

# HANDS *of* GOD

STORIES OF STRUGGLES AND TRIUMPHS  
OF TWENTY LEGENDARY DOCTORS

ARVIND YADAV



INDIA • SINGAPORE • MALAYSIA



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**Dedicated to**  
**Charles Wesley,**  
**My English Teacher in High School**



Charles Sir was my class teacher when I was in the 9<sup>th</sup> and 10<sup>th</sup> standard. If it weren't for him, I would not be as confident in speaking and writing in English as I am today. Hindi is my mother-tongue, and both my parents were Hindi teachers. Naturally, I was comfortable in the Hindi language, and I was always reluctant to converse in English. Never did I consider or anticipate taking up writing in English. I am indebted to Charles Sir for allaying this fear of the foreign language; he taught me to speak it in public without any reservations. He always inspired me to do well in life. This book wouldn't have been possible without his encouragement and guidance during my childhood. Teachers like him don't just teach the bare minimum to clear the exams in school. They teach you how to be successful in the exams that life never stops throwing at you.



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# Foreword

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On a star-filled night in Warsaw, I had an interesting conversation with an Indian cancer surgeon. We both had visited the Polish capital to attend a conference on the impact of nicotine and held divergence views on tobacco. Eventually, the discussion settled down to one important question: How important is your doctor? Is a doctor next to God, or is the doctor your biggest troublemaker?

And then, almost instantly, I found my answer and realised why for generations doctors have topped the league tables for the most-trusted profession among the general public with almost 94 percent votes across the world.

But I realised there's an important, personal angle in this big debate. And it's very simple. You must trust your doctor, and if you do that, the chances are that you are likely to do better when you're sick, even terminally ill.

I read a study published by *The Guardian*, which said as many as 119 people with either breast, cervical, intestinal or prostate cancer, found that from three months following diagnosis, those patients who did not trust their doctors were not only more distressed but also more physically disabled. "They were less likely, for example, to be able to go for long walks or take care of themselves. Patients who felt anxious about being rejected and abandoned suffered the most from not trusting their doctors. So a diagnosis of cancer may heighten the importance of trust, but, otherwise, does trust your doctor really matter?" said the daily. I thought of many hospitals in India and abroad I had visited for my friends and thought of doctors working there. And eventually realised I do not have an alternative.

I am convinced that trusting the doctor has clear health benefits for everyone. Patients can try new drugs, hop, skip and jump between one doctor to another and share vital medical information, but the end still lies with the doctor. A doctor knows the best; he is the only answer to peoples' illnesses. I was reminded in Warsaw by the doctor that as much as half of the failures

in treatment reported are because of the patients not following the regime suggested by the doctors. So what happens? It instantly increases the risk of hospitalisation and ill health. It was getting late, but our conversations continued. I was seeking or trying hard to find some distinct, definitive answers about this peculiar doctor-physician relationship that continues to pass through tumultuous times in South Asia. Some want the best treatment but feel they are being fleeced, and some believe doctors in the government-sponsored hospitals are the best but do not have access to them. There is a third category that keeps advising everyone to get some good insurance cover.

So what should be this doctor-patient relationship? I have a simple answer. Let your doctor take your problems seriously, let them listen to you with empathy, let them be your best friend and let them involve you in the decision-making and make them laugh throughout that journey. I am sure you will trust them more. You and your doctor must trust each other. And it is most important for patients of cancer, patients of heart. If you have a question, you must ask the doctor about why they're recommending a particular treatment option. You may not understand the meaning of the medicine, you may not understand the anatomy of your body, but the doctor will have an answer for both. Remember, poor health literacy, widely prevalent among the elderly, results in poor adherence to prescription instructions, infrequent use of preventive medical services. It also results in increased hospitalizations and visits to the ICU room.

Arvind Yadav, my former colleague, has met up with some of the top doctors in India and has written a wonderful tome about these extraordinary people and how they handled hundreds of patients year after year. Arvind found how less health literacy was associated with worse quality of life, worse physical function and more emergency department utilization for heart patients. And how these legendary surgeons worked to make the impossible possible. Top doctors interviewed in the book have opened up, and patients are now understanding, remembering encounters in the operation theatres. This is a fascinating read between the white-coated physician and the paper-wrapped patient. Arvind says why it is important for patients - even those who are fully clothed - to ask questions, and doctors to answer.

I have only one issue with doctors, especially surgeons. Can they avoid medical jargon and vague terms that may have different meanings to a layperson? Why not drop the word angina and call it chest pain, why not say

red meat and not hamburgers? And yes, doctors should not make patients sign those deadly warrant.

If you are the best surgeon, say confidently, you will handle the operation well, but mistakes can always happen because only the Gods understand the human body, none else. The patients will double their trust. Patients must also remember if they want the best medical care, they need to take the initiative and get clear cut instructions from the doctor.

Only then the doors of the operation theatre will swing both ways.

Once again, brilliant work Arvind. Getting some of India's best doctors in one shot is not easy.

**Shantanu Guha Ray**

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India Editor, Central European News (CEN), Vienna

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Winner of Raymond Crossword award, 2017



# Preface

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In the present day scenario, human life can't be imagined without a doctor. People are born in the hands of a doctor, and unless a doctor declares a person dead, he is presumed to be alive. So from birth till death, the journey starts from the hands of a doctor and ends at the hands of another doctor. During this journey, we come across many doctors for various reasons. There would hardly be any person who might not have visited a doctor. Doctors play a very significant role in ensuring the good health of people. This role is not confined to physical health alone but mental and emotional health as well.

Doctors are considered lifesavers, and this is the reason their profession is one of the most respected professions ever. This also makes it one of the most challenging professions. Becoming a doctor is not easy. One has to study hard and compete to get a seat in a medical college. Then he or she has to work harder to finish medical college and become a qualified doctor. Even then, the journey does not stop, and a doctor has to work hard throughout his or her life to gain more and more experience. Very few people realize the kind of struggle, the kind of trauma and the kind of pressure a doctor undergoes while delivering his or her duties. I have met some of the most excellent doctors in India to understand their journey, their struggle, their happiness and sorrow associated with the profession as well as what makes them successful doctors.

This book contains the stories of 20 prominent doctors in India who have attained national or international fame in the last several decades. These doctors come from various branches of medical sciences like surgery, ophthalmology, dentistry, and neurosurgery, as well as from multiple medicine systems like Allopathy, Homeopathy and Ayurveda. These doctors are among the most excellent doctors India has produced. These stories not only depict the struggles, the dilemmas and the satisfactions that doctors face in their life but also inspire people from all walks of life to pursue whatever their dreams in any field.

Dr. Khalilullah studied in Urdu medium till 12<sup>th</sup> standard, and since his mother wanted him to become a doctor, he studied so hard that he succeeded.

Dr. Ashok Seth, one of India's best cardiologists, failed in the first two attempts in the medical entrance and succeeded only in the third attempt.

Dr. Vijay Dikshit, defying the advice of family members and seniors, made a bold decision to pursue cardiac surgery at a time when no one believed in the capability of Indian cardiac surgeons.

Dr. Akshay Kumar Biso's story reflects the journey of a child from spending most of his time fishing and assisting his farmer father in the fields to become one of the most famous cardiac surgeons in India and abroad.

Dr. Sanjay Agarwal decided not to follow the crowd and choose the 'not-so-popular' field of cardiac surgery, and that made him one of the most inspiring figures in the field of cardiac surgery.

The aspirations of a middle-class Indian family is reflected in Dr. Rakesh Yadav's life.

Dr. Nirmal Kumar Ganguly's story is that of a man who became a doctor because of family pressure. Still, his wish to be a scientist since early childhood did not get stifled, and he contributed to the field of medical science in the form of some breakthroughs in microbiological research.

Dr. Ambrish Mital suffered from a severe and prolonged illness in childhood, and this made him decide to become a doctor himself.

Dr. Sanjeev Bagai's story is that of a person who came to Delhi with just 6 rupees in his pocket and was never afraid to face challenges and to take bold decisions whether in personal life or the operation theatre.

Dr. Saumitra Rawat gave up his global fame abroad to come back to India to look after his parents and also to revolutionize medical sciences in the country.

Dr. Chandrashekhar Yadav studied under the street light to become a doctor.

Dr. Ranganadham fought against poverty and defied all odds to become one of the most prominent neurosurgeons in the country.

Dr. Mahesh Verma, one of the most prominent dentists in India, has dedicated his life to changing the popular perception of dentistry apart from treating patients.

Vaid Devendra Triguna's contribution to the revival of the glory of Ayurveda is, and his advocacy for the introduction of modern methods in Ayurveda has been beautifully depicted in his story.

Dr. Kalyan Banerjee, one of the most leading homeopathic practitioners in the country, has turned homeopathy into a superior alternative to allopathic practice in the country.

The story of Dr. Noshir Minoo Shroff, one of the most prominent ophthalmologists in the country, highlights the importance of an open mind and willingness to keep pace with modern innovations on the part of a doctor.

Dr. Jeewan Singh Titiyal's story highlights his journey from a very remote and backward village to becoming one of India's most prominent and influential eye surgeons in the country.

Dr. Harsh Kumar's journey from a simple middle-class background to being one of the most prominent ophthalmologists in India, tells us the value of sincerity, hard work and the willingness to serve people.

The story of Dr. Hanumantha Rao, one of the most famous Indian pediatricians is that of perseverance and a strong sense of social responsibility in his quest to treat children with disabilities as well as to fight against the stigmas associated with disability.

Dr. P.V.L.N. Murthy, born amidst abject poverty, had to study in the light of the hearth while growing up, and yet he succeeded in becoming one of the most prominent surgeons in the country.

The exciting and inspiring stories of great and legendary doctors will not stop with this book. This book is first in the series. I am not sure how long will this series of the book will continue, but I have pledged to write stories of at least 1000 extraordinary doctors. And, these stories do not have a single element of fiction. All these stories are real. I meet the doctors, listen to their stories, cross-verify the facts before writing and publishing.

All of these stories have a soul of their own as they are not just the detailed bio-data or fact sheet about these doctors who have many recognitions and honours to their credit. I am sure you will like these stories, and these will take you through the lives of every one of these doctors whose objective in life is to save lives — hoping that these stories will inspire you to do well in life.

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# Dr. Muhammad Khalilullah, the Legend who revolutionised Heart Surgeries in India

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In a world where greed has robbed humans of their humanity and personal wants have become more important than others' needs, there are a few people who rise to the occasion and demonstrate the qualities which restore one's faith in humanity. Dr. Muhammad Khalilullah belongs to the first generation of cardiologists. He had the opportunity to board the train, which would have dropped at the rich station—similar to his colleagues, he could have chosen to make money over serving the society. Dr. Khalilullah was deeply influenced by his teachers in the medical school, which motivated him to become the teacher of medical students. He has achieved feats that many renowned doctors could not achieve. It was due to the outstanding efforts of Dr. Khalilullah that the treatment of heart diseases was made easier in India.

Dr. Khalilullah planted the seed of interventional cardiology in India. It was the result of his hard work and determination that high technology and superior methodology was introduced in India in the field of cardiology and

cardiac surgery. He is responsible for the first balloon angioplasty in India, following which heart diseases have been treated mostly without surgeries. He has been lauded for his significant contribution to developing Govind Ballabh Hospital as the most effective research and medical institution for the treatment of heart diseases. He played an important role in improving the standard of medical sciences in India. His life has not always been on the up, and he has seen many downs in his life, but he always remained optimistic and looked for the silver lining. This outlook paid rich dividends.

The man who altruistically dedicated his life to the betterment of medical sciences was born on 6 June 1936 in Nagpur, Maharashtra. His father, Muhammad Kalimullah, was a government employee who worked in the industrial department. His mother, Fazalunnisa Begum, was a housewife. Before Khalilullah could turn four years old, he lost his father to a cardiac arrest. Muhammad Kalimullah was only 41 years old when he met his maker. Khalilullah had two younger brothers and the responsibility of nurturing the three kids was on his mother, Fazalunnisa. She left with her three children to live at her natal house with her parents and her brother in Kamti, which is 16 kilometres away from Nagpur.

After the death of his father, Khalilullah was entirely under the influence of his mother, Fazalunnisa. His mother used to work extremely hard to take care of her children. She had to manage both households and take care of her children. Her dedication left a deep impression in Khalilullah's mind. He always saw her mother working extremely hard to raise her children. The family had no source of income except the small money Fazalunnisa's father and brother gave her for the children. Despite the shortage of funds, Fazalunnisa made sure that all the needs of her children were met with. She made no compromise on her children's education. His mother's efforts encouraged him to focus on his studies.

Khalilullah was enrolled in an Urdu medium government school in Kamti, where he studied till the eleventh standard. Interestingly, the man who would go on to become a doctor did not study Science in his higher secondary school. In those days, Kamti did not have a school which gave the option for specialisation in the Science stream, which is why he had to settle for the Humanities. All his school life, he neither had Science nor Mathematics. His subjects were English, Urdu, Farsi, and Social Studies.

Khalilullah was a sharp student. Ever since his childhood, he dreamed of making it big. He was aware that it was possible only if he dedicated his childhood to his studies.

During Khalilullah's days, only a small number of children would study in a school, and a smaller number was interested in receiving an education. However, Khalilullah was always dedicated to studies. He never failed in any class and passed high school with distinction in two subjects. As a result of his mother's support, he performed well in his school and received government scholarship in the ninth standard, of Rs 5 every month, which was a significant amount in those days. Passing high school was considered to be an achievement back then. An individual had plenty of job opportunities right after completing their matriculation. When Khalilullah passed high school with the first division, his relatives advised him to find a job.

Khalilullah strove for academic excellence, and he never maintained a distance from sports. Whenever he got a chance, he would head to the playground to play with his friends. His favourite game was badminton. He has also played football and hockey in his school days. However, he was always scared of injuries when he was in the playground. He was afraid that if any injury was caused to him, he would have to miss a day or two at school.

It was the teachings of his mother, which brought Khalilullah to the track of medical sciences. Fazalunnisa was influenced by her father's doctor N.W. Signapurkar. Dr. Signapurkar was close to Fazalunnisa's family. He used to consider Fazalunnisa, her sister. His capability and his will to serve others created a deep impact in Fazalunissa's mind. She dreamed of making her son a doctor and help the people. Another reason for Fazalunnisa's determination was the fact that Khalilullah was an extremely bright student. He had always secured the first position in class, and she realised that her son had the potential to become a successful doctor. Further, Khalilullah belonged to a middle-class family struggling to maintain their class stature. She was aware that the only way to escape their poor condition was for her son to be a successful professional.

Khalilullah wanted to fulfil his mother's dreams, and so he worked harder to become a doctor. However, his uncle and his grandfather suggested he find a job.

In times of contradiction, they visited Dr. W.N. Signapurkar to resolve their conflict. Dr. Signapurkar was aware of Khalilullah's dedication and

intelligence. He had understood the potential of Khalilullah and suggested his family let him continue his studies. Since Dr. Signapurkar was a highly respected man in the family, Khalilullah's family supported him to receive admission to a Science college.

The nearest school from the house for an intermediary in Science was located in Nagpur. Considering his big score in high school, the college administration overlooked the fact that Khalilullah had specialised in Arts in his school. He was admitted to the Science stream in his intermediary. In his interview before the admission, he was asked if he would prefer the English or Marathi medium. Khalilullah chose the English medium, thinking that his road would become more comfortable if he opted for the English medium. His approach was thoughtful, but he faced many difficulties in learning a new language for his studies. His classmates used to make fun of the fact that a student had taken admission from Urdu medium to English medium in Science. However, Khalilullah kept his head straight and never let his eyes off his target. He ignored the mocking birds and went on.

Khalilullah fought against all the odds to fulfil his mother's dreams. Remembering the old days, Khalilullah reveals that ball pens were not easily available, so he used to practice mathematics and equations of physics on the blackboard using slates and chalk. He never compromised with his studies for any reason. His hard work paid off as he secured the highest marks in his college under such challenging circumstances. Instead of replying to the mocking birds in class, he let his actions speak for him.

A boy who had not studied Science till class 11, completed his senior secondary education in Science with the highest marks in a language unknown to him for years. Khalilullah's success reflected the hard work he had put in his studies. Based on his scores in intermediary school, he was admitted into Nagpur Medical College at yearly fees of Rs 300.

In medical college, he left no stone unturned to secure high marks. He concentrated on excelling in Medical Science. He was extremely punctual in his schedule. The college was 20 kilometres away from his school. He used to board the train to commute from Kamti to Nagpur. From Nagpur station, he used to board a bus to reach his college. When the train was late, naturally, he would be late for class. Under such circumstances, he would ride a bicycle to college to make sure he would not miss a class. If the train were late, Khalilullah

had to ride a bicycle for 40 kilometres. Despite such a difficult task, he never shied away from hard work.

When Khalilullah joined Nagpure Medical College, he was introduced to an entirely new world. He learned many new things every day about the medical field. Since his father was a victim of heart disease, Khalilullah was always inclined towards studying cardiology and cardiac surgery. He was interested in understanding the electrocardiogram (ECG) report. He started talking to patients about their heart diseases and understood many things about it.

Khalilullah did not let anything divert him from his path. He maintained the same level of discipline and commitment, which he had shown in his school days. At every step of his life, he worked harder to attain success. He completed his Medicine Baccalaureus Baccalaureus Chirurgiae (Bachelors in Medicine and Surgery, or MBBS) with a high score. Finally, after five years of hard work, he fulfilled his mother's dream and became a doctor.

After completing his MBBS, Dr. Khalilullah joined Nagpur Medical College as a doctor. He started his career over half a century ago, but he still remembers his first patient. Dr. Khalilullah was on duty when a patient in poor condition came to the hospital. His situation was critical as he was panting, sweating, and gasping for breath. The other doctor on duty felt that the patient's time was up. However, Khalilullah refused to give up on the patient. His high blood pressure had put him at the risk of a cardiac arrest or brain damage. In those days, controlling blood pressure was not as easy as it is today. Khalilullah admitted the patient to the hospital and tried to bring his blood pressure down with available methods. His methods were successful as the patient's life was saved. It took him three hours to bring the patient's blood pressure to normal. When his professor came to know about his efforts, he praised Khalilullah.

Soon after completing his MBBS, Khalilullah pursued his M.D. at Nagpur Medical College. In 1965, he completed his M.D. and joined Nagpur Medical College as a registrar. While working as a registrar, Khalilullah decided that he wanted to do something significant in his life. He deliberated about his life and the possible contribution he could make in medical sciences. One day, he saw one of his friends with an admission form of All India Institute of Medical Science (AIIMS). He desired to enrol in a super specialist's course in

DM-Cardiology (Doctorate of Medicine). He followed his heart and applied for the entrance examination. He cracked the entrance and received a seat in the course of DM-Cardiology. It was not an easy decision for him, as Khalilullah had to leave Nagpur if he wanted to join a course at AIIMS. He consulted his mother, who was not happy with his decision because she did not want her son to leave Nagpur. His mother did not permit him to shift to Delhi. Khalilullah was baffled as he could not decide whether he should listen to the experienced professors at AIIMS who were inviting him to study there or his mother, who did not want him to leave her side.

Khalilullah found the solution to his troubles when he met Professor B.J. Subedar of Nagpur Medical College. One day, Professor Subedar saw Khalilullah upset and concerned. He asked Khalilullah about the reason for his anxiety. Dr. Khalilullah explained the situation to him. Professor Subedar understood the condition of Khalilullah and visited his house to explain to his parents the future benefits of the degree of D.M. from AIIMS. His mother was satisfied after talking to Professor Subedar, and she allowed him to join the course and move to Delhi.

In the 1960s, there were only two institutions in India that offered the course of D.M. The course was only two years old. It was introduced to inform students about various heart diseases, their treatment and cure. There were a handful of doctors who specialised in heart-related diseases. On 7 February 1966, Khalilullah joined the D.M. course in AIIMS. By this time, Khalilullah had become extremely passionate about becoming a cardiologist. He used to read over 300 reports of ECG in a week. He wanted to become a heart specialist because he did not want someone to lose their kin over heart disease as he did.

Khalilullah followed his passion and remained focused like a lion seeking his prey. He always wanted to make a substantial contribution to the medical sciences. His dream came true when, during his time in D.M. at AIIMS, he built India's first Artificial Cardiac Pacemaker. Sometimes the pacemaker in the human heart fails to maintain an adequate heart rate, which causes severe problems. The Artificial Cardiac Pacemaker maintains an appropriate heart rate in the body. If the heart rate is slow, it speeds up the pace, and in case the heart rate is faster than normal, it reduces the pace. It allows surgeons to perform surgeries on patients by maintaining a fixed heart rate during cardiac surgery. Khalilullah was lauded all around India for his achievement, and the

pacemaker was sold with the name of Khalilullah—K.M. Pacemaker. He was honoured with awards by the then President of India for this achievement.

After completing his D.M. from AIIMS, Khalilullah joined the institute as a teacher. In 1970, while working at AIIMS, he was offered the post of the head of the cardiology department in the Pune Chest Hospital. Khalilullah was in a fix whether to stay at AIIMS, which was India's best medical facility or to join a government chest hospital as head of the department. Khalilullah had not been practicing in those days, and the job in Pune required him to treat patients as well. The remuneration in Pune was less than the salary at AIIMS. He was utterly baffled. He decided to discuss the matter with his teachers, who suggested him to join the hospital in Pune.

Khalilullah joined the hospital in Pune to become the first and only doctor in Maharashtra who possessed the degree of D.M. It was the result of his sincere efforts and commitment that the chest hospital in Pune opened its doors to open-heart surgery. Pune Chest Hospital led the way for the state of Maharashtra towards the first open heart and close heart surgery. Khalilullah was never involved in these surgeries directly, but he used to be part of the intra-operation support team.

While pursuing his medical studies, he idolised three teachers—Dr. Berir, Dr. Subedar, and Dr. Sujoy Roy—who inspired him to become a teacher like them. He always felt that teaching was a fun exercise. Once Khalilullah started teaching, he realised that he wanted to continue his career as a teacher.

Khalilullah had completed a year in Pune when he realised that his interest lay in preparing and training medical students. He wanted to teach students and contribute to the making of the future of Indian medical sciences. He quit his job in Pune and returned to Delhi, where he joined Govind Ballabh Pant hospital as a lecturer. Over time he became an assistant professor, associate professor, and finally, he was promoted to the position of professor. He was named the head of the cardiology department and director-professor at Govind Ballabh Pant hospital.

Khalilullah dedicated 25 years of his life to Govind Ballabh Pant hospital. He has trained over 250 heart specialists in India. It will be safe to state that he has made an army of heart specialists, which has filled the void in the field of cardiology in India. He has contributed to the development of medical sciences in the country by producing many brilliant doctors. Many of his

students are considered to be some of the best heart specialists in India. Some of them have surpassed Khalilullah in their achievements. His students have made him immensely proud as they have been producing path-breaking techniques and skills in the field of cardiology and cardiac surgery.

As a consequence of Khalilullah's efforts, many new techniques and skills in the field of cardiology and heart surgery were devised in Pant hospital, which was later followed by various hospitals all around the country. Khalilullah established strong links between the doctors all around the world and India to assure the best medical facilities in the country. Khalilullah invited many surgeons from the U.S. and Europe who introduced new methods and techniques of surgery in India. He is responsible for making new technology accessible in Indian hospitals, which increased the rate of success of cardiac surgery. In March 1975, Dr. Khalilullah contributed to the introduction of Electrophysiology in India. Later he popularised the concept of interventional cardiology in India, which made the treatment of many heart diseases possible without surgeries. He is also credited for introducing balloon angioplasty in India. He invited a team of cardiac surgeons from the U.S. to collaborate with Indian doctors, who together performed the first balloon angioplasty in the history of Indian medical sciences. This method of surgery left no scars on the body of the patient, and the patient did not need to spend extra days in the hospital for recovery. Dr. Khalilullah ensured that the most advanced medical facilities and research all around the globe benefitted medical practice in India.

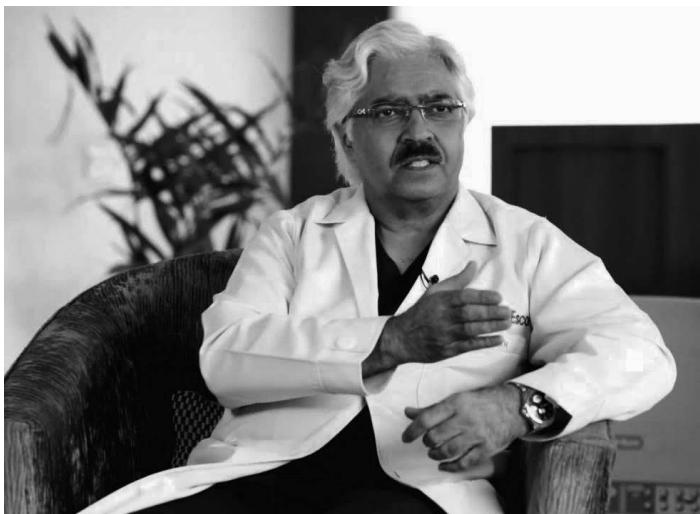
The government of India has thanked Dr. Khalilullah for his contribution to the Indian Medical Sciences. He has been honoured with many awards in his lifetime. In 1984, he was awarded the Padma Shri, followed by Padma Bhushan in 1990. He believes that the most significant award of his life is the honorary degree awarded to him by the college where he was a student—Nagpur Medical College. He is thankful to the government for recognising his efforts in service to the nation. During his career, many foreign universities wanted to hire Dr. Khalilullah. He was offered a job in England, the US, Germany, and Japan with a hefty salary, but he refused to leave his country. He was a true patriot who wanted to serve his country and take his country to the pedestal equal to world-class medical facilities.

Even though Dr. Khalilullah has turned over 80 years, he continues to serve people. These days he is making efforts to reduce the cost of heart surgeries so that even the poor can afford treatment. He is aware of the fact that many

people in India continue to live below the poverty line. Thus, they are not able to use the health facilities which they deserve. He wants to collaborate with governmental and non-governmental organisations to ensure medical services to the poor at a low cost. He dreams that there will be a day when nobody will be denied treatment because of their financial status, and even the poor will receive world-class treatment at a low cost.

