

AMULYA CHANDRA UKIL

(1888–1970)

Elected Fellow 1935

EARLY LIFE AND EDUCATIONAL CAREER

AMULYA CHANDRA UKIL was born on November 14, 1888 at Bongaon in the District of Jessore (now in Bangladesh). His father, late Dr Nibaran Chandra Ukil was an allopathic practitioner in Bongaon. Amulya had his early school education in his native place, Bongaon, a Sub-Divisional town. He passed the Entrance Examination of the Calcutta University in the First Division from the Krishnanagar Collegiate School in 1906, and FA Examination in 1908 from the same College. Young Ukil then entered into the Calcutta Medical College and graduated in Medicine (MB) in 1914. In 1921, while serving as Professor of Bacteriology at the National Medical Institute, Calcutta he went to Europe to specialise in Bacteriology. There he came under the influence of Professor Calmette, the renowned tuberculosis specialist, to take up tuberculosis as a subject for specialization. Ukil later turned out to be the pioneer tuberculosis worker in India. He revisited Europe (Paris and Germany) as a Ghosh Travelling Fellow of the Calcutta University for two years and obtained the Degree of MSPE (Paris).

PROFESSIONAL CAREER AND NATIONAL CONTRIBUTION

After graduating in Medicine in 1914, he joined the Daulatpur Hindu Academy in the District of Khulna (now in Bangladesh) as Professor of Botany and Resident Medical Officer of the college including the attached Students' Hostel. But within a year i e, by 1916 he resigned from these assignments and started private practice in the Khulna District Town. During this time he involved himself with the then Revolutionary Party of Bengal. To avoid chasing by the police, he got into the Indian Medical Service as a war recruit and joined the training camp at Meerut. But he was arrested and interned for one year and eight months. He started professional practice at Calcutta after getting released in 1918. The same national spirit prompted him to join, in 1921 alongwith Dr Sundari Mohan Das, as a Founder Member of the Jatiya Ayurbijnan Vidyalaya. It was created as a National organization under the National Medical Council of Bengal (later renamed as the National Medical Institute). He served there as Professor of Bacteriology (1921-1931) and as Visiting Physician to the Chittaranjan Hospital attached to the National Medical Institute.





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In 1926, Dr Ukil was instrumental in the establishment of the Tuberculosis Association of Bengal with Dr B C Roy as its President. It was much later that the Tuberculosis Association of India was established in 1939 under the auspices of the King George V Thanks-giving Antituberculosis Fund. In the same year, the name of the Tuberculosis Association of Bengal was changed to Bengal Tuberculosis Association. Now there are 49 affiliated Chest Clinics in the State—27 around Calcutta and its suburbs and 22 in the districts. Over a lakh of patients receive treatment in these clinics of which at least 22.5 per cent are tuberculosis infected.

Beginning from 1927, Dr Ukil received a research grant for tuberculosis from the Indian Research Fund Association and was designated as the Director of Tuberculosis Research at Calcutta and continued to hold that post till 1943.

One of the memorable events in the history of medical profession in India was the establishment of the Indian Medical Association (1926) as an All India body by the cooperative and conjoint efforts of the then luminaries of the profession at Calcutta and other parts of India. Dr Ukil's role from the very beginning had been that of an active organizer and constructive cooperator as a member of the organizing committee along with the late Dr K S Roy.

On Ukil's return from Europe in 1931 he became the Honorary Visiting Physician for tuberculosis at the Out-patients' clinic of the Calcutta Medical College and later as the Physician-in-Charge of the Chest Department of the College Hospital. While performing his research activities under the IRFA (now called Indian Council of Medical Research) he showed outstanding abilities in organizing the chest department by his unceasing enterprise and application and succeeded in raising its standard as an all India centre for clinical teaching in tuberculosis.

