

Guest Editorial

PROFESSOR BHALACHANDRA BABAJI DIKSHIT (1902–1977):
PHYSIOLOGIST AND PHARMACOLOGIST,
TEACHER AND ADMINISTRATOR



On the 7th of September 1902, was born at Amravati in a family of distinguished lawyers Bhalachandra Babaji Dikshit, who was destined to play an important role in building up infrastructure in the medical arena in independent India (1). He deviated from the family tradition, and chose to become a doctor. He graduated from Grant Medical College, Bombay, in 1925. His nearly forty-year career had two almost exactly equal phases. During the first twenty years, he distinguished himself as a scientist, and during the next twenty he revealed his remarkable human qualities as a loving teacher and ideal administrator.

B.B. Dikshit, the scientist: 1926–1946

Dr. Dikshit's research career began in 1926 when he joined the Department of Pharmacology at the School of Tropical Medicine and Hygiene in Calcutta so that he could participate in the fascinating work being done there by Prof. R.N. Chopra. Using what must appear today as simple equipment, he worked out the mechanism underlying the cardiovascular effects of antimalarial alkaloids, the efficacy of pseudoephedrine present in the Indian variety of ephedra plants, and the reliability of narcotine as a substitute for morphine. He did all this within 3 years, and also earned a Diploma in Public Health in 1927.

In 1930, at the young age of 28, Dr. Dikshit was appointed Professor of Pharmacology at Medical College, Vishakhapatnam. There he evaluated one of the first anti-leprosy derivatives of chaulmoogra oil, and also studied the

efficacy and safety of percaïn as a spinal anaesthetic. His work at Vishakhapatnam was highly appreciated but he was relieved of his post unceremoniously in 1931 because, as his termination letter clearly stated, an eligible pharmacologist belonging to the Madras Presidency had become available. The British apparently had no compunction in taking steps which would discourage feelings of national integration.

In 1931, Dr. Dikshit left for Edinburgh with plans for obtaining Membership of the Royal College of Physicians. He joined Prof. A.J. Clark in the Department of Pharmacology. Prof. Clark was so impressed by Dr. Dikshit's abilities that he offered him a teaching assistantship in Physiology – then a very unusual achievement for an Indian. Encouraged by this gesture, Dr. Dikshit obtained not only his M.R.C.P. in 1933 but also his Ph.D. a year later. Dr. Dikshit's work in Edinburgh was centred on acetylcholine as a central neurotransmitter: a topic not obsolete even today. He tackled it with simple techniques such as comparing the effects of stimulation of the central end of sectioned vagus nerve with those of injection of acetylcholine into lateral ventricles of the brain, using agents such as atropine and physostigmine, and studying the effects of cerebrospinal fluid (CSF) obtained from animals whose cut vagi had been stimulated at the central end. He also studied the acetylcholine concentration in different parts of the brain, and interestingly found higher concentrations in basal ganglia than in cerebral or cerebellar cortex. His work on acetylcholine is held in very high esteem, and is now a part of classical literature in this area. At Edinburgh he also studied the relationship

of hypothalamus to cardiac irregularities, the effect of caffeine on this relationship, and the effect of sodium barbitone on the cardiac irregularities. This work is relevant to the advice given to patients susceptible to cardiac arrhythmias regarding restriction of their intake of tea, coffee and cola drinks. Dr. Dikshit's work done at Edinburgh was published in the *Journal of Physiology (London)* in the years 1933 and 1934. He returned to India in 1934. Soon after his return, he got married to Hirabai, a graduate and marathi poetess of distinction. She proved to be an able and understanding partner, stood by him through all the vicissitudes of life, and indirectly contributed to his achievements. After a short period of unemployment, he was offered a post at the Haffkine Institute in Bombay through a recommendation made by Dr. C.G. Pandit, who later became the first Indian Director of the Indian Research Fund Association (the precursor of ICMR).

At Haffkine Institute, Dr. Dikshit continued his work on acetylcholine, made a brief digression to immunology of malaria, did extensive studies on drugs used in malaria and plague, and also established a snake farm so that venoms and antivenoms could be studied. Since he was at Haffkine during World War II, he also got involved in work specially relevant to the armed forces. This work requires speed, originality and ingenuity because the problems are often queer, and no textbook formula holds. Dr. Dikshit proved himself equal to the task.

B.B. Dikshit, the teacher and administrator: 1946–1964

In 1946, Dr. Dikshit was appointed

Principal, and Professor of Physiology, at B.J. Medical College, Poona. The college, which had earlier been training Licentiates in medicine, was to be upgraded for training medical Graduates, and the task was entrusted to Dr. Dikshit. This assignment brought to the fore his abilities as a teacher and administrator, and his humane qualities. One responsibility handled well often brings another. In 1951 he was appointed Surgeon-General to the Government of Bombay. His sphere widened to health care and medical education throughout the Bombay Presidency. But all these assignments were mere preparations for the greatest challenge yet to come – a challenge which none else in India could have faced the way he did. In 1956, the government established in New Delhi a centre of excellence in medicine which could serve as a model for the country and also supply research-oriented teachers for the rapidly growing number of medical colleges. The centre was christened the All India Institute of Medical Sciences (AIIMS), and Dr. B.B. Dikshit was invited to be its first Director. His appointment remains one of the best things that have happened to AIIMS since its inception.