He believes that the human body and human life is entirely dependent on the heart. It is the heart which maintains fresh blood supply and enables other important body organs such as the brain, lungs to work. The heart is a magical pump that continues to work for decades without stopping. He believes that human life is also centred around the heart because a person feels emotions through their heart. It is for the satisfaction of his heart that he strives to serve people and make their life better. Currently, Dr. Khalilullah is working in a hospital which he owns, 'The Heart Centre' in Delhi.

# Dr. Ashok Seth, the Luminary who changed Indian Healthcare Scenario



A famous proverb says that if you fail in something, again and again, you are not meant for it. Dr. Ashok Seth rebutted this proverb to prove that hard work makes everything possible. Often, we hear people saying that they do not belong to a particular league. However, Dr. Seth's success story suggests that nobody belongs to any league at first, but hard work and dedication leads them to the desired league. Dr. Seth had to attempt the pre-medical exam thrice to get admission in a medical college. In tough times, he displayed an enormous amount of courage and patience, and he went on to become one of India's most successful doctors.

Dr. Ashok Seth excels in various methods, skills and techniques of cardiac surgery. He has displayed qualities that reflect the qualities of world-renowned Indian scientists and doctors. His story exemplifies that Indian doctors are as good as any doctors in the world. He has taught heart disease treatment and

new surgical methods not only to Indian doctors but to doctors all around the world. Readers of any profession will find his story inspiring due to his 'never-give-up' attitude.

The story of the man who was going to change the fortune of Indian medical science began on 25 October 1956 in Bhagalpur district, Bihar. His father belonged to a Punjabi family in Lahore. While his father was pursuing his MBBS, the tragic partition between India and Pakistan took place, and his father was forced to leave Pakistan. All the doctors who were pursuing their MBBS received admission in one or the other medical university. So, Ashok's father was also enrolled in a medical college in Bhagalpur. He completed his education and received a job offer in one of Bihar's government hospitals. Ashok began his schooling in Tara school in Muzaffarpur. Later he was admitted to Saint Xavier's school. He completed his schooling from Steel Plant Higher Secondary School.

Children love role-playing games, and one of the classic ones around the world is 'Doctor doctor.' Ashok's father was a doctor, and he grew up watching his father treating patients. Whenever Ashok had a chance, he would observe the way his father would deal with his patients. He remembered that his father used to check the blood rate, use his stethoscope to check the heart and then inspect the chest and back with the stethoscope to find congestion, if any. Ashok was aware that at times doctors check the eyes of the patients to see signs of jaundice or other diseases. He had seen his father checking throat and tonsillitis to inspect the symptoms. He was very young when he first saw his father using the thermometer for measuring fever. While playing a doctor, he would prescribe medicine to his patients and inform them about the frequency and dosage.

One day, a hilarious incident took place in his life, which was instrumental in shaping his path of becoming a doctor. Ashok was playing a doctor, but no patient visited his clinic. His long search finally rendered a potential patient in the form of his sister's doll. After a thorough inspection, Ashok concluded that the doll was extremely unwell, and she required surgery. He had seen his father sewing the stitches for his patients. Ashok decided to take the matter in his own hands and pierced the doll with a needle. One after the other, the needles were pierced in the lifeless toy. He performed a long surgery until the doll lost its shape and appearance completely. Ashok was convinced that he saved the day with his surgery, but the owner of the doll disagreed. When his

sister saw the doll, she was furious, and they began to quarrel. Their mother came out to solve the matter. She was surprised to learn about the 'surgery.' His father was informed of his son's medical (mis)adventure. Ashok was scared that the moment his father would hear about it, he would be in grave trouble. However, his father did not utter a word. He was happy to know that his son was fascinated about being a doctor, and he hoped that someday he would continue his legacy.

Ashok's first surgery was disappointing. He was told that it was not similar to what his father does. He was obsessed with correcting his errors, so he started his search for another patient to operate upon; only this time, he wanted a real patient instead of a lifeless toy. One day, Ashok's four-year-old neighbour and a friend came to him to inform him that he was experiencing a stomach ache. Ashok's eyes shined as he finally got a real-life patient to correct his mistake. Six-year-old Ashok began to prepare for the surgery. He was aware that his father kept all the equipment of surgery in the top rack of his almirah. It was only a matter of time before Ashok pulled out the equipment and set up the operation theatre. He found a blade, scissors, cotton, needle and injection. The game was not funny anymore, and it became extremely dangerous. He made the patient lie down on the operation table while he held the scalpel. He was about to incise his friend's stomach when his father came suddenly and snatched the scalpel from him. His father could not understand what they were doing, but when he asked his son and his friend about the incident, he understood. He was thankful to God that he reached on time; otherwise, the young boy could have lost his life.

Ashok had seen his father treating people who would bless him for saving their lives. Ashok realised that his father was doing a noble job. He used to idolise his father. At a very young age, he had decided that he would follow his father's footsteps. His father also wanted Ashok to continue his legacy, but the road was not easy.

Ashok had secured a high percentage in tenth grade and had opted for science with biology for higher studies. After completing twelfth grade, he attempted the pre-medical entrance exam. He failed to clear the examination, so he took admission in the course of Bachelors in Science as a career back up. Next year, he worked harder than the previous attempt to score better. However, he could not pass the cut off mark yet again. Ashok and his father were disappointed with the results. Ashok was making efforts, but his hard

work was not paying off. If destiny does not want permit, one can never reach the destination. Ashok feared that he might have to give up on his dream of being a doctor.

The failure was overtaking Ashok's passion. He informed his father about his decision to quit science and join commerce. He felt that he could not become a doctor ever. He was surrounded by disappointment and depression. In those dark times, his father was the ray of hope for him, who encouraged him to continue his efforts. He always told Ashok to never give up in his life.

Usually, aspirants give up on the entrance exam after two failed attempts, but a temporary dam cannot control the flow of water for a long time. A small setback could not move Ashok. He carried the 'can-do' attitude and prepared for another attempt. One can be robbed of anything but hope. It is the hope that keeps an individual going, a hope of a brighter and better tomorrow. Ashok lost his confidence and his patience, but he never lost hope. In the third attempt, Ashok secured a decent rank, but his name was stuck in the waiting list of Jawaharlal Nehru Medical College, Uttar Pradesh. Again, destiny was at work but only to turn the tables in his favour. Ashok found his name on the admission list of Aligarh Medical College. Had Ashok failed in his third attempt, the country would have lost a brilliant doctor before he could have become a doctor, but it was the unconditional support and love of his father, which fuelled him to move ahead fearlessly. Ashok's story suggests that failure is a test of patience, dedication, commitment and hard work. The one who passes these tests becomes successful.

A long winter in Ashok's life was followed by spring. He received a seat in MBBS. His dreams finally came true. He felt that the dust was settling down, and the destination was right ahead of him, but little did he know that the road to success was not straightforward but full of obstacles. It was the time when Ashok had entered his adulthood. A new and interesting life was awaiting him. He made new friends and indulged in fun activities with them.

As a consequence, he lost focus in life. His career took a back seat while he was moving in a different direction. Unsurprisingly, Ashok failed in all the internal exams. His reputation in the college deteriorated. Teachers in the college felt that Ashok was not a serious student. The reason behind his failure was his lack of focus.

The alarm bell was rung. Ashok realised that his ship was moving towards the storm. However, he acted like a responsible captain of the ship and took control of the steering. He returned to his older ways of rigorous studies. He sincerely prepared for exams. A few days later, one of his friends came to him and informed him that he had topped in Anatomy's external exam. Ashok could not believe his ears. He thought that his friends were playing a prank on him. He ignored his friend and continued with his chores. Later, he went to the classroom where the list of marks of all the students was posted. He checked the list where his name was at the top of the list. Ashok was surprised; he had amazed not only himself but his teachers and peers. He was overjoyed with success.

According to the university tradition, the topper of a subject was required to meet the head of the concerned department. Ashok went to meet the head of the department of Anatomy. He was expecting praise and appreciation from the professor. Ashok went to the professor and informed him that he had topped in anatomy. The professor greeted him and asked him, "How did this happen?" Ashok was amused with his professor's reaction and replied to him, "I came here to ask you, "How did this happen?" Neither the teacher nor the student himself had the answer to the question. The fact was that Ashok was not paying attention to studies at all, but as he re-focused towards his studies, he was able to top the list. He was honoured with a gold medal.

Most of the people were not convinced of Ashok's position and believed that it was a once-in-a-lifetime-miracle. Ashok was under pressure to prove everybody wrong. He realised that he would have to top again to prove people wrong. He concentrated on future examinations and topped in four examinations throughout his MBBS. He received the gold medal four times for his achievement. It was the gold medal in anatomy that changed his life because Ashok believes that once he received a gold medal, his road to success becomes clearly visible again. He accepts that he lost sight for some time, but his life was back on track once he topped in the examinations.

Ashok believes that every individual has different traits and qualities. Every human's brain functions in a different way. It is not necessary that all humans will possess the same characteristics, but they all should possess determination and dedication to turn the tides of time. His story reflects that humans are imperfect and make mistakes, but what counts is their ability to learn from their mistakes and improve on them.

Ashok's father wanted him to pursue higher studies in England. As soon as Ashok completed his MBBS, his father sent him to England for the same. In those days, England was making giant strides towards medical experiments. The doctors and engineers in England were inventing different kinds of techniques to treat various diseases. It was the hub for doctors like Samarqand for scholars in medieval ages. England possessed the best medical facilities and the best doctors in the world. Ashok was excited to visit England and study medical sciences. However, the major drawback in England was the fact that people's mentality in England towards India had not changed at all.

When Ashok moved to England in 1978, he realised that the people in England consider Indians to be the citizens of one of their many colonies. The situation was England was difficult as the racism was rampant. The British were proud of the technology and medical facilities they possessed, and they believed that other countries could not compete with them because they lacked the technology and resources. Ashok was extremely unhappy with their attitude towards Indians. He wanted to prove that Indian minds are as good as any in the world.

Ashok studied Generic medicine in England. Later, he focused on gastroenterology and cardiology. He was influenced by the newly developed technologies which treated the digestive system, including the liver. Technologies and methods such as endoscopy and ERCP were new modern technologies recently devised. Only a few countries possessed these technological devices. Ashok believed that he could learn new techniques and methods from England to become one of the greatest gastroenterologists. However, the prevailing racism did not allow him to be a part of the competition. He was not permitted to enrol for the course. He was heart-broken and lost because his dream was shattered. In the scorching sun, he found the shed of a tree when a professor of cardiology department advised him to become a cardiologist. However, Ashok was not content with the advice because he wanted to be nothing but a gastroenterologist. Ashok recalls the days of the past and reveals that in those days, the treatment of heart diseases was not up to the mark. Cardiologists and cardiac surgeons had no equipment but a stethoscope to work with. They were referred to as the doctors who read ECG reports. Ashok was not interested in becoming a cardiologist for those reasons.

But beggars can't be choosers. Ashok had no choice but to opt for the course. However, his choice was backed by co-incidence. The time when

Ashok joined cardiology was co-incidentally the time when cardiology and cardiac surgeries saw a massive transformation. The university where Ashok was studying became the second hospital to work with angioplasty. The technique made heart-related treatments safer and more secure. A man who had never thought about becoming a cardiologist ended up being part of the first batch of doctors in the world who learned angioplasty.

In its early days, the future of angioplasty was uncertain because there were many cases where the patients could not survive the treatment. Fortunately, over time, the success rate of angioplasty increased drastically to 70%. Today, most of the heart patients are treated with angioplasty. Dr. Seth is considered one of the most learned pundits to know about angioplasty and angiography.

Dr. Seth learned many medical skills and techniques in England. After completing his education, he started to practice his profession in England. He had made a family in England as he settled down with his wife and children. However, back home, his mother's health was deteriorating every day. When she was severely ill, his father asked Ashok to return to India. Ashok was their only son, and they wanted to see their son. He wanted to stay in England, but considering his parents' health and old age, he returned to India. He wanted to take care of his parents and did not want to leave them alone in their old age. He knew that his parents needed him the most at that particular point. It was a crucial time for him. He did not want to regret his decision for his life, so he returned to India to live with his parents. In those days, Ashok was climbing the ladders in his career. His income and position were significantly improving. At such an important juncture, it was difficult for him to return to India, as he was concerned about his future. However, the family came first.

When Dr. Seth returned to India, co-incidentally, Dr. Naresh Trehan was preparing to establish a heart-related hospital. Dr. Trehan had completed his MBBS from Lucknow and had moved abroad for higher studies, where he learned some of the greatest techniques and skills to treat heart-related ailments. He wanted to bring advanced technologies to India. Dr. Seth and Dr. Trehan met at London airport, where Dr. Trehan discussed his plan of establishing Escorts Heart Institute in Delhi. After returning to India, Dr. Seth decided to work with Dr. Trehan to establish the institute. He went on to work with the institute for twenty-nine years. A few years ago, Fortis Healthcare overtook the arrangements of Escorts Heart Institute. Currently, Dr. Seth is the Chairman

and Chief Cardiologist of Fortis Escort Heart Institute. He also serves as the Chairman of the Cardiologist Council of Fortis Hospital.

In his thirty-year-long career, Dr. Seth has faced many difficult cases, but the most difficult case for him was that of his father. His father was eighty-five-years-old when he showed symptoms of heart disease. Dr. Seth decided to conduct the angiography in Escorts hospital. His father showed no signs of fear; in fact, he appeared to be excited and happy at the prospects of being operated upon by his son. Dr. Seth was upset upon reading his father's reports. His father's heart was in poor condition as it had not one but two blockages in the arteries. The blockages increased the possibility of cardiac arrest or heart failure. He was in a state of conflict because, on the one hand, and he wanted to perform an angioplasty on his father immediately.

On the other hand, he wanted to delay it until the right time. It was a difficult choice for him. He informed his father about the need for angioplasty and his father acceded.

Dr. Seth has performed thousands of angioplasty, but this was more difficult than any other previous angioplasty because it was his father, who was also his teacher. He had to put all his past aside and think of his father as another patient. It was easier said than done, but Dr. Seth had no other choice. He dedicated all his attention to his father's angioplasty without thinking any further. His efforts were rewarded as the surgery was successful. Dr. Seth was pleased with his efforts and lost his focus. As soon as he lost focus, his father started to bleed. Dr. Seth became nervous about the bleeding. However, the man possessed nerves of steel. He overcame his anxiety to control the bleeding successfully. It was an unforgettable experience for him. His father recovered, and now he is over ninety-years-old leading a healthy life.

Dr. Seth's return to India was beneficial not only for him but for the Indian medical field as well. In his bid to improve the treatment of heart-related diseases in India, he contributed significantly to establishing the Escorts Heart Institute in New Delhi. Later he played an important role in setting up another medical institution—Max Heart and Vascular Institute. He has deeply researched on the working of the human heart, and some of his findings have proven significant in improving the treatment of heart-related issues. He has contributed not only to Indian but world medical sciences. He is responsible for some of the major revolutions in the field of cardiac problems.

He has trained doctors all around the world. Doctors and researchers around the globe have lauded his research and his contribution to the medical field.

Dr. Ashok Seth had invented several techniques that have been used by doctors in the US and Europe. He is proud of the fact that he has been able to dent the Euro-centric belief that developing nations such as India cannot devise a path-breaking method and technique. He states that he had reversed the process where Indians used to learn from foreigners. Today, foreigners are learning new techniques and skills from Indian doctors. Through his hard work and successful efforts, Dr. Seth has given Indian doctors a new identity on the global level.

Dr. Seth has possibly performed more angiography and angioplasty surgeries than any other doctor in the world. In order to honour his achievements, he was awarded the Padma Shri by the Government of India in 2003, followed by the Padma Bhushan in 2015. He has also received the most honoured award in Indian medical science, the Dr. B.C. Roy award. His name has been registered in Limca book of records. The list of awards in his career consists of many international awards as well. He was awarded the Cross Insignia Officer Order of Isaela de Catholic award. He has been given the title, "Doctor of science" by Banaras Hindu University, Aligarh Muslim University, Jamia Millia Islamia University, Teerthankar Mahavir University, and Amity University.

Even though Dr. Seth has a long list of awards, records and titles behind him, he continues to lead a humble life. His records are just numbers that continue to go up. He is a successful doctor, but his belief in God and spiritualism remains strong. He believes that God has blessed him throughout his career. According to Dr. Seth, it is God doing surgeries through him. He has faith in himself, but the reason for this faith is the fact that God is always with him. Every morning when he leaves for the hospital, he prays to God to make all the patients better and in the evening, he thanks God for his day. He states that in the previous century, science has seen enormous growth, which has completely marginalised spirituality. Intellectuals feel that if they believe in spiritualism and God, they will no longer be considered intellectuals. However, the truth is that some things are out of human control. Irrespective of human efforts, no one can control the situation. Humans must understand that the ultimate power lies in the hands of God. There are some inexplicable occurrences when a healthy patient dies after a span of recovery,

or a severely ill patient suddenly recovers. The ultimate power is responsible for these miracles.

Dr. Seth narrates an incident to support his statement. In 2002, he felt a terrible pain in his hand. He decided to rest that day, hoping that the pain would fade away, but that was not the case. He had to cancel all his appointments because the pain was unbearable. The pain did not subside after a few days, and Dr. Seth was worried about it. He consulted a few doctors who unsuccessfully tried to treat him. Finally, he decided to receive treatment abroad. Before leaving, Dr. Seth wanted to meet his spiritual guru. He went to his guru and told him about his pain. He mentioned that he is concerned that his medical career is all but over now. The guru held his hand and told him that things would get fine. Dr. Seth returned home at night and slept. In the morning, when he woke up, he noticed that the pain had completely faded away overnight. He could not believe the incident and failed to find a reasonable explanation but the fact that it was the spiritual powers of the guru that fixed his hand. After an inexplicable pain of two months, he returned to his job delightfully.

Once, Ashok's mother was ill. Despite his efforts, there was no improvement in his mother's condition. He felt completely helpless and decided to find refuge in the temple. He prayed to God, and he believes that God responded to his prayers. Soon, his mother recovered from a long illness. Earlier, he never believed in Satya Sai Baba, but when his miracles showed effects on Ashok's life, he found his faith in Satya Sai Baba. Later he made Satya Sai baba his spiritual guru.

Dr. Seth's patients and his relatives like him because of his calm nature. Ashok is patient and does not lose his temper easily. He believes that a doctor's aim should be to serve their patients and not to earn additional money unfairly. A doctor has to put himself in the shoes of the patient to understand their condition. The patient places their faith in the doctor, and the doctor should respect that faith. The doctor has to do everything possible to treat the patient. Some people believe that Dr. Seth is God, and he holds magical powers. They believe that if it were not for him, they would have lost their lives. Dr. Seth feels uncomfortable with such a comparison. He believes that he is just another human being who is lucky enough to become a doctor. He explains that God made him a doctor to serve mankind.

Dr. Seth believes that the heart is the most beautiful and important part of the human body. It filters and circulates blood all around the body, providing fresh supply continuously. He says that certain things affect the human heart, such as tobacco, alcohol, poor eating habits, and undisciplined dietary schedule. However, some people have none of the above, and yet their heart fails. Therefore, he fails to understand the malfunctioning of the heart in many cases. He believes that his heart is fragile because he cannot see other people in trouble or problems. He is an emotional man who wants to help others.

Commenting on the emotions close to his heart, he mentions his mother's contribution in his life, who has made many sacrifices to keep him happy. She used to save money so that he could use it later. She loved him and wished to see her son becoming a great doctor. He believes that it is his mother's and god's blessings that he had achieved many things in his life. He confesses that he rarely gets to spend enough time with his mother or his family due to his profession, but he tries his best.

Even though Dr. Seth has a tight schedule, he manages to spare some time out for three of his hobbies. His first hobby is to go out for trips. He loves to travel and connect with nature. He loves to dive inside the water and explore the underwater universe. Scooba diving is one of his favourite hobbies. He is also a die-hard fan of old Bollywood movies and songs and believes that this hobby will never leave him. He has received professional training for singing and has also organised his concert where he performed. He is proud that he returned to India and served the patients in his own country.

Dr. Akshay Kumar Bisoi,  
the Heart Specialist who  
performed more than  
29 thousand Surgeries in 25 Years

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Special Human beings demonstrate an insatiable curiosity and an unending enthusiasm to excel in life. Career choices are the most common instances in everybody's life when these traits express. In Dr. Akshay Kumar Bisoi's choice(s), his incisive exploration into the infinite began manifesting quite early in his life.

Akshay Kumar Bisoi took the spiral of exploration initially as an engineering student. Six months later, to experience human touch, he plunged into the vast arena of service to fellow human beings as a "Doctor." After graduation (MBBS), the sharpness of his intellect and spirit found comradeship in the scalpel that cuts to heal the human body. Two stalwarts who were leading lamps on his progressive journey were Professor Anadi Krishna Patra and Professor

Panangipalli Venugopal. The former hailed him in service of mankind and then handed young AKB to the latter who then chiselled the corners of the gem, that henceforth has shined with a unique, never before seen brilliance in the profession of Cardiac Surgery.

The heart of a thousand (29000) has yielded to the healing cut over the years and continue, beating back to the pink of health once he is through. Life emerges when he finishes his sutures and knots, switches and anastomosis from small beginnings to the high flying. AKB has taken almost all the challenges that life throws up in his elegant stride. What often becomes roller-coaster ride for the weak hearted, has been an eclectic journey for him. Every unsurmountable challenge that he faced, he has emerged stronger and sharper for it, and it has become a way of life for him – breaking the limits!

Born in a rural household in Malihatta village in Cuttack district in the State of Odisha, his father used to take him for all activities associated with household living from a very young age. Subsistence was by tilling the land, in which his son used to assist him with remarkable enthusiasm. This saw the young lad, Akshay, stream through the currents of river Birupa (a tributary of River Mahanadi) with ease and style, which he carried forward in maneuvering and meandering through his dissection and administration and profession. The beauty of the gifted landscape rich with its flora and fauna and hardworking rural folk left a lasting image of purity and purpose on the impressionable mind of AKB.

In his childhood, he used to assist his father, Shri Mahendra Kumar Bisoi, in farming and fishing. His story reflects the remarkable journey of a man who knew no limits. AKB was aware that the world is full of opportunities and possibilities for an enthusiastic mind.

Endowed with a royal genealogy of fighters and defenders (Kshatriya), the lineage adapted to peacetime culture and farming for the livelihood of the village. The homemaker, Smt. Basanti Bisoi provided love and care and protected, grounded and enthused the family of three boys and her husband. The fortune of the rural farming household was subject to the vagaries of the weather. There were periods of sufficiency and more extended periods (seasons) of deficiency and harshness. Odisha was then, as it is now also, ravaged by the cyclones, storms, and rains. It often spells doom for the subsistence of the small-time farmers. These floods and cyclones and consequent migrations, inundation of houses and loss of livelihood also revealed a trait of survival

and thriving amidst adversity in the young boy, which later on hardened into one of the strongest will power to salvage a suffering human heart till its very last flicker. The hunger and the deprivation evolved into a spirit to jump all hurdles and break all limits as they come face to face with the basic instinct to survive and excel

The trials and tribulation of infancy and pre-school years engraved the values of survival and unceasing hard work when faced with certain fatality. A preventable yet fatal illness struck Akshaya as a toddler in his early childhood. Tetanus began to make his supple body rigid, and his little body arched with each waft of air, and the life force would itself bend him like a bow ready to shoot itself out of his corporate self. Smt. Basanti worried as she was, but not out of her wit's end, took him to Professor Sharat Mishra, who meticulously cared for the young boy. She courageously did Tapasya in the village temple (Chatteshwar Temple) of the divine parents - Lord Shiva and Parvati. Medicines and prayers brought the toddler back to life, and Maa Parvati blessed the boy with an athletic body – one that endures long theatre hours with an ease of a decathlon for six days a week has been so for last 25 years. Never afterward has he had any physical or endurance difficulties - be it swimming across the rivers or sprinting across the fields of the village while growing up or while grazing the cows that his Grandpa gifted the three brothers as their Birthday gifts.

The intellectual capacity was equally engaged with challenges in its evolution. Intellect “develops” in a lifetime; It “evolves” over generations. In AKB’s development, the early life fraught with deep existential problems and survival instinct, it evolved by leaps and bound in a single lifetime. The core survival instinct had given an insight into the value of education. Inspired by great stalwarts like Utkal Gaurav, Madhusudan Das, Utkal Mani Gopabandhu Das and Bakshi Jagabandhu Das, who were grounded great social thinkers, educationist and freedom fighters wed to the land in body, flew high in the skies in his imagination. School going AKB started following the thought and action leaders like Subhas Chandra Bose, Swami Vivekanand. Of course, Smt. Basanti, his mother, remains his first and foremost teacher. Each of the others merits an essay’s worth of definition. AKB true to his name (Na kshya jasha saha) explored and continues to do so without a conformist attitude, the infinite possibilities that life has to offer. Examples and instances abound in the path that he has trodden (yet). So have recognition and awards come

his way in his professional career. However, he pursues his dreams of serving humanity and exploring the beauty of life with a purity of purpose. He accepts and rejects awards and abuses with the equanimity of a "Raj Rishi" of yore. All instances are beyond the purview of this description, but a few are worthwhile to mention. Those that have been left undescribed may still be the more revealing and exemplary.