In 1935, he started a National Research Laboratory for medical research in collaboration with Drs H Ghosh and J C Ray and a few other eminent medical scientists in Bengal. It was the first National Medical Research Laboratory to counter the hierarchial policy of the then British Government. The basic fund was provided by the income accrued from the simultaneous running of a clinical laboratory for examination of various types of clinical materials sent by the practising physicians in exchange of some fees. This laboratory received the blessing of men like Acharya P C Ray, Rabindranath Tagore, Pandit Madan Mohan Malaviya, Dr Nil Ratan Sircar, Shri A R Dalal, Dr C V Raman, Shri Gagan Bihari Mehta, and even of Mahatma Gandhi who also signed the first appeal for Indians.**

Following Independence, in 1947, he was appointed as the Principal of the Calcutta Medical College. The very next year he visited Europe and USA where he

**On the attainment of freedom, this laboratory was recognized by Pandit Jawaharlal Nehru and Dr B C Roy. The Institute was renamed as the Indian Institute of Biochemistry and Experimental Medicine under the Directorship of Dr J C Ray. Finally the Institute was taken over by the Council of Scientific and Industrial Research and rebuilt at a cost of 8—10 crores of rupees in Jadavpur, Calcutta and was recognized as one of the National Institutes in India. It is now renamed as the Indian Institute of Experimental Biology. This Institute has the credit of making many original contributions to science which have received international and national recognition.



delivered a series of lectures on tuberculosis and also gained experience on the undergraduate medical education. On his return to India he voluntarily relinquished the post of the Principal of the Medical College on account of some difference with the authorities but continued to serve as the senior consulting physician of the Chest Department of the hospital till 1963. In 1949 he took over full time private practice and spent a good part of his time in public activities and in guiding several top-ranking scientific bodies in India as Member of the Executive Council of these societies.

As President of the Indian Medical Association, in 1955, Dr Ukil urged upon the Government to implement the Inquiry Committee's recommendations for centralising the administration for the control of pharmaceutical products and to tighten up the control on imports of items that were being manufactured in India. He also urged the members of the Indian Medical Association to take it as a matter of particular duty to use drugs manufactured in India, which satisfied internationally required standard of quality and efficacy.

Dr Ukil visited USSR in 1951 as a member of the scientific and cultural representation from India to gain personal knowledge about the medical and health service activities in that country. He revisited Europe twice—once in 1955 on the invitation of WHO and again on the invitation of the International Society of History of Science and delivered lectures in several universities in USA.

TEACHING AND RESEARCH ACTIVITIES

Dr Ukil started his life as a teacher of Botany in a Graduate College in rural setting. About six years later, he joined the Calcutta National Medical Institute as Professor of Bacteriology in 1921, and held that post till 1931. While working at the Pasteur Institute, Paris between 1921 and 1923 he discovered a new pathological anaerobic organism which was named after him as *Ukil's bacillus*. Upto the third decade of the present century our knowledge about the character of the tuberculosis organism prevalent in India and its epidemiology under Indian situation was inadequate. As Director of Tuberculosis Research under IRFA in Calcutta, Dr Ukil engaged himself to study all aspects of the infection namely, bacteriology, epidemiology, diagnosis, treatment, control and prevention and made many original observations and added substantially to our present-day knowledge about the disease. He published not less than 50 papers on the subject. However, his scientific thoughts were not confined to the study of tuberculosis alone but also to many other allied subjects such as nutritional status of the population of Bengal, public health policy in India, drug industry in India and social aspects of medicine and undergraduate teaching in medicine etc. In relation to the Bengal famine during the World War II, he discussed the Food Policy of the Government. As a Member of its Sanitary Board, he strongly advocated cultivation of soyabean in India. He delivered Basanta Memorial Lecture of the Calcutta University on



nutritionally balanced diet at a cheaper rate for the Bengali population to overcome mal- and under-nutrition. In the social aspect of medicine, he was the first person to train and appoint Tuberculosis Health Visitors in the tuberculosis clinics for follow up of the patients in their homes. This was later translated into practical use by the Government of West Bengal by organizing a training course on Medical Social Work at the Indian Institute of Social Welfare and Business Management, Calcutta under the Directorship of the present author. The trainees were absorbed in the regular government service to serve in 'hospitals, out-patients' clinics and also in the primary health centres.

