

How I chose medicine as a career

I was born into the family of a businessman whose intense desire was to make me an ICS officer. With this aim he made me study hard to clear two standards in one year so that I could appear for my Senior Cambridge examination by the age of 15 years. Unfortunately, I did not get the required credit at this examination. However, this was no deterrent to him and he arranged for me to leave for England in the year 1939. Unfortunately, this was the time when war broke out in Europe. The machinery he had ordered from Germany did not arrive and he could not set up the tyre manufacturing unit that he was so keen to establish. He gave up his plans for me because of these setbacks and decided that I should take up medicine. I was not opposed to this wish of his and entered Seth G. S. Medical College in the year 1941, when Dr. Jivraj Mehta was the Dean. Dr. Vasant Sheth a cousin who had already taken up medicine was a great help. He introduced me to the anatomy dissection hall and the cold eerie environment of dead bodies. All through my medical career he was my mentor. He went on to become a successful gastrointestinal surgeon.

Struggle for independence

In 1942, the Independence movement was launched by Gandhiji. I was present at the time of his speech at Gowalia Tank Maidan in Bombay and I joined the movement with great enthusiasm. My mother and I were jailed for couple of days. My father having finished a long jail term earlier was known to the British as a staunch Congressman and hence the entire family was under their surveillance. Dr. Jivraj Mehta was arrested at the time. We hoisted a Congress flag atop our College building and the then Dean, Dr. Koppikar called in the police. For this act, though he was an Anatomy Professor, he became a very unpopular figure amongst the students.

Studies in England

After graduation I appeared for my MD examination in Medicine but was unsuccessful. My best friend was leaving for England for higher studies after having cleared his MD medicine examination. I was married to his cousin. I decided to follow him. My wife and I followed him to UK in 1949. I joined the teaching course at the National Hospital for Nervous Diseases, Queen's Square, on arriving in London. I was so impressed by the then great teachers in neurology that I decided to take up neurology as my career after passing the MRCP examination. My wife returned home to India as she was pregnant. At the same time my father's business started floundering, and I did not receive my monthly instalment from him. This made me take up a house job. My first post was at the Department of Neurosurgery, Morrison Hospital, Swansea, South Wales under Mr. Norman Whalley. He soon became my mentor and placed me under Prof. Nattrass at Newcastle-upon-Tyne. Professor Nattrass was the Professor of Medicine, and I came to learn how they decided on the teaching curriculum at the University. Every year innovations were made and introduced in teaching methods and techniques and at times the student's body was also taken into confidence. Professor Smart was his assistant and was interested in Nephrology. In his lectures to the undergraduates he always introduced the students of physiology to applied physiology by demonstrating classical cases of renal disease. In stark contrast, all of us are painfully aware that no material change has occurred in our medical curriculum or our teaching methods after departure of the British. Whilst I was working with him, his Research Assistant was Dr. John Walton (later Lord Walton) working on Muscular Dystrophy. The culmination of his efforts was the publication of his classical paper in Brain on the Classification of Muscular Dystrophy in 1952.

Under their tutelage I obtained my Membership of the Royal College of Physicians, Edinburgh with neurology as my speciality. At the same time I had appeared for the examination of Royal College of Physicians, London. Prof. Natrass was my examiner in the viva, but he let his co-examiner conduct my examination and only after the latter had assigned marks did he tell him that I was his student. I failed, but Prof. Natrass told me not to appear further as he felt I was wasting my time collecting alphabetical suffixes to my name. I applied for Registrarship under Lord Brain and was short listed and asked to appear for interview but Prof. Natrass prevailed upon me to return to India as there was every likelihood of a Department of Neurology starting at my alma mater under Dr. E. P. Bharucha.

In 1952, Dr. E. P. Bharucha returned to India after receiving his training at the National Hospital for Nervous Diseases, Queens Square, London and the London Hospital. Dr. Bharucha was appointed Honorary Assistant Professor of Neurology and was the first to start a Department of Neurology in Bombay at the King Edward Memorial Hospital and Seth G. S. Medical College.

Neurology in Bombay in the 1940s

When I was a medical student, neurological patients were seen by general physicians and epilepsy was managed by psychiatrists. Even today, the laws of our country do not distinguish between epilepsy and mental disorders. At that time we saw strokes and meningitis. Meningitis was labelled acute bacterial, syphilitic or tubercular. Cases of acute lymphocytic meningitis were thought to be viral in origin. Paraplegias were labelled as hereditary spastic paraplegia or lathyrism. The occasional patient with ataxia was demonstrated as a curiosity. Tabes and GPI were not uncommon then. These are rarities today. All disorders of muscle were called dystrophies. Neuropathies were either hereditary, toxic or deficiency disorders. Occasional cases of acute demyelinating neuropathy were labelled as Guillain-Barre syndrome or Landry's ascending paralysis. I had seen the first case of brain tumour when I appeared unsuccessfully for my MD medicine examination in 1948. The famed general surgeon at the K. E. M. Hospital, Dr. G. V. Deshmukh, became renowned, as the first to operate on a woman with a pituitary tumour in Bombay. I had the opportunity to know this patient during my student days. She was the mother of a school friend of mine. I am happy to report that though blind, she lived a useful life for several years after this operation.