## Professional Life Events which became milestones in History

### *The First Heart Transplantation of India*

#### *Shri Devi Ram - recipient of 1<sup>st</sup> Heart Transplant on the night intervening between 2.8.1994 and 3.8.1994.*

It was just another day at C.T. Centre, and Dr. AKB had just joined as a freshman Cardiac Surgeon. He reported for his duties to his Chief. Unknown to the freshman, his mentor, Guru and Sculptor had put him to one of the toughest tasks ever; that was preparing Mr. Devi Ram for a cardiac transplant the next day. The mentee had come with an unquenchable spirit of inquiry and a sense of service to fellow humans, which was clothed only by the skin of his teeth. History was made in the medical field, which was to make the nation proud. The transplantation started with a 35-year-old lady (certified brain dead) donating her living heart to a 42 years old male, Shri Devi Ram. The angelic act of donating and receiving life inspired the entire transplantation team led by Dr. P. Venugopal. Young AKB tasked with taking clinical details from Shri Devi Ram was deeply inspired by his words that "I want to undergo such a procedure for the first time in the country because I have full trust and confidence in Dr. P. Venugopal and his team. I want to be a part of history and inspire others to come forward to better their life for a better tomorrow". His voice still reverberates in the surgeon AKB's mind and reminds him of the leap and bound on the spiral of his exploration, which the first and successful transplant recipient catapulted in his mind by around 3.00 AM of the 3<sup>rd</sup> of August, 1994.

Indeed what Shri Devi Ram dared to dream has come true, and now cardiac transplant program is an established service being provided across the country.

To recognize the service and honour the leadership of Dr. P. Venugopal and the entire team, Prime Minister P.V. Narsimha Rao congratulated the team for the first heart transplantation in the country on August 17, 1994. The Parliament of India moved a motion to congratulate the entire team on 4<sup>th</sup> August 1995. Atal Bihari Vajpayee, Leader of Opposition, Ghulam Nabi Azad, Minister of Civil Aviation and Tourism, Som Nath Chatterjee, MP and Speaker of Lok Sabha on behalf of the House, congratulated Dr. P. Venugopal and the entire team for this achievement. The golden words of the mentor while marking a copy of the Hon'ble PM's letter to his mentee is a message to last a lifetime

*“Dr. Bisoi, please, this will be a great inspiration in your work and future.”*

– P. Venugopal.

To commemorate the achievement, which left an indelible mark in his poetic mind, Prime Minister Atal Bihari Vajpayee, in 2003 declared that August 03 would be observed every year as a National Heart Transplant Day to celebrate the first heart transplantation. Moreover, he dedicated the Organ Retrieval Banking Organization (ORBO) to the nation. It was established by the Heart Transplant Team to facilitate and coordinate Organ Transplantations at the Institute. Thence the ORBO became a National Facility pioneering organ transplantation all over the country.

### *Spearheading Stem Cell Therapy*

By the early years of this century 2003/2004, the Guru-Shishya duo, one which the Institute had never seen before and may never see ever again, set a trailblazer yet again. In the domain of advanced Cell-based therapeutics Dr. A.P.J. Kalam, Hon'ble President of India, in a teleconference with Dr. N. Gopinath, the founder of the Cardiothoracic Centre, AIIMS posed a question of biology about Stem Cells Therapy in cardiac diseases. The vision and will of steel of the Guru and the ferociousness of spirit and physical strength of the Shishya set the answer to the question rolling, which formed the first Stem Cell Therapy Centre at the Institute. This pioneered research into uses of Mesenchymal Stem cells (harvested from Bone marrow) in patients with post-myocardial Scarring, Type II Diabetes Mellitus, Spinal Cord Injury with Paraplegia, Duchenne muscular dystrophy and others. This prompted

the template for National Guidelines on Stem Cell Therapeutic application in various fields by the Indian Council of Medical Research.

## **Dr. P. Venugopal's surgery**

The trailblazing trajectory of the Heroi-Comic duo of the Gem cutter Guru Dr.(Prof.) 'Padma Bhushan' P. Venugopal and his stellar apprentice Dr. A.K. Bisoi, Associate Professor in the Department of CTVS, culminated in the teacher submitting his ailing heart for the final chisel in the hands of his student for his Coronary Artery Bypass Surgery thereby blessing him with all that he had. In the morning of 7.1.2005, both teacher and student shined forth. AKB carries it closest in his heart and will do so as an inspiration of a lifetime.

### *Extra Corporeal Life Support and Arterial Switch Operation beyond the boundary.*

*"Blue Baby bounces back (The Hindustan Times 2005)"*

This time the surgeon AKB took it upon himself and his team to streamline effectively and efficiently The Extra Corporeal Life Support Program both as a Bridge to Recovery for weak hearts as well as a Bridge to Cardiac Transplant. The Extra Corporeal Membrane Oxygenation was integrated into the Surgical Program of Arterial Switch Operation (ASO) for older children with very weak hearts, which was not possible earlier. Thereby the team led by AKB for the first time untied the knot of crises, cost, and infections which had taken innumerable lives before. This integrated ECMO program helped in redefining the concept of "Regression in Transposition of Great Arteries" and removed the age constraints for ASO. For these path-breaking conceptual contributions, ICMR gave a Gold Medal, Citation and National Award (Chaturvedi Kalawati Jagmohan Das Memorial Award) on 11.10.2017. AKB promptly handed over the same to his team members

## *Taking a stand for Autonomy and Institutional Integrity*

In the now-famous and well documented ideological tussle between the then President, AIIMS (Minister of Health & Family Welfare, Govt. of India), Dr. Ambumani Ramadoss and Prof. (Dr. ) P. Venugopal, Director, AIIMS for Institutional Integrity and Autonomy, Dr. A.K. Bisoi took a stand consistent and congruent with the original idea of All India Institute of Medical Sciences

as proposed and passed by the Parliament of India in 1956. In doing so, he antagonised the Establishment, the Government of India (President, AIIMS). Consequently, he was served a suspension notice twice, to tease him out of Dr. P. Venugopal's umbra. This directly resulted in crises for the young babies who had to be operated upon to live.

It is historical that the Hon'ble High Court of Delhi took suo motto cognizance of a letter written by the parents of a frail baby (Baby of Rekha) born with a congenitally malformed heart that could not hold the life. In a short span of 10 days, after being born in Jodhpur, the baby had been taken to all the well known medical who's who. When everybody pronated their palms in helplessness, the parents were at their wit's ends and pleaded to the justice system of the land. The Court saw through the knotted system of AIIMS and healthcare in general, whereby the only surgeon who could suture the baby back with a life span was under suspension by AIIMS, denied access to the operating room and the facility. First, the Court established that the concerned surgeon is competent to perform the switch surgery (between life and certain death for the baby) on the facts and figures and testimony of the experts standing in the courtroom. That the surgeon concerned was the only and the best bet in the country for the baby to live was certified; the entire administrative knot was incised quickly this time by the High Court using the Wits of the words "Life is to be given preference, over the suspension of an employee. Right to healthcare is part of Right to Life, a fundamental right protected under Article 21 of Constitution of India". Chief Justice, Sah, stated in the judgment that the "need and necessity to undertake and perform surgery at AIIMS outweighs and is more important than the right to suspend an employee" – This still beats reverberates happily in the bosom of a young citizen of India.

Taking note of the 730 Cardiac surgery successfully performed by Dr. AKB, the Central Administrative Tribunal, Principal Bench, did not hesitate to stay the repeat suspension order by the President, AIIMS (Dr. Anbumani Ramadoss) just like the Hon'ble Delhi High Court did for the 1<sup>st</sup> suspension order in perpetuity. It stated, "..... when the allegations are not serious in nature, it will cause irreparable loss not only to the applicant but to the public at large as well if the applicant is not permitted to carry on his duties". Thus, In the larger public interest, Dr. Bisoi was extended all Institutional facilities and services for taking care of these

babies by AIIMS, under judicial directions. When the new Government formed with a fresh public mandate, all allegations and charges were summarily withdrawn by the President, AIIMS (Minister of Health & Family Welfare, Government of India, Shri Ghulam Nabi Azad). Dr. A.K.Bisoi continues to perform his duties and excel.

Further natural monstrosities and malformations which yielded to the healing cut included ectopia cordis (all three varieties in three babies). The one with the heart outside the chest was followed by the one with the heart in the neck followed by heart in the abdomen. Dr. AKB and his team successfully put the heart in its natural place inside the chest in all three. Two of them are school going kids today. One of them succumbed after three weeks of surgery.

### *Integrated Practice Unit (IPU) takes the AIIMS brand to new heights in the service of complex cases*

All India Institute of Medical Sciences is a premier Institute of National Importance with a global standing. Its benchmark of providing quality patient care at a reasonable cost, even in complex cases, required breaking of artificial departmental barriers. The patients' profile from the sub-continent included very critical and challenging cases at the edge of their lives, coming to the Institute as the final hope. Brandishing these cases untreatable was marring the Institute's stature in the world arena. To overcome this tunnel view approach by individual departments declaring such cases are inoperable, and an integrated approach (spoken wheel pattern at a functional level) was mooted for the first time by Dr. AKB. Enriched by his two decades of Institutional practice and team building, he initiated and formalized key experts across the various departments. The point of care pooling of personnel, logistics and other resources led to streamlined and efficient advance care for critically ill patients who were not operable across the specialties. Thus was created the Integrated Practice Unit at the Institute (novel functional enterprise). Scores of patients across the spectrum of age, nationality, and complexity of diseases continue to be benefited by the IPU at the Institute, which was not earlier possible.

Nowadays, he has a few tips for his student surgeons. He suggests four elements to make or break a surgery in a patient. Firstly, a surgeon should be

singularly aware of his responsibilities; Secondly, a surgeon should stoically stand to his responsibility. Further, a surgeon must trust his capability. Self-confidence or its lack may prove to be the best friend or the biggest enemy, respectively. Thirdly, surgery is teamwork through the hands of a surgeon. It is a group performance through its leader: the Surgeon. He should not dither in confidence in himself or his team. Planning the surgical steps (mental map) is essential. Lastly, the surgeon's priority is always to take care of the patients' safety, health and benefit. He emphasizes, in keeping with his childhood spirit, that a surgeon must not forget that the only purpose is the betterment of the patient's life. Dr. Bisoi believes that the patient's welfare is the key to the success of the profession.

**EPILOGUE (Citation as in Capital Foundation Award on 1.9.2019 by his Excellency Mr. Bishwa Bushan Harichandan, Hon'ble Governor of Andhra Pradesh in the distinguished presence of Mr. N. Ravi, Chairman, Press Trust of India, Mr. Justice A.K. Patnaik of the Hon'ble Supreme Court of India):**

*Dr. Akshya Kumar Bisoi, Professor, Cardiothoracic & Vascular Surgery, Cardiothoracic Centre, All India Institute of Medical Sciences, New Delhi. Graduate and Postgraduate of SCB Medical College, Cuttack, Odisha (Gold Medalist), M.Ch.,*

*Transplantation, Stem Cell Research, Organ Retrieval Banking Organization, Integrated Extra Corporeal Life Support. Special mention of Arterial Switch Operation with Weak heart in small babies for the first time in the world is made. Keeping in view of the services to the nation, the President of India has honoured him with the prestigious Dr. B.C. Roy National Award in the year 2019.*

*He is an outstanding teacher and a team leader who has taught and trained from India and abroad in his field as well as related specialties. His students have become world-renowned leaders and experts in their domains. He established the first cardiac surgical program in the State of Himachal Pradesh and trained specialists from the State of Jammu & Kashmir and North-East India, including his home-state Odisha. Under his leadership, a noble platform of "integrated practice" unit at AIIMS. He has contributed more than 120 Scientific Research publications. His research work received National and International "Young Innovator Award" and*

*“Best Image Award” (By Cardiology Society of India, Pediatric Cardiology Society of India and Asia Pacific Pediatric Cardiology Conference). It culminated in the ICMR Chaturvedi Kalawati Jagmohan Das Memorial Award for his outstanding research in the field of cardiac diseases.*

# Dr. Vijay Dikshit, a World Renowned Heart Surgeon who refused to get influenced by others

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What determines success? Is there any way one can measure success? It is often said that in this cruel world, success is measured by numbers. However, do the numbers fully encompass one's success story? Dr. Vijay Dikshit has performed over twenty thousand surgeries in his long career. It may be a great achievement for some, but for Dr. Dikshit, numbers are nothing but just that. He believes that the numbers will keep growing until he has the capability of working, and he wishes to work until his body allows him to. He believes that if one is satisfied with one's contribution, then one is indeed successful. He is satisfied with his efforts and contribution to the field of medical science. However, he wanted to do many things in life, which he could not do. So, does that make him unsuccessful? Here is his story.

Dr. Vijay Dikshit is one of the most popular cardiac surgeons all around the world. He has performed many challenging surgeries, and his numbers speak for his accomplishments. His technique and skills have attracted the attention of many doctors and patients. Some patients believe that he is an

angel sent by God to treat and cure mankind. Some people even compare him with the Almighty himself as they believe that he has miraculous powers that can cure any patient. Even though Vijay has touched the sky, he has still managed to keep his feet on the ground. He says that he is just a simple human being; neither does he have the potential to give life, nor does he have the capability to take a life. He just hopes that people remain healthy, and he tries to help people in maintaining a healthy lifestyle. He believes that he has to serve and treat patients, a duty which he discharges honestly. He suggests that he just uses his education and experience to treat people, but he plays no role in saving them. However, these days, people's attitudes towards doctors have changed completely, which is why people believe him to be an angel or an equivalent of God.

Vijay's father was an officer in Indian Police Service in Uttar Pradesh. The job provided his father with opportunities to work for higher positions. The job had many benefits, but one of the shortcomings of the job was the transfers. Since his father was transferred to many places, Vijay's school record consists of multiple schools. However, most of his time in his childhood was spent in Lucknow and Benaras (Varanasi).

In his childhood, he was influenced by the teachings of his father, which motivated him to serve others. His father wanted him to possess a talent that lay in his hands alone. He always expected Vijay to serve others and make the world a better place by helping others. Most of the members of his family were government servants, but Vijay was not inclined towards a government job. He wanted to fulfil his father's wishes and serve society. Ever since his childhood, he wanted to become a doctor as he did not know a better way of contributing to the well-being of society.

When the small seed is nurtured carefully, and the bud is handled with intensive care, the fruits are always palatable. Since Vijay received excellent teaching at an early age, Vijay's childhood and nature turned out to be different from other children of his age. In his childhood, he learned the practice of serving people. He always believed in charity. He used to buy chocolates and ice cream for unprivileged children. It became his habit to help other people under any circumstances. Sometimes people stopped him from interacting with needy children. People tried to pollute his mind by dictating the difference between the poor and him. However, Vijay was unmoved and determined in his life. No one could prevent him from helping and supporting the poor.

Vijay was firm about his aim, and he wanted to achieve his target. He prepared for the entrance exam with steadfast determination. He believes that it is not extremely difficult to become a doctor, but in his early years, he had to face stiff competition. When Vijay attempted for the entrance exam, the number of applicants was 35,000, and the number of seats available was 700. Vijay scored good marks and attained the thirteenth rank all over India. In those days, Lucknow Medical College was considered to be the best college in Uttar Pradesh. Therefore, Vijay enrolled himself at King George Medical College of Lucknow. In his bid to become a doctor, Vijay had to burn the midnight oil. Sharing his experience in Medicinae Baccalaureus Baccalaureus Chirurgiaehe (MBBS), Vijay discloses that in those days, studies used to appear burdensome at one point but today when he thinks about his days in MBBS, he feels that it was a memorable part of his life. He had to study regularly because every week they had to appear for tests. There was no difference in day and night, and there was little space for daily meals. In his early days of MBBS, he used to stay in the hospital from early morning till 8 pm. There was no time left for him to think about anything but medical science.

In his student days, it was an ordinary matter to fail a subject. Vijay shares that many people used to score well in the entrance exam but could not continue their performance in the college. Many used to fail in one or the other subject. Vijay worked hard enough to ensure that he never failed in any of the subjects. Even though he used to spend hours studying, he never eliminated the possibility of failing the exams, because of the strenuous nature of the degree.

During his training in MBBS, Vijay became interested in heart surgery. He decided that he wanted to be a cardiac surgeon. The challenge ahead of Vijay was that heart surgeries were uncommon in India in those days. People did not trust heart surgery in India, which reduced its scope. There were only a handful of doctors who received training for heart surgery. Naturally, it was a challenging decision, and his family would not have been comfortable with his unorthodox choice.

When he informed his family about his decision, his family was surprised. They were not confident whether the field of heart surgery was promising enough. Nobody in his family supported his decision. His senior in the college had the same apprehensions. Vijay's father was shocked by his son's decision and told him to become a regular MBBS doctor instead of a cardiac surgeon.

However, nothing was stopping Vijay from chasing his passion. He did not pay heed to others' opinions. When his father noticed his passion for cardiac surgery, he told Vijay that he should chase his dreams, and his family would support him under any circumstances. He assured Vijay that he would do anything and everything to support Vijay.

Vijay had decided to become a surgeon, but he was unsure if he would be a successful surgeon. Vijay had seen senior and more experienced doctors performing surgeries, but he had not performed one. He wanted to be a surgeon, but he could not gather the courage to perform surgery on his own. In those days, Vijay was pursuing his internship in a hospital. As an intern, he was sent to a village for a few days as a duty doctor. While Vijay was fighting this dilemma, an important case came to him. A lady had brought her severely injured son to Vijay. The child had fallen from the train, and his neck was partially separated from his body. The child was in a terrible condition, and there was no other doctor available in the nearby villages.

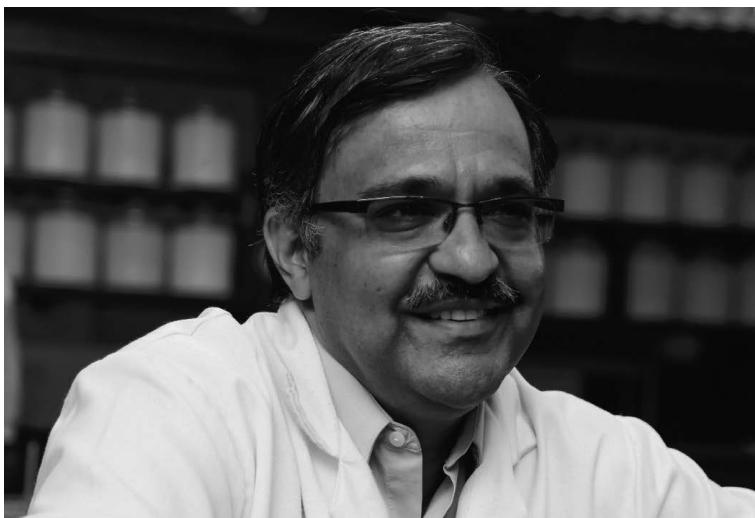
The situation demanded immediate surgery. Vijay had no choice but to perform the surgery. It was a tough decision for Vijay because he had just completed his MBBS, and he was working as an intern. Somehow, Vijay considered the need of the hour and decided to operate upon the child. He performed the surgery successfully. The child's life was saved, and Vijay had found the answer to his dilemma. Under such difficult and urgent circumstances, he rose to the occasion. The surgery gave him the confidence he needed. Vijay states that confidence is the most important pre-requisite for a successful surgery. While performing surgery, the surgeon incises the body organs of a patient. The life of a patient is under the control of the surgeons. In these circumstances, a slight lack of confidence is enough to give the surgeon nervous and shaky hands.

Vijay states that every surgery is a new and different challenge. He tries to improve his skills and technique with every operation. In recent times, different technologies have been introduced regularly, which requires surgeons to adapt to changing times. In the four decades of his medical career, he has been the observer of every transformation that has taken place in the field of heart surgery. He believes that important changes in the last few decades have transformed the face of cardiac surgeries and enhanced patients' trust in the field. Earlier, patients did not prefer heart surgery due to high risks of failure,

but improving technology has helped cardiac surgeons deliver more promising results.

Dr. Dikshit suggests that to maintain a healthy heart, people should follow their hearts. He says, “I have seen that people who do not follow their heart and work without interest are more prone to heart attacks.” He suggests that people must enjoy their work and follow their passion. This reduces the chances of heart disease. He further adds, “stress is a major cause of heart disease. Stress can be for anything, which includes doing something you do not want to.” Dr. Dikshit suggests that it is not always possible to find a job in one’s field of interest. It is impossible that an individual will always be interested in their work. Under such circumstances, a person should believe that he or she is destined to do the work they are doing. The heart remains healthy only when an individual enjoys their work.

# Dr. Sanjay Agarwal, a Cardiologist who dared to venture into uncharted territories



Dr. Sanjay Agarwal is a well-known personality who decided very early not to follow the crowd. The decision was brave. Despite all adversities and without any hesitation, he decided to walk down the path which was taken by only a few before him. The path was not easy. Every step of the way, there were many challenges; obstacles awaited him with open arms. However, later, he achieved phenomenal success on this path. He became a source of inspiration for many people who followed the same path that was treading by Dr. Agarwal.

Dr. Sanjay Agarwal decided to become a cardiac surgeon during the 80s. This decision was very challenging and full of innumerable impediments, but with his determination, courage and talent, he sailed through everything and came through with flying colours. Today, he is amongst the topmost cardiac surgeons in the country. The country has got an army of cardiac surgeons because of such courageous doctors, and the country has made a name for

itself in the field of cardiology. It is because of his efforts that heart diseases are not considered incurable any more in our country.

In a very special meet, Dr. Sanjay Agarwal narrated various aspects of his success story. Besides, he reflected on important events of his life along with some bitter-sweet memories. When Sanjay was in the ninth standard, he had decided to become a doctor upon growing up. It was his own decision—neither did anybody suggest to him or force him to do so. Nonetheless, there was certainly an impact of the pressures of time behind this decision. In those days, the profession was considered highly respectable and sought after. When in 1977, Sanjay told his parents that he wanted to be a doctor, they were extremely happy, as if they were waiting to listen to that from their son. Everyone appreciated his decision and gave him their blessings. However, while pursuing his medical education, he took another decision that surprised everyone. This time, everybody opposed that decision and discouraged him. Like the previous time, this time, too, there was no suggestion from anyone or any kind of pressure. Sanjay Agarwal did not take this decision considering any pressures of time; his decision was completely against the trend. The decision that surprised everyone was to become a cardiac surgeon, that is, a doctor who performs heart operations.

It was quite obvious that people were taken aback by this decision during those days. That was the time when heart disease was considered the most dangerous and fatal affliction. If somebody had any sort of heart disease, often, it was assumed that the person was nearing his end. Heart operation was directly associated with the last few moments of the patient, one last attempt to save one's life. In such a scenario, Sanjay decided to become a cardiac surgeon. Sanjay Agarwal says, "I wanted to do something different from the crowd. There is zeal in the heart. I thought I should learn how to operate upon the heart, often seen as a challenge, and an ill-fated exercise. There were only two dominating thoughts in my mind, first to go in the surgical line and second to listen to matters of the heart." Sanjay Agarwal continues, "In those days, the overall environment was not very favourable to become a cardiac surgeon. In India, there were only two places where heart operations were conducted at AIIMS, Delhi and Christian Medical College, Vellore. The biggest challenge was training. Facilities and appropriate technology for cardiac surgeon training

were not adequate. This was the sole reason new doctors were reluctant to pursue cardiac surgery for specialization.

In answer to one of the questions, Sanjay Agarwal told that a total of 196 students completed their MBBS with him, out of which only four students pursued a course for super specialty, and he was one of them. Sanjay Agarwal chose cardiac surgery, and another went on to pursue plastic surgery, another became a neuro-physician, and the last one pursued a career in nephrology (kidney doctor). This means only four students out of 196 selected a path that was challenging and full of hurdles.

Indeed, the path was difficult for Dr. Agarwal. In those days, when he started performing heart operations, patients did not use to have faith in operation. On the one hand, there were very few hospitals where heart operation could be performed, and on the other hand, in the hospitals where it was feasible, the technique was old. Hospitals did not have advanced technology like we have today.

It was only in the 1990s that the situation pertaining to medical infrastructure started improving. New technologies were being discovered. Even among nations, there was an exchange of technologies. As doctors started using advanced and innovative technologies in cardiac surgery, people started developing faith in heart operations. Apart from this, even cardiac surgeons got recognition and respect in this challenging field.

Dr. Agarwal says, “In the early days, heart disease was considered incurable. Furthermore, now even the most serious case of heart disease can be treated. In India, we have the latest technology and equipment available for cardiac surgery.”

On reflecting upon the memories of his first heart operation, Dr. Agarwal begins, “It was a young twenty-two-year-old patient, who had a hole in his heart. I operated for two hours and closed the hole in the heart. It was a successful operation.” While he was narrating his experience of the first operation, his happiness was clearly visible on his face. With a smile on the face, he even said that “It has been twenty years since I performed that operation. That man comes to me even today for review. On seeing his health, I feel elated. Dr. Agarwal agrees that there was some thrill in his mind while performing his very first operation, but he was somewhat nervous too. When the operation was completed successfully, he felt very relieved and had a sense

of achievement. This success enhanced his confidence and gave him immense satisfaction.

One very interesting aspect of Sanjay Agarwal's personality is associated with his Medical College and Hospital, where he works. He has done his MBBS, MS and MCH from the same college—Ganesh Shankar Vidyarthi Medical College, Kanpur. After completing his education in 1994, he went to Hyderabad, and since then, he has been giving his services in one hospital only. Almost twenty-two years ago, he got associated with Apollo Hospital, Hyderabad, and he is continuing there.

While conversing, he even shared the memories of his most challenging operation so far. He said, "There was a youngster, and his coronary examination was going on in Cath Lab. All of a sudden, his heart stopped functioning. Everybody got worried. We took him to the operation theatre while trying to make his heart function by artificial circulation and cardio-pulmonary massage. There, we performed his bypass surgery, which proved to be successful. The very next day, the patient was normal. It was a miracle for many. It was one of the operations that I can never forget!" he exclaims.

Dr. Sanjay Agarwal's wife, Kavita, is a doctor as well. She is a pediatrician. The couple has two daughters. Sanjay Agarwal's father, S.K. Agarwal, used to work for the electricity board in Uttar Pradesh. He got retired from Generation Corporation from a very high post. His mother, Usha Agarwal, was a homemaker. His elder brother Anup also studied very hard. He is a professor of Computer Science in America. Since his father was in a government job, he used to get frequent transfers. This was the reason he was brought up in Gorakhpur, Lucknow, Kanpur and various other cities.

On completing Intermediate studies, when Sanjay Agarwal appeared in the medical entrance exam, there were only seven hundred seats. For these seven hundred seats, a total of fifty-four thousand aspirants wrote the pre-medical entrance examination. But Sanjay Agarwal's preparation was so strong that he could crack the entrance exam in the very first attempt and got a seat in MBBS College.