As a visiting physician of the Chest Department of the Medical College, Ukil actively involved himself in teaching both the undergraduate and postgraduate medical students (TDD Course). Later, as Principal of the Medical College he tried to remodel the training with emphasis on social and community aspects.

POLITICAL AND SOCIAL ACTIVITIES

Dr Ukil's student life corresponded with the political upheaval in Bengal following the declaration of its partitioning by notification on October 26, 1905. The famous political leader Sir Surendranath Banerjee was arrested and fined. He was to be given an ovation at the Krishnanagar Town Hall. Amulya Chandra was then a student of the second year FA Class at the Krishnanagar College. He led a group of students to the Railway Station and pulled the carriage manually from the station to the town hall to the surprise of the leaders. He also showed evidence of leadership and social bent of mind by organizing a medical students' expedition for the first time to render help to the distressed and sick persons and families following the devastating Damodar River Flood in the Midnapore district of Bengal.

His political activities actually started at Daulatpur (Khulna) while working as a professor in the college and Medical Officer of the Khejurbagan hostel. He was proficient in swimming and riding and tried to train the boarders to learn these exercises to make them hardy and healthy. He noted that some boarders could not contribute their share of food expenditure and hence were given cheaper and poorer quality of diet. Since it was not desirable, he made the students agree to let every body to have the same food which could be provided by pooling the entire collection including his major contribution for sharing the same food with the boarders. Besides this arrangement he also arranged for board and lodging for many poor students. It is said that to save the lives of seriously ill patients he even crossed the river by swimming across the deadly Bhairab river. He also used to donate liberally to help the revolutionary movement out of his earnings in the earlier period of his life (i.e., before settling down after marriage), particularly for those who dedicated their lives for the cause of Independence of the country. Even the Government of India in recognition of his/public service awarded him the 'Kaiser-I-Hind' Gold Medal in 1942.

While he was the Principal of Calcutta Medical College, he used to donate all fees received from examining the patients to the college Fund and utilised the ground



floor of his residence within the college compound for holding night school for the children of the Class IV staff of the college hospitals. All his ideas about the social aspects of science will be found in his article on *Science and Society* published in the Journal of Science Club, in 1954. In fact his motto was to earn money for a moderate living and not to amass wealth by private practice.

ACHIEVEMENTS, AWARDS AND HONOURS

Dr Ukil was a true nationalist and his activities generally geared by his nationalistic fervour. His active association with at least three institutions bear testimony to this fact namely, (i) Jatiya Ayurbijnan Vidyalaya (later named as the Calcutta National Medical Institute), (ii) Tuberculosis Association of Bengal, and (iii) Indian Institute of Biochemistry and Experimental Medicine (now named as National Institute of Experimental Biology). In the development of these three national institutions his personal efforts and contributions cannot be minimised.

His scientific achievements were also highly significant and productive. He not only succeeded in creating a scientific atmosphere for the study of tuberculosis under the Indian situation but also created a band of workers who are greatly devoted to and very proficient in this work. In recognition of this contribution he was initially awarded Ghosh Travelling Fellowship for two years to carry out further studies on the subject in Europe. In 1935, he was awarded Coates 'Gold Medal for Medical Research' by the Calcutta University and Barclay Memorial Medal of the Asiatic Society in 1951. He was also the first recipient of the Tuberculosis Association of India's Gold Medal. In his honour, the Bengal Tuberculosis Association has introduced 'Amulya Chandra Ukil Memorial Gold Medal', awarded yearly. He was elected President of the following scientific organizations in succession : Medical and Veterinary Section of the Indian Science Congress Association in 1941; All India Tuberculosis Workers Conference in 1949, Indian Medical Association in 1955-56, President, Indian National Science Academy (1955-56), Indian Society of Chest Diseases in 1960, Asiatic Society in 1960-61, Medical College Reunion in 1961 and Indian Science News Association in 1961-62. He was also elected to deliver Basanta Memorial Lecture of the Calcutta University and Sir Jagadish Chandra Bose Memorial Lecture.

