treatment and prevention.

2. Tuberculosis Research Centre :

It was started in 1917 by the efforts of Dr. P. S. Chandra Sekhara Aiyar as a tuberculosis dispensary called "King Edward Memorial Institute". It was also called 'Tuberculosis Chemotherapy Centre' and presently it is known as 'Tuberculosis Research Centre'. It is well known for drug trials and pioneering work on domiciliary treatment. Domiciliary treatment as the sheet-anchor of T.B. control programme was a great blessing to all the developing countries with meagre resources.

R E F E R E N C E S

1. INDIA'S FIGHT AGAINST TUBERCULOSIS - T. B. Association New Delhi.
2. NATIONAL TUBERCULOSIS INSTITUTE, GOVT. OF INDIA, Bangalore
3. ANDHRA PRADESH TUBERCULOSIS ASSOCIATION, Hyderabad.

सारांश

भारत में यक्ष्मा इतिहास विषयक एक यात्रा स्मृति मार्ग द्वारा

—जी. थिप्पन्ना,
नारायणम्मा

संक्रामक रोग यक्ष्म का चिकित्सा ग्रंथ सूची में एक विशेष स्थान है। इसका इतिहास ईसा पूर्व 5000 वर्ष उत्तर-पाषाण युग से चला आ रहा है। आधुनिक युग में यक्ष्मा चिकित्सा संबंधी विशिष्ट औषधियों एवं उसके रोकथाम के लिये कार्यक्रमों की पर्याप्त जानकारी होने पर भी विकासशील देशों के सार्वजनिक स्वास्थ्य समस्याओं में यह रोग सर्वोपरि है। इसके दुखकारक आघात को मानवजाति समस्त संसार में सभी युगों में सहती रही है। अतः सभी देशों व भारत के लोग इस रोग के प्रतिकार में जुट गये।