Dr. Agarwal has performed more than five thousand heart operations to date. His energy and enthusiasm are still alive, just like at his first operation table. He says, "I strongly believe that stagnation is nothing but a downfall. Success always follows when one is perseverant and never gives up. That's why

I never want to stop. I always try to keep moving ahead. I always try to move to the next level from wherever I am standing today. Success, for me, is in the form of a smile that comes on the face of the patient after a successful operation. This is the only motive of my life—to instil happiness in the lives of all the patients I treat.” Advising people of this generation, Sanjay often says, “I will say only one thing to everyone, “Follow your passion. Never bother about what others will say. People will always talk, and they will keep saying negative things about something or the other. Never leave your passion and keep working to attain your end goal.”

# Dr. Rakesh Yadav, a Crusader who is trying to make Heart Surgeries affordable for the Poor



Unarguably, there are many successful doctors, but not every successful doctor has warmth and compassion in his heart like Dr. Rakesh Yadav. He is one of the doctors who have immense sympathy for the poor and are concerned with their health. He embraces the pain and problems of the poor like his own. He has a goal in his life—he wants that in his lifetime, the treatment of heart diseases becomes cheaper and affordable for everyone. He does not agree with the present condition, which makes rich men's life more important than the life of the poor.

*“Khwahisho ka silsila beshak badha le jaega,  
Sochta hun ke insaan duniya se kya le jaega  
Tum kisi ki khamiyo ka kyun lagate ho hisab  
Veh apni karniyo ka hisab khud-b-khud le jaega”*

Translation: Dreams and wishes of a man increase throughout their lives, I wonder what the man will take with him after his death. Even Alexander the Great, who conquered the known world, went empty-handed. You do not need to keep track of somebody's deeds. Karma will follow him to his grave, and that will be the only thing he will carry to his afterlife.

These lines express the pain and anger of Dr. Rakesh Yadav over the trajectory that his profession has taken over the years. Dr. Yadav feels hurt over the fact that money has easily corrupted human beings. It has robbed them of their compassion towards others. He is surprised to see that even a profession as noble as that of a doctor has been corrupted. Some doctors are wolves in the sheep of the skin that pretend to dedicate their lives to the well-being of their patients but actually concern themselves only with their bank balance. He loves and respects the profession, but the current condition of the profession hurts him.

Dr. Yadav received the feeling of serving others from his parents, who always taught him to help and serve the poor. Dr. Yadav was born into a middle-class family. He always noticed his parents' compassion towards the poor, which warmed his heart. While pursuing his studies, he came across teachers and professors who helped him to understand the purpose of his profession. He has dedicated his life to serving the poor. His story will motivate others to follow his footsteps. It will redefine the meaning of success by depicting that real success lies in helping and serving others.

Rakesh was born in the Faizabad district of Uttar Pradesh. His father was employed at Indian Explosives Limited. His father led a no different life than other government employees, as he was constantly transferred from one location to another. His mother was a B.Ed and M.Ed. She could have become a teacher in a school or college, but due to her household responsibilities, she could not manage a job.

The couple had four children. Rakesh was the eldest child of his parents, followed by three younger sisters. His maternal uncle, Uday Pratap Singh, is a famous Hindi poet, author, and politician. Uday Pratap Singh is the 'Guru' of the founder of Samajwadi Party, Mulayam Singh. Rakesh's maternal grandfather, Dr. Harihar Singh Chaudhari, was a famous homeopathic doctor at Shikohabad.

Rakesh grew up seeing his father helping the poor. His father was a kind-hearted man who always believed in helping others. He never turned anybody's request down and found the best possible way to help others. Rakesh has seen his father facing the toughest of the situations with a smile on his face. Once, his father lost a job, but he never let anyone know about it. He made sure that his family did not suffer due to the shortage of money. His father had the added responsibility of his brother, which he fulfilled.

Dr. Rakesh Yadav is deeply influenced by his uncle, Uday Pratap Singh. Due to his uncle's influence, Rakesh attended many 'Kavi Sammelans' (gathering of poets). Rakesh used to listen to great poets and learn about their lives. He was motivated to write poems, and even today, whenever Rakesh gets an opportunity, he writes poems.

Since Rakesh's father was posted in Gaya, Bihar, he completed his primary school education from Gaya. When Rakesh completed his seventh standard, his father was transferred to Gonda town of Uttar Pradesh. The family relocated to Uttar Pradesh. Rakesh completed his schooling at Gonda. Rakesh's parents were aware that Rakesh was a bright child. They knew that their son would become a successful man in the future. He possessed many qualities ever since his childhood. There are some of his quirks of childhood that has continued into his adulthood. Rakesh was a talkative child and continues to remain talkative even today. Looking back at his childhood, he remembers that while handing over his report card to his parents, his teachers used to state that he was a bright and talented student, but he was extremely talkative.

Rakesh was a naughty child, too. He participated in every notorious activity in his childhood. Despite his naughtiness, he managed to spare time for his studies. By the time he reached the tenth standard, he had made a habit of studying four hours a day. In case if he was not able to spare decided time for studies, he used to compensate for it the tie the next day. He was an all-rounder who was fond of playing sports. He played cricket, hockey, table tennis and many other sports. One of his favourite games was chess. He used to love the game because it tickled his brain. He was also part of the debating society in school.

Throughout his childhood, Rakesh was interested in mathematics and science. He loved playing the numbers' game. Students found mathematics

extremely difficult, but Rakesh was always enthusiastic about doing the subject. He practiced his mathematics skills regularly, and soon he perfected the subject.

Rakesh always preferred to study at night. When everybody switched off their lives and retired to their beds, Rakesh used to open his books to complete his homework. He believes that the night is the best time to study. It is the quietest time in the twenty-four hours of the day. At night, nothing can divert his mind or his attention. His concentration at night was so strong that even if someone blew the trumpet, he would not be disturbed.

His extraordinary capacity to concentrate enabled Rakesh to secure a state rank in the board exams. Even without taking tuitions, Rakesh secured the ninth rank in the state. His parents were pleased with his performance. They wanted to make their son a doctor. Even though mathematics was his favourite subject, Rakesh chose a different field to fulfil his parents' dreams. After completing the tenth class in 1983, Rakesh chose biology as his major course.

Based on his excellent score in twelfth grade and pre-medical school, Rakesh was offered admission to a medical college. Since his father was posted in Gorakhpur in 1985, Rakesh chose to study at Baba Raghavdas Gorakhpur Medical College. He maintained his concentration, commitment, and dedication, which impressed many professors. It was the result of his hard work in medical college that he scored the highest marks in every subject throughout his MBBS. Interestingly, Rakesh was a rare combination of a topper and a back-bencher.

Rakesh narrates many of his memories of MBBS. Once, Rakesh was attending the Anatomy class. The professor was telling students about the incision of the human body. The professor was a strict man and students feared him. During the class, the professor saw Rakesh with his eyes shut. The professor thought that Rakesh was sleeping in the class. He became infuriated and scolded Rakesh. He told Rakesh to leave the classroom. Rakesh presented his case and told the professor that he was awake throughout the lecture, but the professor did not take his word for it. To prove himself, Rakesh repeated the class lecture as it was. The professor was startled after listening to Rakesh. He was surprised to see Rakesh narrating the lecture word-to-word. He was impressed with Rakesh.

Even in college days, Rakesh never confined himself to studies. He continued the pursuit of his hobbies. He used to play sports in college and won several competitions. He actively participated in essay writing and debate competitions. In the days of the colleges' annual festivals, Rakesh used to win many awards. He was a true all-rounder, which impressed everybody in the college.

Rakesh completed his MBBS with a good score and enrolled in the Sarojini Naidu Medical College at Agra, Uttar Pradesh, for his MD. He was interested in orthopedics, but his parents advised him to specialise in general medicine. In his time at Sarojini Naidu Medical College, Rakesh faced an incident that changed his approach towards life. He became more dedicated to serving the poor and started respecting death. In his college, there was a professor named D.K. Hazra. He was the head of the department. Rakesh used to go with Professor Hazra for rounds to check on patients. Once, during the rounds, a patient passed away. As soon as the professor came to know about the death of the patient, he rushed towards the patient's bed. The deceased patient died with open eyes. The professor told the ward boys to remove the bandages from the patient's body. He removed the needle of IV Fluid attached to his body. The professor closed his eyelid and told Rakesh that people who do not respect death could never respect life. After listening to his professor, Rakesh learned the lesson of his life. He began to respect death and accepted it as an important and integral part of life.

Rakesh's parents wanted him to become a heart specialist. In those days, heart specialists held an important place in society. They were honoured more than other doctors. To fulfil his parents' wishes, Rakesh prepared to enrol in the DM course in AIIMS. He worked hard enough to receive a seat in the DM (cardiology) course. In those days, AIIMS had only two seats for DM in cardiology and Rakesh secured one of them. Rakesh scored the highest marks and cleared the viva exam with a high score. His knowledge and articulation impressed the professors who admitted him to the course.

After completing DM, Rakesh joined AIIMS as faculty. He held the post of assistant professor. During his career, he also treated many patients. For the past few years, he has been treating heart patients and has saved many lives. He believes that every patient is a new challenge for him because every human's body is different, and each case is unique on its own. He tries to treat the patient in the best possible way. He always makes sure that the patient does

not have any complaints or grievances after his treatment. To treat them in the best possible way, Dr. Rakesh Yadav tries to step inside the patients' boots. He tries to understand their problems and routine so that he can provide the most suitable solution to their problem. He realises that even the smallest error on his part can destroy someone's life. It is always a matter of life and death, so he proceeds with caution in every case.

Dr. Yadav admits that treating the people closest to him is the toughest job because emotions are attached to them. If the patient knows him personally, they put more faith in him. In case the patient's body does not respond to the treatment expectedly, he feels embarrassed and helpless. Therefore, while treating a known patient, he faces pressure and more challenges than usual. Rakesh is never anxious, but anxiety grips him when he has to treat someone he knows or a close one.

Dr. Yadav shares an experience to explain his point. A close friend's father was experiencing severe chest pain. He thought that the pain was due to acidity, so he took some medicines, but he did not feel relieved. The friend called Dr. Yadav, asking for suggestions. He told his friend to bring his father to him as soon as possible. Dr. Yadav was worried that prolonged chest pain could be related to heart problems. As soon his friend brought his father to the hospital, Dr. Yadav sent him for an ECG. The report explained that his father had had a heart stroke. He was preparing to take his friend's father to the cath lab when his father suddenly fainted. Dr. Yadav held his nerves together and carried his friend's father to the stretcher. He took him to the cath lab. Rakesh's quick action and treatment saved his friend's father's life. He reveals that he was extremely nervous because he was treating a man he knew very well. Had he not been able to save him, he would have felt terrible. His friend later told him that he had never seen Dr. Yadav so anxious before that incident.

Dr. Yadav has a lot to say about the intriguing issue of heart problems. He states that doctors have discovered the functioning of the heart, but no one has ever been able to understand the reason for its malfunctioning. There are many plausible reasons pointed out for heart problems, but not one reason has been proven yet. In his long career, Dr. Yadav has seen many heart patients who follow a healthy diet and do not consume tobacco or alcohol and yet they are suffering from heart diseases. Throughout the world, many researchers are working to understand the causes of heart problems. He hopes that soon they will have solutions to the problem.

Further, Dr. Yadav discusses the importance of the heart. He states that the working of the heart and its beats depend on the signals passed by the brain. However, if the heart stops beating for even thirty seconds, the brain cannot work. Other parts of the body can get rest; they can afford to be unwell, but the heart can never afford a break. Even the slightest discomfort to the heart may cause serious life-threatening problems. He believes that the relationship between the heart and the brain is interesting as it is popularly said, “When you listen to the heart you are happy, but when you listen to your brain, you progress.”

Dr. Yadav is a person who follows his heart. He cannot see other people in pain. He says that he has a fragile heart that is sensitive to other people's problems. He wants to help and support people to overcome their sorrows and pains. Dr. Yadav is unhappy about the fact that the treatment of heart disease remains extremely expensive in the country. Not everyone can avail of the facilities. He is happy with the initiative of the government to reduce the expenditure of treatment on heart disease, but he dreams that the cost of heart treatment becomes cheap enough so that everyone may afford it. It upsets Dr. Yadav that people have made the profession a business. People do not see love and affection in the profession, but business and money. The doctors do not intend to serve the patients but earn more and more money. Many doctors overlook the great opportunity they have received to serve others. They go ahead to quench their thirst for money.

Dr. Yadav has been teaching students about heart ailments for years. Every year, the number of heart patients is increasing in India. One of every three Indians is suffering from the problem of high blood pressure. One of every eight Indians is a patient of diabetes. He believes that the problem in India is severe. The country is sitting on a volcano, and it is a matter of time before it explodes.

Dr. Yadav has received many honours and awards for his contribution to medical science and research in India. His efforts to help others have been recognised by the government of Uttar Pradesh, which presented the Yash Bharathi award (the most honourable award of the state).

Rakesh gives credit to his parents and teachers for his success. He believes that his parents' teachings have made him a good person. He feels that he was fortunate enough to find good and supportive teachers throughout his life

who encouraged him and gave him important lessons in life. His father always told him that it is important to be a successful person, but it is more important to be a good person.

Another reason for Rakesh's success is his capability of managing time. He is punctual and follows his regular schedule. He does not waste time. Even in his childhood, he used to manage his time efficiently. He had a fixed time to play and study. While studying, he never thought of playing, and while playing, he never brought up studies. He believes that time is powerful and rules everything in life. He believes that "life is not a problem to be solved; it is a mystery to be lived."

Playing with words, Rakesh suggests that if a person keeps a few things in his heart, he or she will never face problems of the heart. There are five things a person has to remember wholeheartedly. Firstly, a person should exercise every day. Secondly, a person should always take care of his eating habits and consume healthy food. Thirdly, one should keep a check on the intake of salt. Fourth, one should stay away from tobacco and alcohol, and finally, a person should distance themselves from stress and should remain happy in life.

# Dr. Nirmal Kumar Ganguly, The most prominent Microbiologist of India



From a very young age, this child was mesmerised by great scientists like Einstein, Faraday, Graham Bell, Jagdish Bose, PC Roy, and others. Their stories amazed him, and their names were deeply engraved in his budding mind. The boy wanted to be like them one day. He was born into a family of famous and successful doctors, and he felt that a doctor had a routine job, and there was nothing challenging or exciting about being a doctor. A scientist, on the other hand, invented new things and explored the unknown. It was thrilling, and the boy wanted that thrill to be a part of his life. He wanted to immerse himself in the unfathomable depths of the ocean of scientific knowledge. Alas, family pressure made him become a doctor, but his quest for scientific research could not be stifled, and he became one of India's biggest microbiologists. This is the inspiring story of Dr. Nirmal Kumar Ganguly.

Prof Dr. Nirmal Kumar Ganguly is arguably India's most respected microbiologist. He has done extensive research in tropical diseases, cardiovascular diseases, and diarrheal diseases; he is considered an authority in the area of infectious diseases. He has been honoured with hundreds of national and several international level awards and recognitions, including the Padma Bhushan in 2008. In 2015, he was selected for the award of Helmholtz International Fellow by Helmholtz Center for Infection Research, Germany, for his vast contribution to the field of infectious diseases.

Dr. Ganguly was a prominent Biotechnology Research Professor in the Department of Biotechnology, Government of India, former President of the Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER) and Asian Institute of Public Health, Bhubaneswar, Odisha. He is also the former Director-General, Indian Council of Medical Research (ICMR), New Delhi; former Director, PGIMER (Chandigarh); and former Director, National Institute of Biologicals (Noida).

Apart from being a Fellow of all the Indian National Science Academies, he is also Fellow of several international organisations, including the Royal College of Pathologists (London), the Imperial College Faculty of Medicine (London), the Third World Academy of Sciences (Italy), and the International Academy of Cardiovascular Sciences (Canada).

Ganguly was born in 1941 in Gorakhpur, into a family of doctors. His maternal grandfather, his maternal uncle, paternal uncle and many other relatives were all doctors. "My uncle (father's elder brother) was my hero; he was a renowned doctor. His son, too, was a doctor, and he wanted to see me become a doctor too. Instead, I wanted to grow up to be a scientist. It was not possible to go against the wishes of the family in those days, and I had to become a doctor, but I remained a scientist and continued research," says Ganguly.

Ganguly had the dream of pursuing research in the field of chemistry and become a famous scientist in the world. He felt doctors were not as famous as scientists, so he was not very happy when he had to study MBBS. But gradually, he realised MBBS was not as bad as he thought because there was a paper in chemistry which fulfilled his interests in chemistry. He was doing well in that paper; another subject that he liked very much was physiology, and he did well in that as well; he learnt that there were new discoveries in the field of physiology too.

But Dr. Ganguly found another avenue to fulfil his wish to become a scientist. After getting his MBBS degree from the University of Calcutta, he went to Chandigarh to do MD from the Postgraduate Institute of Medical Education & Research. One day, he was at a relative's place for dinner. "Dr. S.C. Agarwal was also invited there. He was our teacher. He did his Ph.D. from Oxford and had discovered Diphteria toxin. Over dinner, he told me about a new subject of microbiology. He told me that several Nobel Laureates got the Prize in the field of microbiology. He advised me to take up microbiology because medicine was very common, but microbiology was new. I saw it as an opportunity to fulfil my interest in science. He had incidentally brought a form with him, and I filled it instantly. There was not much competition those days, and I got admission easily," narrates Dr. Ganguly.

With every passing day, Dr. Nirmal Kumar Ganguly was getting more and more absorbed in the study of microbiology. The subject of microbiology was also developing rapidly with innovations and discoveries. He specialised in immunology and learnt a lot in medicinal pathology and public health.

Throughout his career, Dr. Nirmal Kumar Ganguly has published more than 750 research papers so far and has guided 150 Ph.D. students. He is credited with several path-breaking research in the field of microbiology. He considers his research on the causes of Diarrhoea, his most significant success. "I proved that there is a central mechanism that controls diarrhea irrespective of the toxin that causes it. Diarrhea may be caused by different toxins, but the central mechanism is the same, and the disease can be cured by controlling this mechanism. Thus, one medicine can cure all types of diarrhea. Later on, this medicine was formulated by some researchers. I had also highlighted the importance of calcium in the oral dehydration fluid that is given to all diarrhea patients—I stated that calcium plays a vital role in this liquid. There was a long editorial when my research paper was published. I was happy," he proudly shares about his most significant success.

Dr. Ganguly's second-biggest contribution, according to him, is on rheumatic fever and rheumatic heart disease. "Sometimes, a sore throat is caused by a condition called streptococcus pharyngitis; it can be cured by penicillin. But sometimes children are repeatedly attacked by it or in the form of skin infection in the feet. This results in rheumatic fever or rheumatic heart disease—this disease is prevalent among the very poor population. Even today,

a lot of children in India die because of this. The reason is when this ailment occurs, the heart stops working, and there is the need for valve replacement. But it is very expensive, and they cannot afford it. The disease affects the heart and sometimes even the nervous system of children in the age group of five–fifteen, and when they grow up, their heart gets damaged, and they die. I established a genetic base for rheumatic heart disease. I found out why it happens to some while it does not affect some others, and based on those findings, and I established that one does not need to vaccinate all of a particular population to control the disease, one just needs to target some particular individuals.”

There are several other diseases on which Dr. Ganguly and his team have done extensive work. When he was the director of the Indian Council of Medical Research, his team and he had done a phase-I trial of the HIV vaccine. They designed and created a vaccine in India; it did not succeed, but for the first time, a complex vaccine was created in India. The trial was a step in the right direction, and it opened new roads for more research and development.

Dr. Ganguly has also played a vital role in making the medicine for kala-azar or visceral leishmaniasis available to poor people. There was a time when this disease occurred in Bihar, eastern Uttar Pradesh and Bengal. Though there have been no such cases in those areas in recent times, the disease still occurs in Nepal and Bangladesh. This is another disease that affects the poor. The medicines were very toxic and could only be either injected or transfused. Dr. Ganguly brought the first oral medicine of Miltefosine to India and conducted trials. The trial was successful, and it was inducted into the health policy of India, and it became readily available to poor people.

One thing that still keeps Dr. Ganguly going, like any other scientist, is further innovation. He now wants to devise a new diagnosis method for tuberculosis. “The current method, done through microscopy, does not diagnose twenty-thirty percent cases. I want to replace microscopy with new tests, which can give ninety percent results. The tests should also be possible to be conducted in village areas. The cases with lowest bugs, if detected early, can be cured easily.”

Prevention is better than cure is the first advice Dr. Ganguly has for people to maintain good health. “Eating or drinking should not be in excess. At least

thirty–forty-five minutes of exercise every day is a must. Hygienic habits like washing hands before and after meals and after ablution, drinking properly purified water, avoiding open defecation, etc.—by following these simple rules, we can keep a lot of diseases at bay.”

# Dr. Ambrish Mithal, the Pioneer of Endocrinology in India

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Salt is one of the cheapest products in the Indian market. There are many reasons for the low market price of Salt. It is the most abundant and easily available substance in the country. One of the popular beliefs among people is that Salt can never be expensive in the country because the father of the nation, Mohandas Karamchand Gandhi, who led a historical march to Dandi against the heavy taxes levied on Salt by the British. However, Salt was not iodised, and this led to the suffering of people with a deficiency of iodine, which caused several serious diseases, such as Goitre. Iodisation of salt in India started in the 1990s, and that's why Goitre was common.

In recent times, the situation has improved significantly. The number of patients suffering from iodine deficiency has reduced drastically. In the 1990s, researchers, scientists, and doctors worked hard to make iodised Salt available all over the country so that no one would suffer from iodine deficiency. It was the result of the combined efforts of doctors, researchers, and scientists, which brought the numbers down. Dr. Ambrish Mithal is one of the men who were responsible for the success of this initiative, which saved a lot of lives.

Many cases of bone-related diseases were reported in a village of Unnao district of Uttar Pradesh. While conducting research, Dr. Mithal discovered that the drinking water in the village was contaminated with fluoride, which caused bone-related diseases. His research attracted the attention of common people and state governments towards the issue of unsafe drinking water. The government took note of his research and instructed authorities to test the water and ensure safe drinking water to people.

Dr. Ambrish Mithal worked with several Non-Governmental Organisations to spread awareness about the importance of calcium and vitamin-D. He established the first bone-density measurement system in India. He identified many unknown diseases and spread awareness to prevent them. He has also been responsible for spreading the cures and treatment of these diseases in all the corners of the country.

The story of a doctor-cum-social worker, Ambrish Mithal, began on 29 March 1958 in Lucknow, Uttar Pradesh (UP). His father, Devkinandan Mithal, was the secretary at the Vidhan Sabha of Uttar Pradesh. His mother, Rukmini, was a housewife. Devkinandan and Rukmini were residents of Meerut, but due to his government job, he had to relocate at Lucknow. The couple was blessed with three sons and a daughter. Ambrish was the youngest child in the family.

Mr. Devkinandan Mithal, Ambrish's father, was one of the most influential people of his time in UP. He was the third secretary of the Vidhan Sabha, a post he served for eighteen years. Even though his father was a bureaucrat, the family always led an austere and disciplined life. Devkinandan and Rukmini never stopped their children from chasing their dreams. They encouraged their children to follow their passion. Interestingly, his parents share the name with the famous Hindu mythological couple Krishna and his wife, Rukmini.

Ambrish grew up in a well-organised home where his daily routine was set to improve his time management skills and increase productivity throughout the day. In winters, his study time was set from six to eight in the evening, and in the summers, the time was from seven to nine. His routine allowed him to manage his studies and pursue his hobbies at the same time. His parents never stopped him from sparing time to play, as he was very fond of playing cricket. He never wanted to become a professional cricketer, but every day, he used to play cricket with his friends.

Rukmini was responsible for maintaining discipline at home. According to the daily routine, the whole family used to dine together. On the dinner table, his father used to tell the family about Indian politics and discuss political issues with them. Ambrish was always pleased to listen to his father talking about politics.

Ever since his childhood, Ambrish has listened to discussions of science and mathematics at home. Both his brothers were students of science and mathematics, which had a significant influence on him. The elders in his family had encouraged Ambrish to clear the entrance examination and enrol in the Indian Institute of Technology. However, Ambrish was more inclined towards biology. This interest was driven by an incident in the ninth standard, which changed his life.

He had fallen severely ill; his kidneys were not working properly. He was bed-ridden for a few months. Many reputed doctors in Lucknow treated him, and gradually, his health recovered he became better. The role played by doctors in improving his health left a deep impact on Ambrish's mind. He was thankful to the doctors for their extraordinary support through the hard times. He decided that he wanted to become a doctor. After spending eight months confined to the bed, he realised that he wanted to serve and treat patients who will bless him the way he had blessed his doctors.

Ambrish began to work towards his career goal. He knew that in order to become a doctor, he would be required to work hard. He studied hard to secure a state rank in the tenth standard examinations. He still remembers the day when the newspapers printed his photograph after the declaration of the results. In eleventh, he opted for biology as his main subject. Based on his percentage in class 12 and his marks in the pre-medical test, he received admission to Kanpur Medical College. However, Ambrish was dissatisfied

with his performance in the twelfth standard, as he could not secure the first rank in his boards and the pre-medical examination. He felt that he did not put his complete efforts.

Soon after joining the degree course, he realised the intensity of a career in medicine. He understood that a doctor was required to commit to the profession without any considerations for time. The job required twenty-four hours of dedication. It was challenging, and the work pressure remained throughout the career. However, determination and commitment can overcome any challenge. Ambrish was motivated to work harder.

In his days of MBBS, Ambrish noticed that many people used to cram the textbooks. He was unhappy with this method of learning because it had no benefit other than passing. Unfortunately, the people who crammed books secured the highest marks, which always disappointed Ambrish. Another disturbing truth of MBBS in his life was the fact that they were taught many things that had no relevance to their course or career. He never liked cramming or non-related lessons, but he was part of the old educational system. He believes that the education system was too orthodox, and there was a need for change. He suggests that had the curriculum been changed decades ago, the Indian medical field would have been more successful.