of all the physicians interested in neurology, the names of two stalwarts - Dr. Nathubhai Patel and Dr. Minocher Modi come to my mind. Dr. Nathubhai Patel would patiently examine a case of stroke, localize the lesion and work out the artery involved. To us, students, this exercise always impressed and we used to admire the neuroanatomical knowledge of this erudite physician. I remember the first EEG machine in Bombay being imported by Dr. N. S. Vahia - a psychiatrist. Dr. Nathubhai Patel took great interest in the working of this machine. In one of the clinical meetings, a case of dementia with parkinsonian features etc., was being discussed and I suggested the diagnosis of Jakob-Creutzfeldt disease. Dr. Minocher Modi extracted as much information from me at the time and for quite some time as and when he met me, talked about Jakob-Creutzfeldt disease.

Return to Bombay

I went through nightmares after my return to Bombay for quite some time. Although the department of neurology had been set up, Dr. Bharucha, as Assistant Professor, could not have me as his assistant. I started off by conducting research in the department of medicine on pain relief and then joined the EEG section in the department of psychiatry under Dr. N. S. Vahia. During this period I devised local methods to coat sphenoidal electrodes and started working on building an EMG machine. I succeeded in manufacturing an indigenous EMG machine with the help of a colleague who was a qualified electronic engineer. This machine using diode valves was soon outdated due to introduction of transistors and thus never saw the light of the day.

Finally, in 1958, I was appointed an assistant to Dr. E. P. Bharucha¹ In order to accommodate his own registrar in this post, I was transferred to the department of neurosurgery. Dr. R. G. Ginde, who started neurosurgery at K. E. M. Hospital had left and Dr. H. M. Dastur had been invited to take over the department of neurosurgery as a full-time neurosurgeon. Appointment to a surgical department rendered me ineligible for recognition as teacher in neurology by the University of Bombay. Thus I could not teach neurology to the under-graduate or post-graduate students. At this stage Dr. M. P. Bhagat, my senior colleague in the Department of Paediatrics requested me to teach neurology to his post-graduate students, Some of these students later joined me in my research work and two of them have ultimately specialised in paediatric neurology and are serving as consultants in USA.

It was after a very hard struggle, that I got University recognition and I was then given one house officer. I am proud to be able to state that all those who joined me got through their MD (Medicine) examinations at the first attempt are very well placed in life. My DM Neurology students are also doing well as specialists and I wish them well. Despite all my effort, I never got a chance to head a department of Neurology and develop it.

Neurological Society of India

On my return to India, I joined the Neurological Society of India as a member and was soon prevailed upon to take up the post of Secretary. I served in this position from 1956 to 1964. During this period, Dr. R. G. Ginde served as Editor of Neurology India. I could hardly devote time for the same and within couple of years started to lean heavily on me for help in the Editorial work. I did this for a while without any acknowledgment. I was then elected Editor and was relieved of secretarial burden which was taken over by Dr. Gajendra Sinh. I served as Editor from 1964-1977. Dr. H. M. Dastur was of great help in this work for which I am extremely grateful. I became the President of the Neurological Society in 1967, after Dr. N. H. Wadia, though I was senior to him in the Society. This was due to the fact that Dr. Wadia had languished in the Portuguese jail (as he was an Indian) while returning after attending the meeting of the World Federation of Neurology and was therefore honoured by the Society. Dr. Wadia and I initiated the Saturday afternoon clinical meetings of all the neurologists, neurosurgeons, neuroradiologists, neuropathologists and postgraduate students in Bombay. Over the years it has gathered momentum and is still largely attended. Unfortunately, such cooperation and collaboration never worked between departments in their research programmes as plagiarism was rampant.

Epilepsy

In 1967, I delivered my Presidential address to the Neurological Society of India. I focussed on psychomotor epilepsy. I analysed Ramakrishna Parmahansa's biography and suggested that he had psychomotor epilepsy. In the address I pointed to the need to start an Epilepsy Association. In 1962, Professor Trufant was visiting Bombay during the annual meeting of the Neurological Society. I was Secretary of the Neurological Society of India then and he saw the hardships endured by the younger generation. He therefore requested me to show him my Department. The Department of Neurosurgery was under construction and I took him around indicating how Dr. Homi Dastur and I would develop both Neurology and Neurosurgery in one Department. I pointed to the need for money to import various instruments. He went home and started working on means and methods to extend help. Getting over our governmental bureaucracy was a monumental task and ultimately in 1970 a collaborative study on epilepsy for five years was started with the Indian Council of Medical Research in a supervisory capacity. The I. C. M. R. was to harmonize and confederate work at five centres and carry out statistical analysis of our findings. The grant was provided by National Institute of Health, USA through PL 480 funds. The five centres collaborating were the department of neurosurgery, KEM Hospital, Bombay, All India Institute of Medical Sciences, New Delhi, department of neurosurgery, Madras General Hospital, Madras, department of neurology, National Institute of Mental Health and Neurosciences, Bangalore, and Bangur Neurological

Institute, Calcutta. During this period several papers on the psychological and social aspects of epilepsy were published by my staff and me.