Of the other honours given by national and international bodies to following may be mentioned : He became Fellow of the Royal Society of Technical Medicine and Hygiene (London), Royal Sanitary Institute (London), the Honorary Member of the French Pathological Society, the Calcutta Branch of the Indian Medical Association, Emeritus Fellow of the Indian Academy of Medical Sciences and the American College of Chest Physicians, Honorary Fellow of the State Medical Faculty of West Bengal, Senator of the Calcutta University for a number of years, a Member of the Council of the International Union against Tuberculosis as a representative from India, the Dean of the Faculty of Medicine for sometime, Consulting Physician of Chest Diseases at the Institute of Post-graduate Medical Education and Research, Calcutta and Chairman of the First Medical



and Publicity sub-Committee of the Bengal Tuberculosis Association in 1939 and Member of the Editorial Committee of the journal of the Association. On the social side, he was the Founder Chairman of the Calcutta Safety First Association and Joint General Secretary of the Bengal Bratachari Society, founded by the Late Gurusady Datta.

PUBLIC ACTIVITIES

Dr Ukil was associated with most of the important public activities in the city. He was a rotarian and became the District Governor of Rotary International in 1942-43 and Sheriff of Calcutta in 1955-56, a senior member of the Masonic Lodge and Founder Director of the Standard Pharmaceutical Works at Calcutta.

MEMBERSHIP OF SCIENTIFIC, RESEARCH AND EDUCATIONAL INSTITUTIONS

Dr Ukil was Member/Fellow of the following organizations : Bengal Tuberculosis Association, Indian Medical Association, Indian Science Congress Association, Tuberculosis Association of India, National Academy of Medical Sciences (India), Council of International Union of against Tuberculosis, Indian Society for Chest Diseases, Asiatic Society, American College of Chest Physician, Corresponding Member of the French Pathological Society, State Medical Faculty of Bengal, Member of the Calcutta University Senate, Council of the Indian Institute of Science, Bangalore, Scientific Panel of the Indian National Planning Commission, and of several other local organizations. Interestingly, though a nationalist, he did not actively associate himself with any political organization in the country.

UKIL AS A PERSON

Dr Ukil possessed a rare quality of head and heart. He was strong in conviction, a true scientist in outlook and steady in action, and a socialist ready to help people in distress and a good organiser. He had a large circle of friends not only among his own profession but also among other professions and calling and was popular amongst all. He was actually a path finder to the management of tuberculosis problem in India and has left a school of notable and efficient workers in his own speciality. His public appeal for T B Seal Sale Campaign always yielded very good response from Bengal for raising funds that enabled the voluntary organization like the Bengal Tuberculosis Association to maintain a high standard of service in the country.

He was always sympathetic to youths who were trying to hold themselves and offered the unstinted assistance and encouragement for their rising and success. Another trait in his character was that inspite of his disciplined mind he had a lot of humour which he depicted during social functions and while in a group of friends.

Dr Ukil, a medical scientist and educationist, a patriot and socialist, a reformer and philanthropist, a leader of the profession and a distinguished son of India passed



away on February 23, 1970 at the age of 82 years after a most eventful and successful career. His health deteriorated after 1963 which necessitated gradual restriction in his activities and remained actually bedridden for the last two years of his life. He left behind his wife, Srimati Shovana Devi, two sons and two daughters, but his second son died prematurely in 1977. India lost one of her illustrious sons and a very active and dynamic personality.

S C SEAL

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