In his college days, Ambrish was lucky enough to find his soul mate. He met Dr. Ranjana in medical college and married her later. Dr. Ranjana is an ophthalmologist (eye specialist). She currently practices at the Indraprastha Apollo hospital as a 'Senior Consultant and Eye Specialist.' Ambrish believes that his college life is connected to his wife, which makes his college life unforgettable.

After completing his MBBS, Ambrish wanted to study further. In those days, cardiology was one of the most popular fields. Cardiology was striding forward, and there was a heavy demand for cardiologists. The field of cardiology was not only a more respectable place, but it also promised better financial prospects. Ambrish's family and acquaintances suggested him to pursue his career in cardiology. He was registered to specialise in the field of cardiology for his MD. However, Ambrish never believed in following the flock. He wanted to rise above the set trend and stand out from the crowd. He did not want to choose the road where many people had walked on. He wanted to

do something new in life. Ambrish gave up the MD course in cardiology and turned towards Delhi.

Ambrish's life did not become any easier in Delhi. He endlessly searched for jobs in Delhi. Finally, his search took him to AIIMS. His life changed in AIIMS as many doors of opportunity opened up for him. In those days, some doctors had collaborated to set up a program to eliminate Goitre. These doctors required dedicated professionals for research and study purposes. Since the work was concerned with the health of the masses, Ambrish decided to work for the program. In those days, Goitre was a widely spread disease. In goitre disease, the deficiency of iodine causes swelling in the thyroid gland, which inflates the throat to an abnormal size. Mostly, this disease was prevalent in regions where drinking water did not contain sufficient amounts of iodine.

After enrolling for the program, Ambrish received the opportunity to meet goitre patients in Uttar Pradesh, Bihar, Assam, and other states. He spoke to the patients to understand their problems and study the causes and effects of the disease in depth. During his research, Ambrish became aware of many significant issues. Ambrish came to know that due to the deficiency of iodine in pregnant women, the newborn kids were either born with Goitre or with other physical or mental diseases. His research also revealed that the lack of iodine was causing the Cretin effect, which leads to incurable bone diseases in infants and children. He witnessed the horrors of iodine deficiency in children whose bones were bent out of shape and prevented them from even walking.

Ambrish collaborated with professors and doctors of different institutions such as AIIMS and Sanjay Gandhi Postgraduate Institute of Medical Sciences, to prepare for the launch of the All India Iodised Salt program. The purpose of this program was to ensure that Salt sold in India contained iodine as a mandatory ingredient. It was the success of this program that curbed the deficiency of iodine and diseases caused by it.

The program was essential and proved to be useful, but the execution of the program was extremely difficult. Many organisations objected to its launch. They accused the doctors of AIIMS and other institutions of being under the influence of foreign companies. It was argued that the doctors had joined hands with companies that produce iodide salt. They tried to prevent the implementation of the program. They suggested that the doctors had introduced such a program for their benefits. Several organisations argued

that this program would hamper the Indian salt companies and might damage the Indian economy. Ambrish states that people who were protesting against the program had never stepped out of the comforts of their homes and visited the rural areas of the country; they were unaware of people's problems and the repercussions of the deficiency of iodine. However, the government knew the importance of the program, so they implemented it without a second thought.

AIIMS introduced a super specialty course in Endocrinology. In 1987, Ambrish became the first doctor to receive the DM degree in endocrinology. When Ambrish completed his course, there were only a handful of doctors who were aware of the field. His family was completely unaware of the field and was concerned about Ambrish's future. In order to find a solution, Ambrish's mother met with a professor of the Lucknow Medical College. The professor told his mother that Ambrish was an intelligent and sharp-minded person; he said that since Ambrish had chosen endocrinology, he would only be able to pursue research in the field. Rukmini was upset after listening to the doctor. She told Ambrish to continue his passion but suggested him to help people and treat patients in every possible way, in addition to research. Ambrish was taken aback after being told what the professor had to say. When he chose the field, he thought that the field was narrow, and he would only be treating patients of diabetics and thyroid, but as his career progressed, he discovered that the field was an integral part of every Indian in one or the other way.

Dr. Ambrish Mital joined the Sanjay Gandhi Postgraduate Institute of Medical Sciences after completing his DM. While working with the institute, he made some outstanding contributions to the health development of the country. One day, a sixteen-year-old boy was brought to the hospital. His bones had bent, and he was unable to walk. The orthopedic tested the boy to find the cause of the problem, but he could not find anything in the reports. The doctor understood the problem and speculated a disease, but he was not able to diagnose him. The doctor was unsure about the problem. He thought that the problem was not with the bones but hormones, so he referred the patient to Ambrish.

When Ambrish saw the patient, he was baffled and shocked. The patient was in terrible condition. The shape of his body was curved. Ambrish could not understand the problem, but he remained adamant about getting to the root of it. He suggested a blood test and several other tests for the patient. The reports made it clear that the disease was related to bones and caused by

malnutrition or an unbalanced diet. Even though the problem was related to bones, Ambrish could not dust his hands off because he had already vowed to find the cause. Ambrish's curiosity took him to the library, where he explored all the books he could. Finally, he found a book that mentioned a deshaped body.

To find more about the disease, Ambrish decided to explore the boy's village, Asoha village of Unnao district. He rode his scooter to land in a village that held a horrible picture for him. When he reached the village, he was shocked to see that many people were suffering from the bone deformity. The problem was neither age nor gender-related; everyone was the victim of the disease. He discovered that people in Unnao and nearby regions used to consume groundwater from hand pumps and wells. Ambrish immediately sent the drinking water sample to the laboratory. The results from the laboratory explained the problem to Ambrish—the drinking water of the village consisted of an escalated fluoridated level. The fluoridated water forms a layer on the bones and weakens them. The weakened bones were causing deformed shapes of the village inhabitants.

Once Ambrish discovered the case in Unnao, he attracted the attention of the country and the whole world towards the harmful effects of consuming fluoridated water. He decided to run a campaign to facilitate safe drinking water. As a result of his efforts, the government ensured the supply of safe drinking water in rural areas of various states. The research revealed that at least sixty million people have suffered from diseases due to fluoridated water. Different programs and campaigns were organised throughout the country to ensure the supply of drinking water. However, there are still many villages that are consuming fluoridated water due to the absence of fresh and purified water. He states that people are helpless, so they are forced to drink poison instead of dying of thirst.

Ambrish has conducted many types of research and saved millions of lives in his career. To laud his essential research on fluoridated water in Uttar Pradesh, Harvard Medical School invited Ambrish him to deliver a lecture. The university requested him to conduct similar research in their laboratory as part of the Fogarty fellowship in 1993–94.

In 1997, through Sanjay Gandhi Postgraduate Institute of Medical Sciences, Ambrish established India's first bone density measurement system.

He was the first Indian to receive training in bone density management in Japan as a JICF fellow. Ambrish was the first Indian doctor to reveal the threat caused by osteoporosis. In osteoporosis, the bones deteriorate or become fragile due to low bone mass and bone tissue loss. His research discovered that over fifty million people are affected by the disease. Research conducted by Ambrish detected that several people were suffering from various diseases due to the deficiency of vitamin-D. To prevent the deficiency of vitamin-D, Ambrish joined hands with several organisations. He initiated the process of making milk and edible oils containing vitamin-D. He spread awareness regarding the danger of the diseases and told people about its prevention, treatment and cure.

He is the first Indian ever to work with several international health organisations such as Global Task on Osteoporosis (World Health Organisation), Asia-Pacific Advisory Council and Board of Governance of the International Osteoporosis Foundation. He served as the chairman of the Endocrine Society of India. He was also named the head of the Indian Society of Bone and Mineral Research. He has also been the head of Bone and Joint for more than a decade.

Dr. Ambrish Mithal's research has benefitted the whole nation. Recognising his efforts, many Indian and foreign institutes have honoured and awarded Dr. Mithal. In 2004, he became the first and only Indian to be awarded the 'Boy Frame Award' by Society of Bone and Mineral Research. In 2005, he was awarded the Health Professional Awareness Award by International Osteoporosis Foundation. In 2015, the Indian government appreciated his efforts and honoured him with the 'Padma Bhushan' award, India's third-highest civilian honour. Dr. Mithal received the BC Roy Award in the year 2017. BC Roy Award is the highest recognition for medical practitioners in India.

Dr. Mithal states that he has treated thousands of people in his career. Every day, he faces tough challenges in his life. Most of the patients who visit him have already tried and tested other doctors. Many times, no one can diagnose the disease, and that makes his job even more difficult. He narrates two such incidents that he will remember throughout his life.

A child who dwelled in Gorakhpur was suffering from a disease. Her bones became weak and sour. He used to fail extreme pain in her bones. He consulted

several doctors who tested her for many diseases but could not figure out his illness. A doctor suggested his parents consult Dr. Ambrish Mithal. When the patient reached Dr. Mithal, he was in a critical condition. Ambrish collected blood samples and conducted several tests on him. The reports declared that he was suffering from hypoparathyroidism. His blood showed a low amount of calcium in his body. Ambrish treated the child, and in a few days, the boy recovered. Ambrish tells that the boy has grown up and is leading a healthy life in the USA.

In another incident, doctors conducted several tests on a woman but could not detect the disease. The woman lived in Delhi, and she was facing problems in her bones. She had unbearable pain in her bones, which made it impossible for her to walk. She used a wheelchair. She listened to the suggestion of some of the doctors and consulted Dr. Mithal. As soon as she saw him, she started crying. She conveyed her feelings and her situation to him, and it became clear that he was her last ray of hope. Dr. Mithal suggested her to take some tests and x-rays. The reports depicted that the woman had several fractures. The blood sample revealed that the deficiency of vitamin-D caused the weakness of bones. Dr. Mithal began to treat her. Medicines prescribed by him worked miraculously for the woman. She recovered from her disease, and her bones became strong. She was able to walk again. Within three months, she completely recovered from her disease. The woman was grateful to Ambrish. He could see the joy on her face. Ambrish states that nothing is more important for him than seeing his patients happy and satisfied with the treatment.

The man who made the endocrinology popular in India, and spread awareness regarding many diseases, Dr. Mithal, is currently the Chairman & Head of Endocrinology at Max Healthcare. He earlier served at Medanta-The Medicity Hospital. He was the head of the Endocrinology and Diabetes department. He worked for many years at Indraprastha Apollo Hospital. Many people criticised him for moving from a government hospital to a private hospital. Still, Ambrish does not pay any heed to the criticism and believes that he took the right decision. He states that it does not matter where he works because neither his job has changed nor his method. He adds that wherever he works, he must serve and take care of the patients. He suggests that medical aspirants should become doctors only if they wish to help the patients. He believes that people who will join the profession seeking money and recognition will only meet disappointment. Ambrish reveals that when he

receives an award, naturally, he is happy. He feels proud of the honour that the world becomes aware of his work. However, awards are not as special as the happiness of his patients for him. Doctors should never forget that they must help and serve their patients. Every doctor should have one goal that their patients should be satisfied and content with them.

Dr. Ambrish Mithal does not have any aim in his life, but he has some priorities in life. Firstly, he wants to provide better services to the patients. Secondly, he wants to give suggestions and treatment to patients through technology so that people do not have to visit hospitals regularly, like via Facebook, YouTube and WhatsApp. Lastly, water is the only medicine that can cure the diseases that Dr. Mithal has devoted all his life to. As long as there is safe drinking water, every patient will remain hale and hearty.

## Dr. Chandrashekhar Yadav, who became the top most Orthopaedic Surgeon because of his Mother's Illness

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The protagonist of an inspiring success story, Chandra Shekhar, was born into a middle class 'Yadav family' of Agra City in Uttar Pradesh. His father, along with three brothers, used to run a milk dairy business as a means of livelihood, while his mother was a homemaker. Till the time his father was in a joint family, things were going smoothly, but the economic condition was threatened upon separation of the three brothers. The family went through a tough time and was in an acute crisis. Arranging for even two meals a day was a big struggle. Chandra Shekhar's father was a simple man with a strong belief system and high integrity. Never had he harmed or cheated anyone. After the disintegration of the brothers, Chandra Shekhar's father took numerous small

business ventures, but none of them proved to be profitable. Chandra Shekhar says in a cheeky manner, “My father did not have an entrepreneurial approach. He was an epitome of honesty. He never indulged in mixing water in milk or any kind of adulterations in ghee. Even while weighing, he did not know of any tricks to cheat customers. This was the sole reason he could not earn any profits in any of his business endeavours.” His mother was forced to sell off her jewellery to feed the kids. One day, the worst situation arose, and there was nothing to sell off further. There were many people in the city who respected Chandra Shekhar’s father’s honesty and integrity, and they were the ones who provided monetary help to maintain the subsistence level of existence.

All the children were sent to Hindi medium government schools since the family was not economically sound enough. Chandra Shekhar was admitted to Rukmani Devi Model School. He was a very bright student and was very dear to his mother. His mother was suffering from Arthritis since her childhood. With her advancing age, her condition got intensified, and her joints pain was becoming unbearable. Chandra Shekhar had closely seen and observed his mother suffering in pain since his childhood days. Despite her extreme pain, she never fell short in bringing up her children. Those were the days when there was no cure for Arthritis. There was neither medicine available to get completely rid of the pain nor could operation be performed to replace the knees. Often, his mother would ask him to become a doctor and cure her joint pain. These words created a deep impact on the innocent child, who was keen to become a doctor from that time onwards. Chandra Shekhar says, “In my childhood, there was no dream other than that of becoming a doctor. In those times, children hailing from low-income families were made to work to support their families. Had it not been an ardent desire of my mother, perhaps I could also have been in some trivial jobs.”

He was so firm and passionate about becoming a doctor that he would even study in street lights along the roads. Chandra Shekhar narrates, “For years, we did not have any fan or bulb. Electricity supply was very irregular, and even when it was there, we could afford only one bulb. So, I had to study under the street lights.” Near his residence, there was a ‘steel box manufacturing factory’ that used to make a lot of noise during the day due to the usage of cutting equipment and hammers. All this was very disturbing, and he could not maintain his concentration while studying. Because of this, he had to wait till the evening so that he could go on the terrace and study under the

street lights. His hard work and determination helped him score good marks in high school examinations, and as a result, he was admitted to the popular 'Maharaja Agrasen Inter College.'

Many students used to take coaching classes to crack the pre-medical entrance exam. Chandra Shekhar could not even go to coaching due to financial constraints. He proved his worth by securing admission in the medical college with his hard work, sharp mind and intelligence. Chandra Shekhar recollects, "I did not attend coaching, but many of my good friends used to go. Out of these, few of them used to share their study material with me. They used to extend help by lending books, and I used to clear their doubts in return."

The entire family celebrated his success when he got exceptionally high marks in the pre-medical entrance exam and secured a seat in a medical college of his city Agra. He shares the sweet memories of those days, "not only our home, but the entire street was celebrating my success. People were elated as they discovered that a boy from their street is going to be a doctor soon." No one could ever become a doctor after him from that street.

The days of his medical education at Sarojini Naidu Medical College were also very challenging. Before entering college, he had always studied in Hindi medium schools and college, and the entire curriculum was in English medium. Gaining command over the English language was another challenge for Chandra Shekhar. In medical college, most of the students were from affluent families. Being from a humble 'Yadav family,' it took him some time to socialize with his classmates, but later, the friendships he formed were strong enough. Chandra Shekhar never hesitates in accepting the fact that he could have never crossed the ocean of his challenging journey in college without the help of his friends. He could not afford to stay in the hostel, so he used to make use of his friends' hostel rooms. On reflecting on his hostel days, he says, "Exactly three months before the exams, I used to begin my rigorous preparations. When I would study, I only used to take breaks to eat and to sleep." Even more impressive is the fact that during his MBBS days, apart from academics, he used to discuss the subject matter of various political, economic, social, spiritual and psychological issues. Besides, he often used to debate issues like capitalism, socialism and economic inequality prevalent in society.

When he was pursuing his medical education, his mother's issue of Arthritis became incurable. She was a heart patient too. His mother passed away while Chandra Shekar was in college. The most regretful thing for him was that he could not treat his own mother. However, later in his life, he became a specialist doctor of Arthritis and cured thousands of people afflicted with this disease. Even today, he treats cases of deformed bones and continues to add happiness to the lives of such victims. He says, "It gives me immense pleasure that I did my specialization in orthopaedic, and I became a doctor for treating Arthritis. What I couldn't do for my mother, I have been doing for thousands of people."

He is now Chairman of the Department of Joint Replacement, Sir Ganga Ram Hospital, New Delhi. He worked as Professor and Knee and Hip Joint Replacement surgeon at AIIMS Delhi for twenty-two years. While working in the orthopaedic department in AIIMS every day, he treated different types of complex cases of people who have severe Arthritis. In India, he tops the list of doctors who are renowned for knee- and hip-replacement surgery. In his medical career, he has performed numerous complicated operations and gifted people healthy life. He says, "In AIIMS, we mostly get serious cases that cannot be treated elsewhere. When local doctors cannot handle the case despite all their knowledge, they refer the case to AIIMS. We get patients in a wheelchair, but after treatment, they move out independently on their legs."

Additionally, he is engaged in visiting several hospitals and training young doctors. He is also a brilliant researcher—he has published various research papers in leading magazines and journals. His research work has changed the trends in the field of joint replacement on many issues.

Often it is seen that knee and hip pain are very dangerous that they curtail all the freedom of walking. In severe cases, the patient is forced to wheelchair life or bedridden. He has routinely treated such cases at AIIMS and contributed to a great extent in alleviating their standard of living.

As a doctor and human being, there are many achievements and accolades attached to him. One of them was scaled when he went up to the high altitude of Leh to perform operations for knee and hip replacement. This commendable work got his name registered in 'Limca Book of Records'—he conducted a knee replacement surgery at an altitude of more than 11000 feet from sea level in adverse conditions. Nobody has performed such knee and hip replacement

operations at high altitude regions before Chandrashekhar. So far, one hundred seventy-six ( 161 total knee and 15 total hip ) joint replacements have been done till 2019. For our Leh-Laddakh work, British Medical Journal in an editorial in 2016 has appreciated and adjudged the best team of South Asia for joint replacement. These people have to spend a lot on getting the desired treatment in AIIMS Delhi or Chandigarh. In 2013, he went there with his team and all the required instruments that weighed around 1000 kilograms. His name was registered in golden letters in the history of medical science after conducting knee operations on such a mass level. The team of doctors had to face many challenges. One such challenge was the weather—even the doctors have to use an oxygen mask in such places. In places like Leh, doctors are required to be physically strong, along with mental preparedness. Despite all the difficulties, he successfully completed the mission. He has already taken a pledge to continue this legacy in Leh.

Because of his commendable contributions in the field of medicine, Chandra Shekhar was Honored with the highest award in the field of medicine Dr. B C Roy national award by President of India at Rashtrapati Bhawan in 2015. He is also honoured with Uttar Pradesh's highest citizen award 'Yash Bharati Puruskar.' by the chief minister in 2016. Besides, the very prestigious 'Loknath Sharaf Memorial Award' is also in the list of his achievements. He says, "It gives me immense pleasure to be honoured with these awards as it recognizes my work, but people see me as a successful and dependable doctor not because of my awards but because of my capabilities as a surgeon, and that is perhaps my biggest achievement. I am very happy and content with the fact that I have received so much respect and love from people."

While working with AIIMS, he has done many such works that nobody has done in India ever before. He introduced a training program on a cadaver in joint replacement in India in 2009. This was the first unique course in India. Since then, he is doing these programs on a regular basis. In AIIMS, it is only because of his efforts that joint replacement services could be upgraded, set new trends and standardized. The experts of medicine claim that Chandrashekhar has done significant work in eliminating the wrong practices while performing knee and hip operations. He has even started an awareness campaign to make people vigilant about the quacks and doctors who cheat and mislead patients in the name of knee and hip replacement surgeries. It is because of his efforts such malpractices have been curtailed to a certain extent.

Chandra Shekhar has not only proved his mettle in Leh but also in many other places across India. He has helped people in adverse situations of medical needs. When Gujarat was struck by the earthquake, he went there to render his services by providing them with medical facilities. When there was massive destruction in Uttarakhand by torrential rains and landslides, then, too, he went to that area to extend his helping hand to the affected people. He participates very actively in the programs that are organized by the government, NGOs, ministers, and other people in social interests. He says, “Society has given me a lot. All my education was free of cost. Besides, I have got a lot of recognition and respect from society. Because of this, I want to serve humanity in every possible manner. I want to fulfill my moral and social responsibility towards society.”

Chandrasekhar's personality has so many praiseworthy traits, but the most significant is that despite reaching the stage of fame in his field, he is still grounded. He has no pride for his success and wealth has never changed his values of life even after joining Sir Ganga Ram Hospital as Chairman, Department of Joint Replacement, New Delhi. Even in his second inning, money is not a priority. His passion for serving humanity is truly inspiring. His determination to achieve his goals is very high, and this is perhaps the reason he is often seen advising people, “If you want to attain the goal, then you have to be firm and determined. If one's vision is clear, then he/she will certainly achieve the goal, despite all challenges on the way, through hard work and persistence.”

Dr. Sanjeev Bagai,  
the Legendary Pediatrician,  
came to Delhi with 6 Rupees in the Pocket and  
created history

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In the 1990s, a six-year-old boy was brought to the hospital in critical condition. He was suffering from prolonged & undiagnosed fever, but he was not an ordinary case of fever. Considering his complicated condition, none of the doctors wanted to take the case. Even his parents were aware of the severity of his illness. They knew that only a miracle could save their son. He had multi-organ failure with fulminant hepatitis. Under such difficult

circumstances, a young doctor took it upon himself to save the child's life. He drew several cultures from his body and tested the samples. Without waiting for the reports, he admitted the child to the hospital. The samples drawn of his liver functions showed extremely disappointing results.

The human body consists of a yellow compound called Bilirubin, which occurs in the normal catabolic pathway that breaks down heme in vertebrates. The catabolism is an important process in the body's clearance of waste products that arise from the destruction of aged red blood cells. Bilirubin acts as a cellular antioxidant in the catabolic process. The bilirubin level in a normal human body should not exceed 1. However, in the case of the small boy, the bilirubin levels had touched 55. Such a high level of bilirubin reflects a severe case of jaundice with high fatality.

As soon as the child was admitted, the doctors began to treat him, but his condition did not show even the littlest of improvement. The child's health further deteriorated as his kidneys stopped working. After a few days, his lungs and liver also gave up. The doctors felt that the child might need a liver transplant, but under such a complicated condition, it was impossible to perform the transplantation. The child's parents were distressed. They had lost all hopes of seeing their son healthy again. The young doctor was concerned and anxious because the treatment was not working. However, neither did he lose courage, nor did he lack experience. He had treated many children successfully, but this challenge was the most formidable challenge he had faced so far. The doctor brought his lifetime experience to use. He did not give up on the patient and continued to treat him in the best possible way. Finally, his hard work paid off as the child's health showed some improvement. Gradually, the fever has worn out, and within a month, the child's health was restored.

The child's parents had witnessed a miracle. They knew that the doctor had snatched their son from the jaws of death. When they saw their son, they were overwhelmed with joy. Their son was hospitalised for a month and for a long time, there was no ray of hope for a long time. They thanked the doctor and praised him for his efforts. The child recovered from the illness and led a healthy life. He completed his schooling with high grades and became a successful professional. A few years later, he invited the doctor who had saved his life in his childhood to his own wedding. He introduced the doctor to everyone and informed them that he would not have seen his wedding day without the doctor. The hero of this story is Dr. Sanjeev Bagai, who has faced

several similar challenges in his medical career and achieved success almost every time.

In 1990, when Dr. Bagai came to Delhi, he had only Rs. 6000/-, in his pocket. He worked hard to become successful in his life. Hard work is the key to success, but many failures come before success. An individual who is afraid of failure cannot become successful because he or she will never be able to gather the courage to take the initiative to succeed. It is only when the fear of failure is lost that an individual can run faster and freely without the fear of falling. Dr. Bagai follows what he preaches, and it is his initiatives and fearless efforts that made him a successful doctor.

Dr. Sanjeev Bagai states that in every doctor's life, there is a time when they face extraordinary cases that require unparalleled dedication. These experiences are the best teachers in a doctor's career. The doctor learns many experiences from these cases. For Dr. Bagai, the case of the six-year-old boy was one of those momentous cases. In his long career, Dr. Bagai has treated thousands of children, and he wouldn't have attained such success and fame if he did not have the determination and dedication towards his practice.

In 2010, Dr. Sanjeev Bagai was part of the team of twenty-seven doctors, which separated the conjoined twins Sita and Gita. There are only handful cases of conjoined twins in the world. It develops when an early embryo partially separates to form two individuals. Most of the conjoined twins are still-born, or they die shortly after birth. Cases that reach the operation theatre are rarely successful. Doctors of different fields join hands to form the team to perform such complex surgeries.

Sita and Gita were born to a low-income family in a village of Bihar. The two sisters had different heads, hands and legs, but they were joined to each other through the waist. They shared a liver, pelvis, kidneys, genital and a spinal cord. Their parents visited several hospitals to separate the twins, but doctors found the case extremely complicated and refused to operate. The twins had very little time as their health was continuously deteriorating, and the doctors told them that they would not be able to survive if the two sisters were not separated soon.

When Dr. Bagai heard about the twins, he took an important decision that would change the life of the sisters and his own. He initiated a step to begin the procedure of separating the two bodies. However, the task was herculean,

and one man alone could not perform the procedure. He spoke with several specialists and convinced them to be a part of the team. A team of twenty-seven doctors was formed, which consisted of a neurologist, orthopaedician, and various other specialists. The team decided to perform the surgery in Batra Hospital. Since the family was poor and could not afford the expenditure, Dr. Bagai convinced the doctors to perform the surgery without charging any fees. He further convinced the hospital to contribute to the other expenditures.