At AIIMS, which was created as an autonomous institute outside the purview of the Medical Council of India, Dr. Dikshit had the freedom to implement a curriculum which took into account the then latest advances in medical education and was at the same time relevant to national needs. Dr. Dikshit's inspiring leadership made some of the best Indian medical scientists working in different parts of the world give up attractive offers abroad to come and join

the exciting experiment in innovative institution building going on at AIIMS. Establishment of institutions like AIIMS was a part of nation building, a part of the vision Nehru had of an India that would rediscover and recover its greatness. The faculty, students, technicians, gardeners and sweepers, all worked as one family under the paternal eye of Dr. Dikshit to make AIIMS a name to reckon with in the medical arena.

B.B. Dikshit, the person

As an administrator, Dr. Dikshit was very clear headed. He refused to get entangled in extraneous or irrelevant factors. He would get to the core of the problem and given an unambiguous, fair and just decision. His comments on files were characteristically brief – still remembered fondly as either 'Yes, BBD' or 'No, BBD'. Moreover, he was one hundred percent genuine, absolutely without any pretensions. He would tell a person clearly on his face what he thought of an issue, and write exactly that on the file. This is in clear contrast to a commonly held but erroneous view that administration is some sort of trickery or manipulation. Dr. Dikshit had an intense regard for truth and justice. He was violently allergic to falsehood, but entirely above prejudice. That made him very level headed. Even when he discovered something deplorable, he would size up the culprit, but within five minutes all will be forgotten. He would look at every issue, every file, afresh, on its own merits, absolutely without prejudice. He refused to let an event of yesterday affect his decision today. Even those whose demands he denied, respected and admired his writ because his

decisions were based on principles, not on personal considerations.

Although Dr. Dikshit was exceptional as an administrator, what has made him immortal is the love and respect with which he is remembered by many generations of students – at B.J. Medical College, and at AIIMS. He had enormous theoretical capabilities, admirable practical skills, and a highly developed talent for teaching. He also had a life-long love for sports, which gave him something in common with the youth. He was a university-level hockey player, and in later life took to tennis and badminton. But to attribute his popularity among students to how well he taught or played would do him gross injustice. He had an extremely genuine, intense and selfless paternal attitude to students, characterized by totally unconditional love which did not expect anything in return. The result was that students were as sure of him as children below ten are of their parents. Children below ten may or may not like everything about their parents, but one thing that they are totally sure about is that parents love them, have only their good at heart, and will never ever deliberately do them any harm. Students felt exactly the same about Dr. Dikshit. Dr. C.G. Pandit, who got Dr. Dikshit the job at Haffkine Institute, and had also recommended his name for the appointment at AIIMS, once confided that he was jealous of Dr. Dikshit for only one precious thing: he had not been able to get from students the type of love which Dr. Dikshit had received. Not just Dr. Pandit, hardly any teacher gets it because students are very fair and choosy in bestowing their love on teachers.

It would be reasonable to ask what it was that made for him very natural a behaviour which most of us find very difficult. The answer comes from Prof. N.K. Bhide, his student at B.J. Medical College in 1947 and later with him as a young faculty member at AIIMS: “Dr. Dikshit had some deeply spiritual qualities”. Only spirituality – the ability and tendency to see a common spirit uniting us all – can fill a person with universal and selfless love of the kind Dr. Dikshit had. It was this vision of oneness that made him obey and reward a newly appointed guard who pointed to his cigarette when he was entering the library (a non-smoking area). He respected the guard’s authority, and also used his own authority with responsibility and detachment because in either case he looked at authority as a sacred duty entrusted by God rather than something to be relished as a power to subdue others. It was again the level of his spiritual attainment that made him a deeply contented man. After he became the Director of AIIMS, he wanted nothing from anyone – the government, his friends, or his students. That is what made him fearless, true and impartial. That is what made him refuse many invitations: he did not go abroad even once as Director of AIIMS. He preferred to be physically present as much as possible in his *karmabhoomi* so that he could give his maximum to the job carved out for him by destiny. Dr. Dikshit epitomized the life-affirming brand of spirituality preached by the Gita:

He who is in Yoga, the pure soul, the master of his self, who has conquered the senses, whose self becomes the self of all

existences, even though he does works, he is not involved in them.

(The Gita, 5:7)

The end came exactly as it should for such a deeply spiritual man. He had a reasonably advance warning that the end was near, but remained physically mobile and mentally agile till the last day. His wife was hesitating to make a visit to her parental home in view of his unreliable coronaries but he encouraged her to take it easy and make the visit. She made a two-week visit, and he held on till she returned. The day after she returned, he said the final good bye to us all – sharp, clear and quick,

like all his decisions. A painless, prompt finale, and yet not so sudden an end as to leave behind a trail of regrets and remorse. The hundredth's birth anniversary of Dr. B.B. Dikshit is an appropriate occasion for *IJPP* to salute this colossus among the architects of post-independence Indian renaissance.

ACKNOWLEDGEMENT

I am grateful to Prof. Mohan B. Dikshit for providing invaluable material, and to Prof. N.K. Bhide for giving me an insight into the man that was Prof. B.B. Dikshit.

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REFERENCE

1. Nath I. Bhalachandra Babaji Dikshit (1902–1977). Bibliographical memoirs of Fellows of the Indian National Science Academy 1992; 16: 17–35.