Muscle disease

I have had the opportunity to study muscle disorders since 1964 till today. I studied in detail the pentose phosphate shunt in normal muscle and that in Duchenne dystrophy. I was also the first to study the involvement of the central and peripheral nervous system in Duchenne muscular dystrophy with study of creatine kinase in cerebrospinal fluid. The latter was made possible by a grant from British Muscular Dystrophy Association. Thereby I was able to suggest that the Duchenne gene was pleiotropic. It has since been shown that dystrophin is also found in the brain and attempts are now being made to explain mental retardation by affection of dystrophin in the brain.

Neuropathology

While Dr. C. G. S. Iyer and Dr. D. K. Dastur, appointed by Dr. V. R. Khanolkar on a grant obtained from the I. C. M R., were doing neuropathology at the Indian Cancer Research Centre, there was no neuropathologist at any of the teaching hospitals in the city. In 1962, I wrote to Professor Ludo van Bogaert, requesting him to depute someone to train a neuropathologist at Seth G. S. Medical College and K. E. M. Hospital. Prof Bogaert, in turn, wrote to Prof Abner Wolfe in New York and 15 directors of neuropathology in the USA. Professor Feigin of New York University recommended his young colleague Ilona Bubelis. She accepted the invitation and set up the department in 1964-1965. She took Dr. D. H. Deshpande under her wing and was able to state on January 4, 1965 that 'My successor D. H. Deshpande is rapidly acquiring knowledge in Neuropathology.' By the time she left India, she and Deshpande had completed an impressive amount of work and prepared 12 publications on subjects such as lathyrism, reticulosis, infantile Jakob-Creutzfeldt disease, gargoylism and effects of hypothermia on the central nervous system. The department has developed further under Dr. A. P. Desai.

Difficulties in carrying out Research in India

To carry out research or even to introduce new techniques in biochemistry or any other branch of the basic sciences, at that time one had to lean heavily on Governmental or semigovernmental departments outside the teaching institutes. Initially when I started working on muscle disorders to estimate creatine kinase, I had to take the help of the Late Dr. Beatrice Braganca at Indian Cancer Research Institute. We asked for assistance from Bhabha Atomic Research Centre and the Indian Institute of Technology, Powai, Bombay etc. and involved a fair amount of running about the city. The college departments were too busy or were not interested.

Dr. Haridasan and Dr. Sanghvi of the BARC and I were able to develop indigenously a Quantitative Electromyography Machine and later it was computerised by a student from IIT. However, due to various rules and regulations of these institutes, the machines developed were never put on the market for commercial purposes in India. During the period, I also copied the Narabayashi stereo-taxic frame in Bombay and by its use Dr. Dastur and I carried out a fair number of stereo-taxic surgical procedures. We were then able to use Cooper's lesions for dystonia with good results.

The present sorry state of affairs

My friend and colleague, Dr. Sharat Desai warned me that I should be mentally prepared to accept the total ruin of the department that I was zealously trying to build as his life's efforts of collecting and making a museum of culture specimens of all fungi that affect the skin of homo sapiens came to a naught. Today, when I look back at the two

departments, one at K. E. M Hospital built by me and other at J. J' Group of Hospitals built by my contemporary Dr. N. H. Wadia, both are in shambles. The latter lets than mine. No one was appointed as a successor to me. At J. J. Hospital despite Dr. S. M. Katrak's efforts, the department is ill equipped due to shortage of funds. Hence there has been the inevitable brain drain to greener pastures such as private medical institutions or western countries, specially USA. Able young teachers are being lost and both the under-graduate and post-graduate education is suffering. No governmental organization is interested in updating the methods of teaching and revising the obsolete curriculum. Unless urgent corrective steps are taken to revitalise our teaching hospitals, I prophesise crumbling of their speciality departments as skilled, competent and experienced teachers leave in frustration and are either not replaced or are succeeded by third-rate individuals.

Summing up

It has always been my dream that the Western region of India should have an Institute of Neurology. If a genie gives me one wish, I shall then ask for an Institute which will have sound clinical neurology, evolving and progressive neurosurgery, ideal records, up-to-date neurophysiology, neuropathology and neuroradiology, rehabilitation and finally both basic and clinical research. Let me point out here that these facilities do exist In the city, but are at present in institutions spread all over the city. Attempts to create all the disciplines under one roof were made but without success. Time is ripe now. It is for the younger generation to work towards achieving this goal.