On the decided date, the team of doctors operated on the eighteen-month-old twins for twelve hours. During the operation, the doctors discovered that the case was more complicated than it appeared. Many internal organs of the twins were conjoined. In order to carefully separate the two sisters, the doctors performed multiple complex surgeries. In the first operation, they separated the bodies of Sita and Gita. After separating the two bodies, the second surgery was performed where the internal organs were created through a 'reconstructive surgery'. Numerous other procedures followed this. The collective effort of the team was successful. Both Sita and Gita survived the operation and recovered from the surgery. The surgery became the symbol of the medical excellence of Indian doctors and surgeons. It became one of the most popular surgeries all around the world. The operation was recorded in golden words in the history of Indian Medical Sciences. Several media channels refer to this surgery as one of the rare miracles of medicine. However, undeniably, it was the initiative of Dr. Bagai and a collective effort of twenty-seven doctors, which made such a complicated surgery possible and successful.

Reflecting on his past, Dr. Bagai revealed that as a child, there was no family pressure on him to be a doctor. He was born into a middle-class family, and his father worked at Hindustan Petroleum. Since his father was a government employee, their family was never settled in one place for a long time. This gave Sanjeev an opportunity to dwell in cities such as Chandigarh, Pune, Lucknow, Kolkata, and Mumbai.

Sanjeev was a bright student and secured good grades in every class. In junior college, his main subjects were Mathematics, Physics, Chemistry, and Biology. Usually, students prefer either biology or mathematics, but Sanjeev opted for both. He wanted to keep all the windows open. He scored excellent marks in junior college and received a seat in both engineering and medical colleges. He chose to enrol in medical college and become a doctor.

Sanjeev received admission to Seth Govardhandas Sundardas Medical College in Mumbai. G.S. Medical College was established in 1926 and is one of the oldest medical colleges in Asia. Reflecting on his MBBS days, Sanjeev states that it was the best time of his life. During those days, he had three priorities in life. Firstly, he wanted to remain focused on education. He maintained his concentration and studied hard. In five-and-a-half years of his education, he never had a backlog in any examinations. Secondly, he loved to play cricket ever since his childhood. He had played professional cricket in his school days. He wanted to continue his love for cricket in his medical life. Thirdly, he wanted to maintain healthy eating habits. He realised that if he wanted to continue both studies and cricket, he required a good body and mind.

Sanjeev was always fascinated with children. He adored children and loved to spend his time with children. In his days of MBBS, the children's ward was one of his favourite places. It interested him to test the infants and young children for various tests and identify their problems. He believes that it is extremely challenging to figure out diseases in children and infants because they cannot speak and tell the symptoms. However, he wanted to make this challenge a part of his life.

During his MBBS, he decided that he wanted to be a paediatrician. He enrolled for MD in Mumbai At the prestigious Wadia children's hospital. Sanjeev tells that while pursuing MD in Mumbai, there were many cases where kidneys of children stopped working. The hospital was full of such cases, and doctors remained busy handling such cases. The head of the department was a Paediatric nephrologist. Under her influence, he opted to study the same subject. The subject enhanced his expertise on the issue of children's kidneys and urinary tract.

In the last few decades, Dr. Bagai has treated many children. His career has been a difficult roller coaster. Even though he has saved many lives, but there have been cases where either the child was suffering from an incurable disease or the parents did not bring the child to the doctor at the right time. He feels upset about the lives he could not save. Dr. Bagai believes that being a doctor is the most difficult profession in the world. He thinks that none of the other professions are as demanding as this one.

Dr. Bagai reveals that it is extremely difficult to become a doctor. An aspirant has to work extremely hard to receive admission to a medical college. After securing admission, one has to study for five-and-a-half years to complete the bachelors. The specialisation further absorbs another three years of a doctor's life, followed by another three years of super specialisation. In order to gain experience, a doctor has to work at a hospital. They become professional doctors, not before the age of thirty. Once an established doctor begins to practice, most of their days are spent in treating patients. Under such circumstances, it becomes extremely difficult to spare time for family. However, he can find time for his family through efficient time management and discipline. He leads a disciplined life and has a fixed time for every daily task. He wakes up early in the morning. He tries to complete most of his daily chores and duties by the first half of the day. He has many responsibilities and roles as a doctor, as a son, as a husband, as a father. In order to bring justice to all his roles, he tries to balance his responsibilities by managing time and enjoying his work. He does not appreciate laziness or lack of punctuality. He leads a disciplined life and recommends his patients to follow discipline in life in order to bring stability to their lifestyle and health.

For his extraordinary contribution to the field of paediatrics, Dr. Sanjeev Bagai was awarded the Padma Shri by the government of India. He has been honoured with the greatest award in Indian Medical Sciences, the Dr. B.C. Roy award. In 1991–92, he became the fellow of The Prince of Wales Children hospital, Sydney, at the age of 27. He believes that it was his greatest achievement. The honour is awarded to usually old doctors who are extremely experienced and accomplished. However, he received it at a very young age. He received the opportunity to work in the hospital with some of the greatest doctors in the world. Dr. Bagai states that if a doctor can work in The Prince of Wales, they can work anywhere in the world.

Dr. Sanjeev Bagai has performed thousands of surgeries, procedures in his career. He has been connected to Indraprastha hospital, Rockland hospital and Batra & Manipal hospitals for a very long time. He is the chairman and managing director of the Nephron clinic and health care. Currently, Dr. Bagai is working in Administration & clinical medicine.

Dr. Sanjeev Bagai shares the secret, which has made him successful in his career. He reveals that there are three steps to identify medical problems

with children. First, the doctor is required to inspect the infant with extreme care. Delicacy is required because infants are fragile, and even the slightest recklessness could cause injury. Secondly, the doctor should interact with the parents to understand signs and symptoms. Such an exercise will provide a recent medical history and activities of the child who may prove useful during the treatment. Thirdly, the doctor needs to perform tests to confirm his theory and concerns.

His passion also includes digital smart technology, innovations, artificial intelligence, amongst others. He is a key orator in many National and international forums.

**Prof. Dr. Sanjeev Bagai.**

MBBS(bom), DCH(bom), MD(paed),

MNAMS(paed), DNBE, MIPA(USA),

FSCH (Australia), FIMSA., PhD.hc.(USA).

Sr. Consultant Paediatrician and Neonatologist and Pead. Nephrologist.

Chairman, Nephron clinics

Fellow Of The Prince Of Wales Children's Hospital  
and Prince Henry Hospitals, Sydney, Australia.

Doctorate in Paediatric Nephrology,  
National American University, Delaware, USA.

**List of Awards/Medals**

- Padma Shree Presidential Awardee.
- Dr. B. C. Roy Presidential Awardee.
- Gold medalist, Bombay University.
- Sir Dorab Tata Merit Scholar
- Bombay University Merit Scholar.
- DMA Vashisht Chikitsya Ratan award of excellence.

- IMA distinguished award of excellence.
- Life Time achievement Award IMA.
- Oration Awards -DMA, IMA.
- IMA excellence Award.
- DMA distinguished services Award.
- Times Award for Medical Achievement.
- Global Top 100 Innovator Award.
- IAP Research Award.
- Human Care Millennium Award.
- Bharat Jyoti Award.
- Vijay Shree Award.
- Sarla Vaishnav Research award IAP.
- Dr. P. N. Taneja Oration award IAP 2019.
- Medical Ratna award 2019.
- Distinguished Hall of Fame ABI.
- Global leaders Award.
- International leadership award.
- Lifetime Achievement award Global summit.
- World Health Congress Innovation award
- Visiting professor to universities of UTMC, USA & CHU SJ, Canada.

# Dr. Mahesh Verma, the Doctor who is changing Perception of Dentistry



Dentistry is a crucial branch of the Medical Sciences. Teeth are a significant part of the human body; they are not only essential for chewing, which is their primary function, but they also determine the facial appearance. Traditionally, Dentistry has not enjoyed due recognition as most other branches of Medicine due to its largely non-life-threatening nature. 'Padma Shri' Prof. (Dr.) Mahesh Verma is an eminent Prosthodontist, a Dental Professional, who has been a game changer for Modern Indian Dentistry. He has made an immense

contribution to the perception of Dentistry in the country. Apart from introducing newer techniques and procedures in the field of Dentistry, he also had a tremendous role in transforming the Maulana Azad Institute of Dental Sciences in New Delhi. He is one of the handfuls of Dental professionals who have been honoured with the Padma Shri and the Dr. B. C. Roy Award, the highest honour in the field of Medicine, which was presented to him by the President of India.

Dr. Verma's story is indeed an inspiring one. Mahesh was born in Zakatkhana, a small village on the banks of the Sutlej. He was a curious boy who lived a simple village life in the Bilashpur district of Himachal Pradesh. The year was 1957. Mahesh's village was flanked with dense forests, and at that time, Zakatkhana had no metalled roads to connect it with the main highway. Mahesh went to the only school in his village – the school building was a single-room which was used as the staffroom. The classes were held in the open, where the students sat on the ground. Students brought mats from home to sit on, and during the winters, a fire would be lit to keep them warm. "We saw electricity in the village for the first time when I was in the sixth standard." He says, "It was an everyday ritual for us to gather firewood from the jungle, and we carried it on our heads to home and school. We also had to fetch water from a well. This was everyone's routine, and we didn't know life could be any other way. In the summer, the well sometimes ran dry, so we had to make do with the muddy water, which was left at the bottom, with no water to bathe. All the kids in our school were from farmer families, and most of them studied only up to the third or fourth standard. I am the only one from that school who has come this far."

The medium of instruction in the School was Hindi, with Urdu as the second language. Since there was no Urdu teacher, Mahesh learned it all by himself. The school had just a few JBT teachers who used to teach in the open, using slates of wood. The school did not have any sports facilities like cricket or football either. During games, the children played Gilli-Danda and Kho-Kho. "We were happy with what he had." Dr. Verma recalls. "We did not have any complaints or feelings of inferiority. We did not feel that we were missing out. The awareness of what we were lacking came only when I came to the city. After I completed the Eighth Standard, I had to leave my village to continue my education. There was no High School in the vicinity of many

miles. When I moved to the city, I realized that we were backward in so many aspects.”

As a young kid, Mahesh had the dream of becoming a doctor like his Chacha, who was an MBBS Doctor. Talking about his early childhood, he says, “My grandfather had passed away at an early age of twenty-six, so my father had to work right after the tenth standard to support two of my uncles. It was my father’s desire to see one of his brothers become a doctor - but his younger brother set up a shop after the sixth standard; he did not study any further. His youngest brother, however, did become a doctor. He was the only MBBS doctor in and around an area of 200-300 miles. I saw Chacha since I was a child and becoming a doctor like him became my dream.”

Mahesh says that none of his classmates had any such ambition in life, “They were very simple individuals. Most of them became farmers. One of them became a peon in the same school. His name is Brahmanand, and I meet him every time I go to my village.”

The village school had classes only up to the eighth standard, so Mahesh had to move to Bhatinda, where his father worked for the railways. After finishing his tenth standard board exams, he completed higher schooling from an Inter College there.

“There was no common medical entrance test in those days; admissions were based on the marks one obtained in twelfth standard,” he says. Mahesh topped his class with 69 percent marks in Pre-Medical Examinations. Students from batches before him had gotten admitted into MBBS, even with first division marks - so, he was confident of getting an admission. Unfortunately, he missed the cut by a few marks. That year, nearly 52 students who passed out from Ganganagar had also applied. There were only 148 general category seats for colleges in Patiala and Amritsar. With his marks, Mahesh did get through a Dental College, but that was in Trivandrum, Kerala.

Dr. Mahesh Verma considers not getting admission in MBBS as the turning point in his life. “It was a blessing in disguise. What I could do in Dentistry, I could not have done in MBBS. Today, I am happy that I did BDS. BDS is a specialization, and when I did MDS, it was a super-specialization. Today, my colleagues and I have taken dentistry to such a level that it is an achievement in itself. There has been enormous development, both invention

and innovations in the last few years. Most of all, everyone has realized the need for Dentistry. I am indeed very happy,” Dr. Verma exclaims.

Dr. Verma has played a significant role in changing the perception of Dentistry in the country. “There was a time when people did not recognize dentistry as much as they do today. The people who study and practice it truly understand its importance. Earlier, it was just about extracting up a tooth and fixing it, but today, Dentistry has come a long way. It has grown into a specialty of eminence dealing with trauma, pathologies, infections, aesthetics, malignancy of jaw and oral cavity, teeth, and associated structures. It has become sophisticated and high-tech now. There have been pioneering innovations with extensive technologies in imaging, material sciences, laboratory fabrications, and diagnostics, which have made Dentistry an elaborate branch of Medical Science. Dentistry is aspirational for students and practitioners. There are more than three-hundred dental colleges in India today, where twenty-six thousand students take admission every year. Only the top two-hundred students can opt for MBBS or BDS. I am involved in the admission counselling for Medical Colleges and Dental Colleges in Delhi, and I often see students opting for BDS over MBBS, even in Maulana Azad Institute here; so, the mindset has changed. Dentistry is versatile: there are nine branches for MDS after BDS. It goes shoulder to shoulder with other medical sciences.”

Apart from his role in changing the perception of dentistry, he has also been credited with a pivotal role in the revival of the Maulana Azad Institute of Dental Sciences. This, he considers to be his biggest success. His face radiates pride as he narrates on, “I came to Delhi in the 1980s after completing my MDS. At that time, there were just a few rooms allotted for the dental wing of Maulana Azad Medical College. Facilities were meagre; the faculty had weaknesses which were obvious and too many. 1993, it was derecognized by the Dental Council of India. So, a degree from there had no value. The only Dental College in the country was derecognized by the Ministry of Health, and to the students, it was insulting. We felt ashamed. So, we made a revival plan and worked hard to inject life into the institute. In 2005, it was shifted to a new building with modern infrastructure and increasing faculty strength. It has been the best-ranked institution in the field of dentistry in the country. Today, Maulana Azad Institute of Dental Sciences has come very far and is recognized globally.” He continues with a sense of glee, “When you uplift

an institution, the profession also gets uplifted. We are on par with other institutions today. We reclaimed our lost glory.”

Dr. Verma’s achievements in the field of Dentistry are extraordinary, and he has been honoured with the Padma Shri. He still remembers the day when he got a call from the ministry about their decision to honour him. “That morning, the ministry official called me to get my acceptance. At 8 am, I was busy getting ready to reach the hospital. I am punctual, and I do not accept phones at that time, no matter what. I do not want to waste even a few minutes. That one time, I accepted the call, and the caller asked me if I wanted to accept the Padma Shri. I was excited the whole day. I could not tell anyone until it was declared formally. My nomination was from the Delhi government. It had been sent several times earlier. Every year 4-5 names are forwarded by the government. Finally, in 2014 it was accepted. It was not just a personal recognition for me but also for Dentistry and the institution where I worked and led my team. It was a proud moment for paramedics, nurses, doctors, faculty, students and everyone who was involved.”

Dr. Verma’s life has been full of achievements since then. Many recognitions and honours have come his way, but that only inspires him to have more dreams for the future. “The institute stands tall in a nine storied building now. We are building a twelve-storied structure beside this. I want to see it become functional. We want to add more facilities, services and raise the overall quality of the institution. The only challenge is that the number of patients has increased a lot over the years, and they have higher expectations too—they want more and more facilities and services for free. I aim to raise the standards of our services at the same pace and thereby raise the profession,” he declares.

Dr. Verma thinks that the challenges he has faced were a part of life—they made him who he is today. “I have been through challenges at every stage of my life. At different points of time, the challenges were different. In the village, the resources were limited. I did not know English. There was a time when I did not know how to turn on a computer despite being a doctor. I learned to operate the computer much later. When I saw a phone for the first time in the eighth standard, I did not immediately pick it up because the wires made me feel unsure if something like that could give me an electric shock. At my Medical College in Kerala, there were challenges of the language barrier, and I had to learn things about a different culture. But I kept moving on.”

“Studying for BDS was not easy.” He reminisces about his struggle, “There was no dental college in Himachal. I was sent to Trivandram by The Himachal Pradesh Government as its nominee to pursue the course. I had never been even as far as Delhi, and here I was, getting sent to Trivandram, which was 3,600 km away from my village. It used to take me three days to travel. The environment at Trivandram was different too. I did not know much about the culture. In the beginning, I did not understand English or Malayalam. To make things worse for me, not many people spoke in Hindi. I was the only outsider in the class. All my peers were local students of Kerala, and I did not know how to interact with them. I also found it difficult to follow the lectures in the classes because the instruction in English was heavily accented with Malayalam. Coming from the Himachal, the temperature was different too. Back home in the hilly North, we had the habit of sleeping in quilts, but coastal Trivandrum was hot and humid. Fans were being used all the time. The taste of food, the spices were entirely different. These are all manageable adjustments in themselves, but when they happened all at once, my life looked nothing like what it used to be. It took me some time to fall in love with beautiful Kerala. My life had to make some adjustments, and I’m glad for having overcome that challenge.”

He goes on to say, “You know when you are in a difficult situation, life teaches you things. Initially, I did not like it, of course, and there were nights when I felt like running away - but taking an impulsive step would have shattered my life-long dream of becoming a doctor. Slowly and gradually, I became aware of the real obstacles. My resources were limited. Only 200-250 rupees came from home every month, and that was not enough to sustain me in a new city. But I knew that if I stopped studying, my family would be affected — for my two brothers and my sister, I was determined to overcome everything. I had to work hard. It was always in my mind that I had come all the way to Trivandrum just to study, and I had to finish my course no matter what. That was my struggle, but I excelled in studies every year, and in the final year, I came out with a gold medal around my neck. Even today, for my classmates, I am like a representative of them in Delhi, and they are proud of me. They are proud that I am doing well in the capital city of the country.”

After graduation, there were other hurdles to be tackled. Dr. Verma earned his post-graduation degree and started looking for a job. “In those days, MDS was very few, and I got a job in Safdarjung Hospital and RML Hospital as SR.

But I had made up my mind that I wanted to work in a Dental College in the Dental Wing. People made fun of us, ridiculed us as dental professionals—in the medical fraternity, that was a challenge, too. It is only now that Dentistry has become a profession that is admired, emulated and envied. Even today, there is so much professional jealousy in the field; that is also an issue.”

Despite the botherations, Dr. Verma tries to keep a cool head. He thinks a doctor must keep calm if he wants to treat his patients well. “I am transparent, and my internal stress shows on my face, so I try to keep calm. If I am outraged, I try to explain to myself that anger is not good in any situation. There should be a balance. When meeting with patients and students, I make sure I am composed even in the face of difficulties.”

Dr. Verma emphasizes the importance of oral and dental health that many people tend to neglect. “Dental problems afflict everyone. I would like to emphasize on the word—everyone. Why do we have dental problems? Because we tend to ignore the trouble when it starts. We procrastinate. These problems gradually worsen over the years; it can be severely damaging. A little effort can save our teeth, gums, and mouth. People tend to forget that our mouth and body are related—without a healthy mouth, our body cannot be healthy. When it is too late, the teeth may have to be salvaged. To prevent such a situation, we must change our attitude and be aware. The most important advice as far as oral and dental health is concerned, is to maintain hygiene by brushing, flossing, swishing, and using mouthwash. A balanced diet is also important. I won’t ask one to avoid sticky foods, but one must be careful and rinse properly after eating these. A well-dressed man can have horrible teeth. And then sometimes, I see daily-wagers are conscious about their teeth. They ensure that they have excellent oral hygiene. In my profession, I have realized that destitution shows in a person’s teeth. When the deprived come to me and say, ‘We really need relief from this problem now’, I try to do the best a doctor can.

Dr. Verma does not take any of his cases lightly. “Every case is complicated. Some cases referred to our institute are of gunshots, wherein the jaw is shattered, and it must be reconstructed. My specialization is Prosthodontics, where we not only create the teeth by dentures, implants and fixed bridges but also fabricate the nose, ears, eyes, etc. for those who lose their organs due to cancer and other problems. A person whose face is half gone feels like an outcast in society; he cannot go anywhere without covering his face. Helping these

people regain their face and thereby, helping them regain social acceptance is rewarding. Every case brings a new challenge. Today we have different materials and different facilities; earlier, materials were not as revolutionary, and we used primitive technologies.”

For several decades, Dr. Verma has served thousands of patients and worked for the development of Dentistry and his institution. It is more of a service than a profession to him now. That is the reason he has turned down several lucrative offers. “About ten-fifteen years ago, some former students who make a lot of money in private practice came to me and asked why I was wasting my time, ‘Come to the market and start your practice, and you will make a hundred times more than what you are making now. Give up your job and be associated with us. Let us start a dental college or clinic.’ I gave only one answer, ‘I do not work for money.’ I get a good salary. The government gives us a good salary; I am not bothered by how much I make or don’t make. At some point, I had a passion for this profession, but now, I have achieved my goal, and I have an internal satisfaction in rendering my service to my profession. Money is not everything. There are millionaires and billionaires who have no internal happiness. These things don’t go together. You work, and you get recognition. There are some individuals who never think about a government job; all they want is to make money. Here, in this institution, people do not work for money. They work to provide service.”

When asked about what a dentist should do to succeed in his profession, Dr. Verma’s success mantra is very simple. “Success, fame, and awards come as a by-product of your work. Excel in whatever you do. Make yourself outstanding in whatever you do. If you are a cobbler, you should have such a skill that you stand out in a crowd. If there is no dentist in a village, you will work hard, you will introduce new things, and you will learn new things. There is no recipe for success. Just do your job and do it well in whatever field you belong to.”

Dr. Saumitra Rawat,  
the eminent Doctor on a mission to introduce  
Innovations in  
Indian Medical Science

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Dr. Saumitra Rawat is Chairman and Head of Surgical Gastroenterology and liver Transplant at Sir Ganga Ram Hospital and is also Member, Court of Examiner, Royal College of Surgeons of England. He did his medical graduation in 1987 from the prestigious Maulana Azad Medical College, New Delhi, followed by a Master of Surgery from the same institution. In 1995, he went to England for higher super-specialist training, where he was extensively trained in world-class centres. He was subsequently appointed a Consultant and

an Honorary Consultant Surgeon at Glasgow Royal Infirmary, East Cheshire NHS Trust and Christie NHS Foundation Hospital, respectively. These are internationally recognized Centres of Excellence. Dr. Rawat has an impressive list of fellowships, which includes FRCS (Glasgow), FRCS (Edinburgh), FRCS (England) and FRCS (Intercollegiate). He earned success in England as he became one of the most successful doctors not only in England but all over the globe. His success was at its peak when suddenly his father fell ill. Since his parents were old, Saumitra decided to return to his native country to look after his parents. However, he did not return empty-handed to his country. Saumitra brought along with him a revolution in the field of Indian medical sciences. He introduced some of the modern surgical methods for the cure of several diseases related to oesophagus, stomach, intestine, colon, rectum, pancreas, gall bladder, liver and other parts of the digestive system.

The man who is responsible for the advancement of technology and methodology of Indian Medical Sciences, Saumitra, was born in Sakrar village of Jhansi district in Uttar Pradesh. His village was part of Bundelkhand. Most of the dwellers in the region remain below the poverty line due to drought, arising from a shortage of water in the area. Saumitra's family was educated. His grandfather was a teacher and social worker. His efforts and initiatives enabled many poor children to receive education. He dedicated his whole life to spreading awareness about the importance of education. The Indian government rewarded his contribution with a national award. In 1959, the then President of India, Dr. Rajendra Prasad, gave him the national award for best teacher in the presence of then Prime Minister, Jawaharlal Nehru and Vice President, Dr. Sarvapalli Radhakrishnan.

Saumitra's father, Mahavir Sharan Rawat, was a doctor. Dr. Mahavir Sharan was born in Sakrar village. In those days, there was no secondary school in the village. The nearest school was located 15 kilometres away from his home. Even though the school was far and commutation facilities were sparse, he never missed a day of school. He was determined to study and become a successful professional. He worked hard in his school days and later in his medical career. His hard work paid off as he became one of the most famous surgeons of his time.

Dr. Mahavir Sharan did not attain success in making huge money but to serve the people. Instead of working in private hospitals, he chose to work in

government hospitals to help needy patients. Dr. Mahavir Sharan worked as a surgeon in Irwin Hospital (Now LNJP Hospital), Safdarjung Hospital, Deen Dayal Upadhyaya Hospital and Ram Manohar Lohia Hospital. He was also posted in Agartala. In those days, the situation in East Bengal was complicated. A new nation was demanding independence from Pakistan. Soon, on 25 March 1971, war broke out between Bangladeshi nationalists and the Pakistani army. Later, India intervened and brought an end to the battle on 16 December 1971. The battle was a significant part of Dr. Mahavir Sharan Rawat's life. Since Agartala was close to the border, many injured soldiers were admitted to the government hospital. Dr. Mahavir Sharan was the specialist surgeon of the hospital. The majority of the surgeries of injured soldiers took place under his supervision. He treated many injured soldiers himself. Saumitra and his family accompanied Dr. Mahavir Sharan to Agartala, but when the situation deteriorated, the family was sent back to Sakrar village for their safety, and Dr. Mahavir Sharan stayed behind to serve the nation.

Hundreds of injured soldiers were brought to the hospital for treatment. Many of them were in extreme trauma. Some soldiers had bullet wounds on their bodies; some had lost their limbs while some were admitted with serious head injuries. Most cases required immediate medical attention. Under such circumstances, Dr. Mahavir Sharan inspected the conditions of injured soldiers himself and decided on the process of their treatments. For nine months, Dr. Mahavir Sharan worked tirelessly and saved the lives of many soldiers. Dr. Saumitra Rawat informs that he treated thousands of soldiers. Not only did he treat injuries, but he also saved the lives of soldiers who were critically injured.

Dr. Mahavir Sharan's efforts were applauded by the whole world. The World Health Organisation honoured him with a fellowship. His role in treating the injured and mutilated soldiers were referred to as 'case study.' It served as a perfect example for different health facilities when it came to treating soldiers injured in battles. Dr. Mahavir Sharan was invited by several prestigious institutions in the USA to discuss his experiences and the challenges that he faced during that harrowing time. He delivered many informative lectures advising doctors on how to operate in such exigencies.

Dr. Mahavir Sharan was a hero, not just during battle time. In his regular life, too, he performed many difficult surgeries and saved many lives.

Dr. Mahavir Sharan was always delighted when he cured a patient. It always pleased him to see that he could make someone's health better.

Saumitra studied in Agartala till first grade. Later, he was admitted to Kendriya Vidyalaya (Central Government School) in Tagore Garden, Delhi and then to Kendriya Vidyalaya in Gole Market, Delhi. He completed his matriculation and senior secondary education from here. Interestingly, Saumitra was a sharp and intelligent student but never achieved the first rank in school.

Since Saumitra had decided to become a doctor, he had a planned future ahead of him. In the eleventh standard, he opted for science with biology as his major subject. Based on his high percentage in twelfth-grade examinations and his score in the pre-medical examination, he became eligible for admission to the MBBS course. In those days, Maulana Azad Medical College was the most preferred college for medical aspirants. His high score ensured that he got admission in a college of his choice. At the age of seventeen, Saumitra successfully enrolled in Maulana Azad Medical College.

Saumitra completed his MBBS course and later enrolled in the same college for MS in surgery. He completed his MS and Registrarship from Maulana Azad Medical College. He believes that his medical college made him a complete doctor. Not only did he receive theoretical knowledge but also complete practical knowledge and training to become a successful doctor. He reveals that the students in the college were encouraged to serve society.

Dr. Saumitra Rawat has inherited the trait of social service from his family. His grandfather and father had dedicated their lives to serving the people of the nation. His grandfather was honoured with the national award for serving the society as a teacher. His father, too, received multiple honours for serving the soldiers and the patients. Dr. Saumitra was heavily influenced by the heroics of his father and grandfather. He always believed in charity and helped the poor at every opportunity. In his college days, Saumitra joined the Rotary Club of Delhi and the Indian Red Cross Society, and as a member, he organised many health camps in Delhi and its neighbourhood. He also became the President of Rotaract Club (youth wing of Rotary Club) of Connaught Place in Delhi and continued his charitable work.

After working at Maulana Azad Medical College for twelve years (between 1983 and 1995), Dr. Saumitra decided to move to England. There, he

observed that the nation was inventing and utilising advanced techniques using modern technical equipment to treat diseases related to oesophagus, stomach, intestine, colon, pancreas, liver and other body organs. In England, Saumitra learned the newly evolved laparoscopic surgery for curing gastrointestinal, hepatobiliary and pancreatic cancer. He got the opportunity to learn new surgical techniques from the world-renowned surgeon, Dr. MacMohan. Education in England and the training that he received from some of the renowned surgeons made him an excellent surgeon. He excelled in treating ailments related to oesophagus, stomach, intestine, colon, pancreas, liver and other digestive organs. He got the opportunity to work in some of the most prestigious and advanced medical institutes in the world, such as the ones in Sheffield, Newcastle and Leeds.

Soon, Dr. Saumitra became one of the renowned surgeons in England. His success paved the way for fellowships at Glasgow, England, Edinburgh, and the Royal College of Surgeons. He served as a Consultant and an Honorary Surgeon at Glasgow Royal Infirmary, East Cheshire NHS Trust, and Christie Hospital, respectively. He trained students in surgical skills and laparoscopic surgery for in Royal College of Surgeons courses. He worked as an advisor, teacher, surgeon, researcher and doctor at several institutions in England.

After accumulating immense success, Saumitra returned to India in 2012. In 2010, Dr. Mahavir Sharan fell critically ill. He was vomiting blood. Dr. Saumitra decided to return to India to treat his father. When he boarded the flight, he was anxious that he might not be able to reach on time and save his father. Fortunately, when Dr. Saumitra returned to India, his father was stable. Dr. Saumitra worked hard to treat his father and took care of his health wholeheartedly. He decided to stay back in India. So, when his father's health improved, Dr. Saumitra went to England with thoughts of coming back to India.

After working for more than seventeen years in the United Kingdom, Dr. Saumitra began to practice in New Delhi at Sir Ganga Ram Hospital. While working at the hospital, he introduced many new techniques and advanced technologies for surgeries related to oesophagus, stomach, intestine, colon, pancreas, gallbladder, liver and other organs of the digestive system. He and his team hold the record for performing the first laparoscopic and robotic esophagectomy and robotic anterior resection in North India, and the first robotic hepaticojejunostomy in India. Dr. Saumitra vividly shares

an incident about a woman whose gall bladder was once operated upon at a local hospital in Gwalior. During the surgery, her bile duct was damaged. This led to the deterioration of her medical condition. The woman was brought to Sir Ganga Ram Hospital, where Dr. Saumitra and his team stitched the bile duct through laparoscopic and robotic surgery. The case was extremely complicated, but they saved her life with courage, experience and technology. It was the first time in India that the repair of hepaticojejunostomy was done robotically.

Dr. Saumitra also has memories of some complicated cases that he had handled in his career. When he was working as a consultant surgeon at the Royal Infirmary in Glasgow, he had come across a case where a man had suffered serious bullet injuries. A bullet had damaged his liver and intestine. One of the digestive system vessels had also been injured. His chances of survival were minimal. Dr. Saumitra did not give up and performed the surgery. He removed the bullet and its particles from the patient's body. He also tried to fix the damaged internal organs and vessel. The patient remained in ICU for a week after the surgery, and his life was saved. Another case involved an old man who was also the founder of a university. The man had cancer in his food pipe. He could not eat or drink anything. His condition was critical and required immediate medical attention. The only solution was to perform surgery, but the man was old, and this could have put his life in danger. Dr. Saumitra depended on laparoscopic and robotic surgery to remove cancer from his body. The surgery was precise, and the man was discharged from the hospital after a few days.

But the first surgery is always the most revered. Dr. Saumitra performed his first surgery during his MBBS course at Maulana Azad Medical College. Those were the last days of his internship. His professor gave him the responsibility to remove the appendix from a patient's body. The operation was performed in the presence of highly esteemed Dr. Bawa. Dr. Saumitra did not hesitate and performed a neat surgery. The operation was successful, and Dr. Saumitra was appreciated by Dr. Bawa.

Dr. Saumitra has been successful in most of his surgeries. Many people believe that he has miraculous hands that can treat any patient. Dr. Saumitra states that it is his dedication, commitment, experience and hard work, which make him a successful surgeon.

Dr. Saumitra has treated thousands of people. He is still practising in Sir Ganga Ram Hospital, where he treats many patients every day. People from all

around the world come to Dr. Saumitra for treatment. He states that most of the cases that come to him are critical and complicated cases.

Sir Ganga Ram Hospital is one of the most renowned hospitals in India. It performs over 17,000 surgeries in a year. The hospital is famous for Surgical Gastroenterology and liver transplants, which involve the treatment of digestive system organs. Dr. Saumitra believes that the hospital owes its success to the founder of the department, Dr. Samiran Nundy.

Dr. Saumitra has improved the techniques and technologies of treatment in India. Apart from treating patients, Dr. Saumitra believes in helping and serving the poor. Following in the footsteps of his grandfather and father, he does every possible thing to help the poor. He financially supports children who are below the poverty line to ensure that they receive a proper education.

Besides improving the condition of Indian medicare, Dr. Saumitra has also initiated India's first international fellowship programme by the National Board of Examination. He has ensured that one doctor undergoes training in Sir Ganga Ram Hospital in India and Christie's Hospital in England for a period of one year each. Every year, an exam is conducted by the National Board of Examination to determine the suitable fellow. Dr. Saumitra states that it is the dream of every medical student to undergo training in England, but due to heavy expenses, it is difficult for most of the students to go to England on their own. However, the fellowship ensures that every year, at least one student can live his or her dream and undergo training in England. After the completion of training, the student is awarded the degree of M.Ch in England and FNB by National Board of Examination.

Dr. Saumitra is passionate about teaching. He is a trainer in laparoscopic surgery for the Royal College of Surgeons of England and has trained surgeons from all over the world. He was the Surgical Tutor and has been a faculty and convener for various Skill Courses of Royal College of Surgeons of England. He was an examiner for medical students at the University of Leeds, undergraduate trainer for the University of Leeds, Glasgow and Manchester and postgraduate trainer for Glasgow and Liverpool. He is Examiner, Councillor, Coordinator and Accreditor for National Board of Examinations.

Dr. Saumitra's contribution to the advancement of the Indian medical field has fetched him many honours and awards. In 2015, his efforts were lauded by the Indian government, and he was honoured with Padma Shri

by the then President, Pranab Mukherjee. He was awarded the Ed Eendum Fellowship of Royal College of Surgeons of England. He has received the Academic Excellence award and also Vishisht Chikitsa Ratan Award from Delhi Medical Association, Golden Jubilee Oration award from Delhi State Chapter of Association of Surgeons of India. Given his work as one of the important leaders in medicine, he was invited to participate in Young Leaders Conclave-Vision 2020, which included highly respected and influential speakers like Shri Narendra Modi and Dr. APJ Abdul Kalam. He was also conferred as distinguished alumni by Maulana Azad Medical College. He was awarded "Bundelkhand Gaurav Samman" for his extraordinary contributions and devotion to the field of medicine. He was awarded as the doctor of the Year 2017 by the Indian Medical Association. He was honoured with the Eurasian Golden Award at the House of Lords, the UK and Bharat Gaurav Award at the House of Commons, British Parliament, UK. Dr. Saumitra feels joyous to have received the honours and awards, but the smile on the face of the patients gives him immense happiness, which no award can give.

Dr. Saumitra wishes that health facilities in the country should be affordable for everyone so that no one dies due to shortage of money. Having worked in England, he has observed the national health care system closely. According to this system, every citizen of that country receives free treatment. He believes that citizens of the country should receive treatment free of cost, irrespective of whether they are rich or poor. Dr. Saumitra wishes that the Indian medical services should be developed and advanced enough to provide treatment and cure of all diseases so that no patient has to go to a foreign country in need of better medical facilities. He also wants that every state should have a super-specialist hospital so that people can avail the best treatment locally.

Dr. Saumitra advises that if a person wants to become successful, they should decide the destination first and then undertake the journey. They should know what they want to become in life. Once the destination has been decided, the person should strive hard to achieve the target. Honesty and hard work guarantee success in life. There may be a time when the target seems far, but one should never lose hope. If one is determined, nothing is impossible. He also suggests that one can achieve success, even if one is not able to rank first. Willpower and determination always fetch success irrespective of the rankings.

# Dr. Noshir Minoo Shroff, the Visionary who revolutionised Indian Ophthalmology with bold initiatives



In 1914, Dr. S. P. Shroff established Dr. Shroff's Charity Eye Hospital in New Delhi. Dr. Shroff was a renowned ophthalmologist and fellow of the Royal College of Surgeons Edinburgh. His son, Minoo Shroff, also became an ophthalmologist and joined the family clinic. On 23 August 1951, Minoo had a son who was named Noshir. Noshir Minoo Shroff later became Dr. Noshir Minoo Shroff, another leading ophthalmologist of the country. It was Dr. Noshir who introduced intraocular lens implants in Delhi despite massive resistance and criticism and pioneered a new era of ophthalmological procedures in the country.

Being born into a family of ophthalmologists, Noshir grew up in a home environment in which ophthalmology came as a natural choice of career for him. “No one pressurised me into following the family tradition, but the environment at home was such that it came to me naturally. Every night at the dining table, my father and grandfather would talk about eyes, eye surgeries, complications, cases and trends. I heard all about the challenges and success stories in the field of ophthalmology, and my interest in the field grew as a result,” he explains. Apart from the environment at home, he was also influenced by the environment at

their family hospital, which he would visit during his childhood.

There was not an iota of doubt in Noshir’s mind about choosing his career. He went to the prestigious Modern School of Delhi—his father’s alma mater. At school, Noshir took part in a lot of co-curricular activities and sports; horse riding is his favourite. He was in the school horse riding team, and he also participated in the Delhi horse show. Carpentry and photography were two other hobbies that Noshir loved. Amidst all these activities, he never lost focus of his ambition, and he took Biology in the ninth standard. After his schooling, he went to Hans Raj college for his pre-medical classes, post which he joined Maulana Azad Medical College, Delhi.

Preparation for medical examinations in those days was not as tough as it is today. Yet it was difficult. “I remember my mother used to serve me tea at three am in the morning when I was studying. Sometimes I would doze off and would wake up in her lap.

Noshir got his MBBS degree in 1973, after which he got his PG degree from the same institution. In 1978 he got a master’s degree in Ophthalmology and joined the family clinic.

With every passing day, Dr. Noshir was now honing his practical skills as an ophthalmologic surgeon. “While treating a patient, practical knowledge and experience are more important than bookish knowledge. When you start working, the world is different from what you read in textbooks,” warns Dr. Shroff. “In those days only mature cataract was operated upon; people would be happy even if they had to wear a number 10 glass which did not make them see properly. But they were happy.”

Dr. Noshir took forward the family tradition of ophthalmology, but he wanted to experiment with new ideas and techniques. He introduced path-

breaking surgeries like intraocular lens implant for the first time in India. “I wanted to take the family tradition to a new level. It was the time when intraocular lens implants were still being debated, and many surgeons doubted the efficiency of the method. They said it was a time bomb waiting to explode. ‘This new boy is playing with the patient’s eyes,’ they would say. At that time, the implants were not very popular, even outside India. Some of the implants had to be later removed from patients. Therefore the criticism was very intense.” Dr. Noshir narrates while describing the resistance he faced. However, despite the resistance and criticism, he was undeterred. He operated on five-six patients at first. When these patients were cured, he operated on a few more patients. These patients were made to meet new patients who were considering undergoing the operation, and when these patients gave good reviews, the new patients came forward. After some time, he gave a presentation of his first ten operations at the Delhi Ophthalmic Society, and he got an award for his achievement. Gradually, the word-of-mouth publicity, regular presentations and awards convinced people that these implants were safe. Besides, his father did not take up the intraocular implants—when people would come to his father for implants, he would tell them, “These implants are done only by my son.” So, automatically, some patients shifted to him.

What gave him the belief in the procedures and the courage to sail against the tide were those who influenced him. “In around 1980, I went to meet Dr. Daljit Singh in Amritsar. I saw him doing implants, but I could not agree with him on his methods. I adopted microsurgery.

I also went to the US and UK and saw the procedures there and gained confidence. I thought if they can do it, why can’t we adopt these techniques in India? I decided to go ahead without caring for what people said, ‘Let them say whatever they want. I will go ahead. I am giving my patients vision anyways, and they are happy,’ I told myself and went ahead,” exclaims Dr. Noshir. Eventually, everyone saw the results of the intraocular implants, and they recognized Dr. Shroff’s contribution.

Keeping pace with modern technologies is the mantra that applies to Dr. Shroff’s career. Even after the intraocular lenses, there were other technologies that he adopted for the first time in India. These include phacoemulsification, where cataracts are removed through a 2mm incision, Femto cataract, surgery with laser etc. Dr. Shroff emphasizes the importance of adapting to new technologies, “Some people still ask questions like ‘Why

do we need these techniques when we can operate with our hands?’ However, from my thirty-eight years of experience, I will say that new technologies will keep coming, and if you do not adopt them and keep criticising, you will be left behind.”

Dr. Noshir Shroff has been honoured with many awards and recognitions, including the Padma Bhushan. He narrates the feeling of getting the Padma Bhushan, “I was in the operation theatre when the home secretary of Government of India called. My receptionist told him that I was busy and would not be able to take the call. I called back after the operation because I knew if the Home Secretary was calling, it must be something very important. He informed me about the government’s decision to reward me with the Padma Bhushan and asked for my acceptance. That was one of the happiest moments of my life.”

Till now, Dr. Shroff has operated upon more than fifty-five thousand people and wants to give vision to many more. Among all the cases of surgeries, he considers the ones dealing with the displacement of the natural lens after injury or other reasons. Repairing these damages and giving eyesight back to the patient gives him the most satisfaction and happiness. He believes that upholding ethics and keeping the interest of the patient in mind while giving an opinion is the best practice to follow, “I am happy that I have always acted ethically and truthfully in the interest of patients without commercial consideration. Patients know that Dr. Noshir Shroff will give the right opinion, and in our clinic, we do not recommend an operation to a patient if they do not need it. In our four generations, for more than a century of practice, no one has given an opinion against the interest of the patient.”

Dr. Noshir has dealt with many high profile patients. “While dealing with high profile cases, a little tension is there, but with experience, the tension reduces. At a certain level, those things do not matter much. However, yes, consciousness is there. Yet in the operation table, it goes away. The eye of a patient is just an eye. All eyes are the same. All are beautiful—from the beggar’s to the president’s.” The eyes, according to Dr. Shroff, are the most significant body part. “It makes you see the world. If you break your leg, you can at least watch the television, but if you do not have eyes, it is a major problem. Every organ is important, but the eye makes you appreciate the beauty of the world,” he claims. As far as his own eyes are concerned, he finds sceneries, lush green forests, mountains, tea estates, etc. the most soothing sights.

Dr. Noshir's brother Cyrus is also an eye-surgeon. He, too, works in the family clinic. Both Dr. Noshir and Dr. Cyrus have two sons each. Dr. Noshir's elder son Daraius is a retina specialist who works with Dr. Cyrus, and the younger one is in the US working with Google. The younger son of Dr. Cyrus, Rushad is an eye specialist and has joined Dr. Noshir. The elder son of Dr. Cyrus is at WHO, Geneva. "We wanted our sons to follow the family tradition but did not pressurise them. If they do not have an interest in the field, it is no use doing something which does not appeal to you. So, each one of them chose his path."

Dr. Noshir hopes one day his grandchildren will also take forward the family tradition. "When I am not doing operations or treating patients, I love to spend time with my grandchildren—that is my most favourite hobby today. Playing with my nine-year-old granddaughter and six-year-old grandson takes away all the fatigue. When I go out, they ask me, 'Grandpa, where are you going?' When I say I am going to the hospital, they ask me if they can come with me. I tease them by asking them to go to the hospital and become my assistants. I don't know what will happen when they grow up. I just hope they develop an interest in the family tradition," Dr. Shroff says with a happy smile.

Dr. Shroff's suggestion to young people is, "Do whatever you want. If you're going to go to medical school, go for it. But maintain honesty and integrity. Some students ask me, 'Sir, there are so many unethical practices in the medical field, how can we survive?' I tell them, 'Maintain honesty and ethics, and you will succeed.' Later they often come back and say, 'Sir, you were right.' What I would suggest is do not learn the tricks of the trade but learn the trade. If you learn the trade, you don't need to learn the tricks; people will come to you and your income will definitely increase. If you apply tricks all the time, but you are not good at your work, you will not succeed."

# Dr. Jeewan Singh Titiyal, from a remote village to being a World-Renowned Eye Surgeon



“In the words of Jean Nidetch- ‘It is choice, not chance, that determines your destiny.’ And I have been blessed to have unknowingly made the right choices to reach where I am today”, says Dr. Jeewan Singh Titiyal with his characteristic calm and humble demeanour and smile.

Dr. Titiyal is one of India’s most renowned ophthalmologists, and his journey from a remote, tiny hamlet nestled in the hills of Uttarakhand to widespread international and national fame serves as an unwavering source of inspiration for every struggling student. “With every batch of new students at All India Institute of Medical Sciences, New Delhi, I take a session telling them about my background. I tell them in detail about the drawbacks I had to overcome at every step of my journey in order to make them realize that my conditions were much worse than theirs, yet I could manage to achieve

success. I try to boost their morale and inspire them to aim for the stars,” says Dr. Titiyal.

Dr. Titiyal was awarded the Padma Shri, one of the highest civilian honours by the Government of India in 2014, in recognition of his exemplary work in the field of ophthalmology. He is a surgeon par excellence who has operated upon several eminent personalities, including His holiness, the 14<sup>th</sup> Dalai Lama. He holds the distinction of operating upon the then Prime Minister, Dr. Manmohan Singh and President of India, Mrs. Pratibha Patil, while in office, in addition to chief ministers of various Indian states. He is the first Indian to perform live surgery on an international platform at the American Society of Cataract & Refractive Surgery Annual Meeting held in the USA. Besides, he is the first Indian surgeon to perform live corneal transplant surgery and is also credited with the first INTACS procedure for complex corneal problems. He has performed more than 100 live surgical demonstrations encompassing cataract surgery, complex corneal transplants and refractive surgical procedures to date. He has been invited as a faculty in more than 200 international and national scientific conferences.

Jeewan Singh Titiyal was born in a remote village called Tidang, in the Pithoragarh district in present-day Uttarakhand, near the Tibet and Nepal border. Even today, there is no motorable road to Tidang, and the nearest town is sixty kilometres from there. A young Jeewan had to walk three kilometres to attend primary school in another village, where there were no modern amenities like electricity etc. For middle school, he would have to travel for three days to another place if it were not for his maternal uncle, who had a small grocery shop in that town. Jeewan stayed with him and studied up to the tenth standard at government intercollege in Dharchula. “In those days, government intercollege education was good all over India. Fortunately, there was no internet and no concept of home tuition, and you needed to learn from books or your teachers. Knowledge dissemination was very effective in those days,” he reminisces.

“I was not a bright student, just an average student. My maternal uncle was illiterate, but he wanted me to study Science after tenth grade for me to become a doctor. In our place, there was a paucity of medical facilities, and every patient had to be taken to the army hospital. This served as a motivation for me to become a doctor,” Titiyal claims. While in Dharchula (Pithoragarh), young Jeewan developed a liking for the Army. Dharchula is a permanent

military station of the Indian Army and Jeewan grew up around army officers dressed in their impeccable uniforms decorated with various insignia—it had an indelible impression on his mind, and he dreamed of becoming an army officer as well. The proximity to the military base also strengthened his interest in sports. “A culture of sports is always there in the hilly areas. We used to play football a lot. We saw army officers engaged in boxing, so we started boxing, too and would wrap clothes around our fists to resemble gloves,” Titiyal remembers. The interest to join the Indian Army and serve the nation remained with him. “But later, I could not join, because as far as the medical branch was concerned, it was difficult for people without an army background to gain entry into the army.”

Jeewan opted for biology after his tenth standard, as he found Mathematics difficult. In the meantime, his father was transferred to Lucknow and Jeewan moved there to complete his final year of schooling. This was the first time in life that a young Jeewan ventured from the laidback quiet hills of Uttarakhand to the plains of Lucknow and experienced the fast-paced life in the city. “In UP, the boys were very competitive, and all the boys who took up biology were determined to become doctors. My father also encouraged me to take coaching for medical instead of opting for BSc. In retrospect, my father’s transfer to Lucknow proved to be a blessing in disguise for my younger siblings and me, as we could explore wider opportunities to build our careers,” recollects Dr. Titiyal. While preparing for the medical entrance examination, Jeewan had three options in front of him—Combined Pre-Medical Test of Uttar Pradesh (CPMT), All India Institute of Medical Science (AIIMS) and Armed Forces Medical College (AFMC). This was the first time he had heard of AIIMS, New Delhi. “For AIIMS, the entrance tests were conducted in English, but my entire education till then was in Hindi; I had even studied science subjects in Hindi. However, the one-year coaching for the exam helped me learn to write in English and also speak a little bit of English. The teachers at my coaching institute were very encouraging and confident about my selection. Their positive appraisal, critical inputs and my continual efforts paved the way for me to reach AIIMS, New Delhi”, he says gratefully.

The first time Dr. Titiyal came to Delhi was to give the entrance exam of AIIMS, and the capital city of India was another cultural shock for him. Titiyal speaks about the communication barriers he faced initially and how he overcame them. “At AIIMS, students had to prepare presentations and speak

in front of teachers. I was very stressed and tense for the initial six months and avoided seminars because I was scared of speaking in English. Gradually, with the encouragement of my teachers and friends, I grew in confidence. It is essential to understand that language cannot impede your success if you possess knowledge. In fact, the same person who could not fluently converse in English when he entered AIIMS now regularly delivers talks and lectures on the world stage to a rapt audience. This has all been made possible by a strong institutional backing and the support of my teachers and friends”, acknowledges Dr. Titiyal. He now has over 26 Orations & Keynote addresses to his credit, including the prestigious PK Jain oration and SN Mitter Oration. In addition, he has delivered more than 1000 lectures and talks at various national and international forums.

After getting admission into AIIMS, Titiyal thought it would be challenging for him to adjust because it was the most significant institution in India. However, he was pleasantly surprised to see that the environment was amicable and welcoming, contrary to his expectations. There were very few students in those days, the interaction was very cordial, and the seniors were also very supportive. “AIIMS was a potpourri of different cultures, and there were people from all walks of life. I was initially a bit reluctant to mix up, but gradually my hesitation vanished. I was a good sportsperson and excelled in badminton and table tennis, so I easily made new friends. I was recognized by teachers and students alike because of my sporting talent.” Every passing day, Jeewan was progressing on the path of becoming a doctor.

Nevertheless, he had not yet given much thought to choosing any particular branch for specialization. “In those days, you would just study during your MBBS and gain a little bit of practical experience while pursuing your internship, such as inserting intravenous cannulas, drawing blood samples etc. In Ballabhgarh Govt Hospital in Haryana, a senior resident, I was assisting made me perform surgery and subsequently appreciated my skills. He said, ‘You have a good surgical hand, and you should take surgery as one of your subjects.’ When a senior teacher appreciates you, it is very motivating, and this incident encouraged me to pursue a seat in general surgery. However, fate had a different plan for me, and I could not secure a seat in general surgery despite waiting for a year. Subsequently, I chose ophthalmology as my field of specialization, and the rest, as they say, is history. Ophthalmology was still in the nascent phases of development during that time, and there was a wide

scope for medicine, surgery and clinical research. I realized early on during my post-graduation that I could make a mark for myself and stand out in this field.”

Eventually, Dr. Titiyal got the opportunity to conduct operations. “When you are still learning, there are very few opportunities to perform surgery. The first surgery is usually cataract because it is the most commonly performed surgery with relatively easy steps. Performing your first surgery is always exciting; however, you are more excited about the thought of finally operating on a real patient instead of thinking about how you are going to do it. Fortunately, the patient was cured. At that time, we had to perform surgeries under senior supervision. There was no wet lab where you could learn. There was no concept of implanting an intraocular lens, and a patient had to wait for six weeks to get a prescription for glasses. At that time, we had the feeling that we were benefitting the patients, but we were also simultaneously learning. Nowadays, that excitement is not there as the thinking has changed. Now we think more along the lines of how we can benefit our patients better, which is equally important.”

Dr. Titiyal has performed pioneering work in the field of eye surgery. “Towards the end of my post-graduation, I wanted to perform new and more complex surgeries, apart from cataract. During my senior residency, I developed an interest in corneal transplant surgery—transplanting one cornea from one person to another. For the first time in the world, we divided a cornea into three parts and distributed the component parts amongst three people. It was ground-breaking at the time, and the technique is performed worldwide now. He has published over 250 articles in international journals describing his research findings and innovations and contributed immensely to the advancement of ophthalmology. He has also written four textbooks in his field of expertise- cornea, cataract and refractive surgery, comprehensively detailing the basics as well as cutting edge technology for students and practitioners alike. We got these opportunities in AIIMS, New Delhi, because the establishment promotes innovative and scientific thinking, provides an optimal working culture as well as opportunities to advance in the field of teaching, research, and patient care.” Dr. Titiyal has an avid interest in research, and his innovations and novel techniques have won widespread recognition and numerous awards at both national and international platforms. He has been honoured with the Senior achievement award by the American

Academy of Ophthalmology, Achievement Award by Asia-Pacific Academy of Ophthalmology and APACRS Certified Educator Award. Also, he has been awarded numerous gold medals by the Sadguru Seva Singh Trust, Bombay Ophthalmologist's Association (BAO) and Intraocular Implant & Refractive Surgery Society of India (IIRSI) to name a few.

Being an eye surgeon has some advantages, according to Dr. Titiyal. "Cataract operations are one of the most commonly performed surgeries in the world, as well as in India. Cataract surgery is often seen as a relatively minor procedure; however, it requires a great degree of surgical skills and expertise to operate precisely in such a small organ. It is very rewarding both for the patient as well as the surgeon as there is an almost immediate gain of vision for the patient, and the surgeon can also assess the outcomes. You do not often encounter sick or dying patients in ophthalmology."

He further says that though cataract surgeries give instant outcomes, keratoplasty surgeries are also immensely gratifying for the surgeon as they are technically more challenging to perform, and you restore sight to a previously blind person.

Dr. Titiyal has operated upon many high-profile people, but he considers being chosen by His Holiness the 14<sup>th</sup> Dalai Lama for surgery as the most exciting experience. "Dalai Lama could have had his surgery performed anywhere in the world, but he chose me. One day, his representative came to meet me and informed me that His Holiness had chosen our institute for his surgery. I asked him, 'Why us?' He said because of the reputation that AIIMS has carved for itself and also because some colleagues had referred them to me. When I met the Dalai Lama, we bonded immediately. He said, 'I am at the right place.' That was a very exciting day for me." Dr. Titiyal considers it a privilege to serve at AIIMS. He has an emotional bonding with the institution—his alma mater and workplace. "For an ordinary person like me, working in AIIMS in Delhi is a big achievement. I have been here for almost forty years, and I have also been teaching for twenty-twenty-five years. Seeing my students in top institutions around the world is a great achievement for me. Restoring sight to my patients is a great feeling too. I feel that although I may not have money or mansions, I am happy to have the respect and recognition from the people who matter. Wherever you go, if you are not recognized by your own people, that is the most unfortunate thing. I get that recognition in AIIMS—a heart-warming achievement for me." In fact, he recalls an incident

during his interview for the post of faculty at AIIMS, New Delhi. "During my faculty interview, the chairperson of the selection committee asked me why I did not want to go back to my native place and serve the people there? I replied that AIIMS would provide me with a better platform and hone my expertise to more ably serve my people. I was subsequently selected, and in all these years, I have been the single resource person for the people of my region with medical problems. I truly believe that the help I have extended to my own people while staying here at AIIMS would not have been possible had I gone back to my native place. It is essential to have not only good intentions but also the means to back up the intent. AIIMS provided me with the means in the form of infrastructure and expertise to benefit such a large number of people.

Dr. Titiyal has a profound sense of social responsibility. He wants to contribute to society through his experience and knowledge. After his retirement, he wants to continue to work in order to help the people in his village. He is in talks with the government of Uttarakhand and some NGOs over some of his plans for the area. "I want to improve the ophthalmological services in Uttarakhand and train the government doctors," he says assuringly. Despite his strong sense of social responsibility, Dr. Titiyal is not interested in politics. He wants to contribute to society in his own way. He says modestly, " My nature and education is not fit for politics in Uttarakhand. I want to do medical social work in collaboration with NGOs and social workers."

"Eyes are in a way your window to the world, as well as your own body," emphasizes Dr. Titiyal. "The structure of the eye is such that you can find out what the disease is ailing the body by looking into the eye. I can tell by looking into the eye whether the person has diabetes, hypertension, cholesterol, cancer, etc. But unfortunately, some ailments are difficult to repair, especially injuries in sports, fights, war etc. The eye is a camera system with a reel; if the reel is scratched, it is not possible to repair the camera."

For people of every age, Dr. Titiyal has some advice for the protection of their eyes. "Protecting the eyes is very important. There are a few important things that a person should keep in mind. One is to protect against injury, especially while travelling and during festivals such as Diwali, Dussehra and Holi. Next, you should work in such places where there is adequate moisture in the environment in order to prevent dryness in the eyes. While coming

from outside, wash your face and eyes to prevent infection. Nowadays, people work on smartphones and computers all the time. It is inevitable, but take some precautions—keep the screen at a safe distance from your eyes, blink and take breaks, the glare from the screen should not fall in your eyes.” He proceeds with his precautions, “Do not apply any substance in or around your eyes which you are not sure about or is not prescribed by the doctor. People often put medicines on their own and these damages the eye. These substances often result in cataract or burning of the cornea etc.” He ends with advice for regular check-ups, “You should go for eye check-ups in school-going age, college-going age, at around forty years for diabetes or glaucoma, etc., around fifty-sixty for cataract and retinal degenerations. If you have diabetes, an annual check-up, and for glaucoma, a regular check-up is necessary.”

What is happiness for Dr. Titiyal? In the last few decades, Dr. Titiyal has treated thousands of different eyes. “In the long run, happiness is when the patient can see the world. When I see a patient with cataracts, I feel happy because I will be able to remove it and help the patient. Nothing can be worse than a patient losing sight because of infection or some other ocular disease.” He continues, “When I teach young medical students, I feel happy. When they do well, I feel happy. When patients thank me and say ‘I can see because of you,’ that is happiness. When some people donate eyes or when relatives donate eyes to their expired relatives, it makes me happy. We honour them once in a year. Interacting with them also makes me happy. When someone says, ‘You gave me a twenty-year old’s vision at the age of eighty, that is also a source of happiness. A friend of mine often jokes, ‘You gave my wife such good vision that my life has become miserable.’ In rural areas, we used to conduct camps. I remember a hundred-year-old woman who shouted while she was still on the operation table, ‘I can see now.’ There are a lot of such incidents that make me very happy. The difference we make in others’ life determines the significance of our own life, and I have had the honour of lighting the lives of thousands of my patients by restoring their vision.”

Dr. Tityal is known for his calm nature and the smile that is always on his face. What is the secret of this smile? He has a very clear answer. “When you work hard and with sincerity towards your patients and your self, you get good results and the smile comes as a result of the happiness,” he says with a smile on his face. “At AIIMS, the working environment is good. Young students are getting a high-quality education, and they respect you. Poor patients are

being treated with high-class and high-tech facilities, which is a rarity in India. The stress-free environment here helps me stay calm. I don't have to run after money and engage in private practice. This also keeps my happiness level high. I have worked hard to develop technology, not for me, but for the entire institute, for students and for patients. Today we have the latest state-of-the-art facilities and expertise that we can provide to our patients irrespective of their socio-economic status."

People often say Dr. Titiyal has magic in his hands. How does it feel? Dr. Titiyal rebuffs, "There is no magic. Every art is perfected through years of practice and hard work. Practice makes your skills sharper. The facilities at AIIMS have made me better, but I believe that God has blessed me to ensure that whatever I have done has resulted in good, and I am thankful for that. As far as surgery is concerned, there are a few important things. First, your mental state; keep calm and stay happy. Second, the facilities and technology given by the government should be optimally utilized. Thirdly, regularly update yourself and keep pace with time and technology."

Dr. Titiyal has come a long way from the remote village without roads to being an internationally acclaimed eye surgeon. He has some invaluable gems of advice for people from remote or backward areas. "You have problems everywhere, even in places like Delhi, but you should not lose patience, no matter how long it takes for you to overcome those problems. You should have the will power to work and to struggle. Nothing is impossible. If you are persistent, you will traverse the road to success. Your mental strength is the most important."

Dr. Titiyal is a 'teacher of teachers' and has been imparting knowledge and surgical skills to many medical students and clinicians over the years as an esteemed faculty of AIIMS, New Delhi. He established the National Surgical Skills Development Centre at AIIMS to provide hands-on training in keratoplasty and phacoemulsification to residents, national trainees as well as trainers. He also regularly trains cornea faculty of RIOs, other government institutes and Armed Forces in complex corneal transplant surgeries. He believes that sharing his knowledge and learnings over the years with his fellow surgeons and students is one of his greatest achievements. "However skilled I might be, I can only benefit a certain number of patients in my lifetime. But teaching my students and passing on my knowledge and skills has exponentially increased my potential to benefit mankind. As Robert Noyce

said, ‘Knowledge is power, knowledge shared is power multiplied.’ God gifted me two skilled hands to begin with, which have now multiplied into hundreds of pairs of hands in the form of my students. That is the true measure of my success and my legacy.”

# Dr. Harsh Kumar, The Doctor whose mission is to give back vision to people



“I am not a big shot. With God’s blessings, a person can reach any height. On his own, he is nothing.”—this is how Dr. Harsh Kumar reacts when he is described as an eminent personality. In the backdrop of such humility, his stature as one of the most prominent ophthalmologists in India shines brighter.

Dr. Harsh Kumar is the Director of Glaucoma Services at Centre for Sight, New Delhi and also serves at the Indraprastha Apollo Hospitals, Delhi. He was also honoured by the Government of India in 2015 with the Padma Shri. He was the former President of the Glaucoma Society of India.

Dr. Harsh Kumar is not only an eminent ophthalmologist and eye surgeon in India, but he is also a familiar name outside India too. Apart from

his three books and innumerable published papers in renowned journals, he finds mention in international textbooks as well. He has described nine laser surgical procedures for glaucoma and anterior segment, out of which one is cited by Shields Text Book of Glaucoma—an internationally reputed reference book on the subject. He has also ensured access to knowledge of his field to the layman through his YouTube channel amidst his busy schedule.

Dr. Kumar's story of success is a hugely inspiring one. His journey from a simple middle-class background to being one of the most prominent ophthalmologists in India, tells us the value of sincerity, hard work and the willingness to serve people.

His father was a renowned legal expert whose students include eminent legal luminaries of today. He had a very profound influence on Dr. Kumar growing up, "My father did a very ordinary job in Lucknow. He did not get proper support from his family because of his stepmother and took it upon himself to change his life. He studied the law and went to Delhi, where he did not have a regular job and had a family to look after. But he never let me feel the pinch. When I face any difficulty, I ask myself—is my problem bigger than my father had faced?" Harsh told his father that he wanted to go to Modern School—one of the best schools in Delhi and famous all over India. "I did not know that it was very expensive," he says. However, his father did not let his son's dreams get stifled because of financial constraints. He was the only earner in the family that consisted of his two children and wife. Despite his limited income, he somehow managed to get Harsh admitted to Modern School. The significance of getting admission in the Modern School can be understood by the fact that a rich man offered one lakh rupees to Harsh's father to give up the seat in favour of his own son. But his father did not relent. "When I grew up, I realised that almost half of my father's salary went into my school fees. That day I asked myself what I can give back to my parents in return for this sacrifice. The only thing I could do as a child was to be sincere in my studies and make them proud. With this realisation, my priorities were set permanently, and I never came second in the class," says Kumar.

Most of the students in Modern School were from well-to-do families. They had no dearth of money and maintained very luxurious lifestyles, in and out of the school premises. "But I was very clear from the very beginning that spending money like this was neither possible for me, nor was it my objective. To be able to get admitted into the school itself was a big achievement for

my family and to waste money and time on unnecessary things would be a disservice to my parents' efforts. I was there just to study," recollects Kumar.

The sense of frugality that Harsh developed as a child is still alive with him, and he is grateful to God for whatever he has achieved—he has no complaints or regrets. "That awareness that wasting money is wrong is always on my mind. Whatever my parents gave me was much more than they could afford. I never had any problems, and it is all due to God's grace," he says.

Young Harsh gave his unwavering attention to his studies with the sole objective of making his parents' sacrifices worth it. He wanted to provide them with a sense of satisfaction in his achievements. However, he did not ignore sports and extra-curricular; neither did his parents ever stop him. "When you are doing well in studies, you develop such confidence that you can freely enjoy other activities too." His neighbourhood kids were also from a similar socio-economic background as him. Harsh and his friends would always play cricket in their free time, even if they had to use them during school and on vacations. He also became the captain of the junior hockey team of Modern School. He could have gone to play for the Delhi state team, and for that, he would have to spend much more time to do the practice. Even Major Dhyanchand's son Ashok Kumar came from the Air India team to play with them and inspire to take up hockey. But finally, Harsh's father said that only one thing could be done wholeheartedly and he had to choose between studies and sports. Harsh had no confusion about his choice, and he gave the highest importance to his studies. "I agree that even in sports, one can excel and become prominent, but in those days it was not a possible source of income, and I just would not put them to any more financial hardship. So I chose academics and focused entirely on that."

Being an eminent legal expert who had trained several leading lawyers in the country, Harsh Kumar's father had a wish that his son would also become a lawyer; but he never forced his wish on his son. "My father wished to see me as a successful lawyer, but he gave me the freedom to decide for myself what I wanted to be. He told me that if I were to study law, I could, after finishing the course, join any of the big lawyers who were trained by him, and it would be easy for me to excel in that profession. But I was not interested in becoming a lawyer because I had already made up my mind that I wanted to become a doctor."

It was a small incident in Harsh's childhood that had an indelible impression in his mind that prompted him to become a doctor. He had a stomach ache and was taken to the family doctor by his father. It was 28<sup>th</sup> of the month, and his father was a bit tense about the doctor's bill. The doctor, who was a family physician, knew that money was a bit tight for the family, so after seeing Harsh, he said he would see him again on the 3<sup>rd</sup> of the next month, and until then, he would not charge anything. The smile on his father's face was only that of seeing his son regain comfort but much beyond it. "That was the time when family physicians knew everything about a family. Not like today when doctors know nothing about a patient's background, family or personal life. I was impressed with this doctor, and I had made up my mind that I wanted to become a doctor and positively affect people's lives," he reminisces.

Yet, the beginning of Harsh's medical education at AIIMS was not smooth sailing. The toughest experience was ragging. Describing the experience, he says, "Ragging was disgusting. It still sends shivers down my spine. The questions asked were so distasteful and dehumanizing that after one month of ragging, I thought of giving up. But luckily, my neighbour Parminder Singh Bhatia—one year senior to me—protected me many times. After that gruelling period was over, I was too preoccupied with studies, the AIIMS building, the patients, going to classes, etc. It was such a good experience that I did not have time to think about other things."

The journey on the way to becoming a doctor had started, and Harsh was inching towards his dream with utmost devotion and sincerity. But he had not thought about ophthalmology as a specialisation. The branches that interested him were neurosurgery and paediatrics. However, there was only one seat in neurosurgery, and one of his friends had opted for that. Harsh, therefore, decided not to compete with his friend for it. In paediatrics, on the other hand, he failed to qualify. Among the other available branches, he chose ophthalmology. This teaches us that if one battle is lost, it is not the end of the journey but the beginning of another dawn. Thus started the journey of Harsh Kumar to becoming Dr. Harsh Kumar, one of India's most renowned and sought after ophthalmologists or eye specialist in India.

As always, Dr. Harsh was devoted for the next few years to the study of ophthalmology, and in due course, he was ready for his first operation. In ophthalmology, the first operation is usually a cataract operation. His senior,

Dr. Mahipal Sachdev, his senior, told him he would be standing right behind him and would take over in case there was to be any problem. The patient was a burly, happy-go-lucky Sardar who said to Dr. Harsh, "I know this is your first operation. Don't worry. Just go for it." The memory of that day is still fresh in his mind, "The patient trusted me with avowed confidence in me and this faith has helped me to keep taking care of my patients like my family members." Something I teach my students is that if you are facing a complex problem, close your eyes and think that the patient in front of you is your father or whichever relative fits the age and gender. Then think what has been the best solution for them under the existing circumstances; you would then arrive at the right decision clearly.

During the struggle years of MBBS and the initial years in eye specialisation, there was no time to devote to the family. This is a regret close to his heart that while he did fulfil all duties of a son as a medical person getting all requisite surgeries etc. for the family, but had no time to sit and behave like an average human who would do little chores for the father and mother. At his last time, his father was in coma. When he regained consciousness for a very short while, the only thing he uttered was, "You know my son is a doctor at AIIMS." It is something that Dr. Harsh recollects with a great sense of redemption, washing away a lot of guilt that has not been able to help with many small and mundane routine matters. "Our family members are not very expressive. So when my father said that one line, it was the expression of all his happiness that he felt from inside."

Dr. Harsh considers it a privilege to be able to serve people. Though on certain occasions, he gets distracted by the sufferings of his patients; however, that moment passes. "Every day, we get such cases when one eye has been operated upon many times, and only a little eyesight remains, which may also recede merely by touching." He remembers one of his cases, "Once, I got a twenty-four-year young glaucoma patient. He was from a very average family, and on top of that, he could not have come for surgery earlier as his parents were sick. His glaucoma was at a very advanced stage at such a young age. There was a huge chance he could lose the sight of his only eye immediately after touching it in surgery." He laments, "Such cases are truly disturbing not only because it leaves you with a profound sense of helplessness and grief wondering how such people are never detected early when a much safer treatment in glaucoma could have been possible. Sometimes, I am so

overwhelmed by such cases that I feel like giving up this profession. Once, I said to my friend that I am giving up. My friend said, 'you have done so many surgeries in the last forty years and have reached this stage, you have been honoured with so many awards, name and fame, more importantly, God has given you this opportunity and grace to serve people. Just remember that you are doing it to serve humanity. If in that process you and your family suffer, well its the price you pay for being selected by the almighty."

Dr. Harsh Kumar has treated many eminent personalities and earned a lot of respect in his field. But he credits God for allowing him to have achieved all that he has. "We had a teacher, Dr. Dada. At some point, he headed AIIMS; I was his assistant. He had operated upon many eminent personalities from Narasimha Rao to various other Prime Ministers. I asked him if he ever felt scared. He said, 'Can you do anything on your own without the blessing of God? Can you even breathe on your own if God does not want you to? Why should you worry? He is making us do things.' Since then, I also realised that it is in the hand of God, not us. We need not worry."

Another miracle to happen was at the beginning of the career as a consultant in AIIMS. Posted in the Retina department which was a little alien to his basic training as a glaucoma specialist, he was coaxed to see the newborn premature children in the nursery of AIIMS by none other than the famous Paediatrician Dr. Paul who is contributed majorly to current Government health schemes, which no senior consultant had the time to devote. The very first baby he saw was suffering from a disease called retinopathy of prematurity in which a baby born with low birth weight and kept on oxygen for survival as was happening in more and more nurseries across India could go blind unless treated by a simple cryo or laser procedure. The saving of that baby made him realise the enormity of the problem of hundreds of such babies going and likely to go blind without the treatment all across India. It was a new disease, and neither the pediatricians nor the eye specialists were geared for it. Seeing the enormity of the problem and how a baby saved with great difficulty going blind can shatter an entire family, Dr. Harsh took up the fight in true earnest. He wrote a project to ECFMG USA who then granted him a scholarship, which is granted to only ten people across the World, to study about the disease at the University of Illinois at Chicago under Dr. Michael J Shapiro. The Americans had had the epidemic a decade ago when they had started saving these very premature babies and thus had full knowledge of it. He not only mastered the

art but wrote the first comprehensive book on the disease in the World such that a new eye specialist could understand how to deal with it.

Not only was this book recognised worldwide, but many Indian eye institutes, including the LV Prasad, took it as a guide book until they created their material. He then went to two major hospitals, including the Safdarjung and Lady Hardinge Medical college, where senior eye specialists, including Dr. Guliani and Dr. Sarita Beri, took up the fight to save the eyes of these newborns under his direct mentorship. Dr. Harsh then organised innumerable workshops across the country where renowned persons like DR Azad, Dr. Pual and a group helped to teach innumerable pediatricians and eye specialists how to save these eyes.

Dr. Harsh always emphasises the importance of humility. “Whenever someone says ‘you cured us,’ I say ‘No I did not; it is your destiny that got you cured.’ I don’t like it when people touch my feet, because I know I do nothing. I may do ten operations in a day, and every operation may have different results. When people call me God, I say, ‘Don’t say that. If God learns there is one more, he will call me back!’”

Dr. Harsh believes that God has been very forgiving to him and also keeps him on the path of humility. “I have a strong connection with God. Whenever I veer towards vanity, he straightens me up. I keep in mind that I am only God’s servant, and I should never be vainglorious, but sometimes, I forget that. My God and I are both forgetful, and we forget things. He forgets my mistakes, and I forget his kindness and grace. Once, I did an operation, and a visiting foreigner was watching; I said, ‘See what a beautiful operation it is. The next day the patient’s condition was bad. God was telling me, ‘Who are you to be proud? What did you do? I am the doer.’ Then I prayed to him and promised I would never do that again. ‘Whatever good is yours, whatever bad is mine,’ I said to God. The patient improved dramatically.”

Dr. Harsh does not see any conflict between God and science. “There are thousands of crores of diseases. We learn a few thousand in medical colleges, and we try to fit everything into that, which is not possible. Every patient is different, and every disease is different. If you could become a great doctor by reading books, then every MBBS would be a great doctor. But it takes years and decades to learn about a disease, the type of the disease and the type of the patient, etc. Since we are scientists, we apply science to find out about the

disease, but after that, everything depends on God. When you are dedicated to God and ask him to cure the patient, God listens most of the time.

Dr. Harsh considers every day, not a struggle but a challenge. “Every day is a fight. The higher you are, the more difficult patients you get. Treating a one-eyed patient and wondering the next morning whether he got cured is a strange battle, and this struggle keeps you humble and kind.” Yet, every time a patient is cured, the patient says to the doctor, “You are a God.”—that feeling affects you deeply though you know who the healer is. So when you do something with all your heart and soul, God listens to you. “

Although Dr. Harsh Kumar did not follow his father’s footsteps of becoming a lawyer, he is continuing his father’s legacy of imparting knowledge. He has been educating doctors as well as common people on issues related to the eye. Since the very beginning of his practice, he has been travelling to far-flung places to train young doctors. He makes it a point to deliver lectures in the local language as much as possible. This is one of the major reasons his lectures are widely popular and are well appreciated by all listeners. This, he considers one of his biggest successes. “Once I went to Punjab and delivered the lecture in my limited Panjabi—by now,—everyone else of the local speakers spoke in their limited English, and my lecture was highly appreciated. They were all happy. Dr. Daljit Singh, an Icon, who had invented an Intraocular lens in India for the first time, said, ‘We are proud of you. You taught us everything in our language, while we were struggling to teach in a language not close to our hearts.’”

“The problem is that people are more preoccupied with science instead of understanding the patient.” Dr. Harsh always emphasises on understanding the patient before anything else. This is something he follows in his professional life and advises others to follow too. “Whenever I lecture, I tell five-six simple things. Once a person came to me and said, ‘Sir! I attended one of your lectures and noted these five-six things, and I noted them down.’ He showed me a paper and said, ‘My patients have benefitted a lot because of these things.’ I like teaching people because that is the way to propagate good things and help others save sight.”

Educating people about eye ailments is considered a public service by Dr. Harsh. “How many patients will you treat on your own? How many operations will you do on your own? God has given you these two hands

and twenty-four hours in the day. Every doctor needs to teach the juniors and spread knowledge as only then can we tackle blindness. Alone, we are too small, and together we are a sea. I see a lot of patients every day, and it is impossible to spend too much time with them, even if I want as then others requiring attention will get neglected. Thus I have created a few videos which are on YouTube. I have put up many things there, for instance, how to identify problems of glaucoma, how to apply medicine, etc. People have benefitted from these videos, because usually when you can detect glaucoma, it is too late. Many doctors just give a pamphlet to read, which lies ignored, and with the changing times, the written word is not as appealing to people as videos or audios."

Where ever I go and travel to give lectures, especially to the young budding eye surgeons, I tell them stories to make them understand the power of interaction. I repeatedly tell them to never tell anybody that they are likely to go blind. That virtually amounts to a death sentence as the guys will be completely shattered. So I had a young girl come to me barely able to see anything, completely broken after being refused at multiple places she needed special attention. I closed the OPD for some time and sat and talked to her. I gave her hope that, within a span of time, new inventions are likely to restore her sight. I begged her and cajoled her to immediately start looking for a telephone operator or some such job, which would distract her and make her feel useful to the family and society. She came back to me after three months, smiling and told how she was going to commit suicide, but the offer of hope saved the day, and she was gainfully employed and even found a visually challenged person as a husband. Hope is everything. Whatever you do, you have no right to snuff that from there lives.

Two years ago, my world fell apart when my spouse, who was 90% of me, left for her heavenly abode at an unusually early age. Completely shattered, what kept me going was that I had to now fulfil the role of both the parents. Feeling really low down, the day I rejoined, I was moved by the type of patients waiting for me. There was a young boy who had only one eye functioning and that too, with limited sight. He begged me to help him at any cost as he had lost his father, had a housewife mother and three younger sisters to support. Then came another young chap who again had only one working eye with a limited vision, and though through surgery, we had stabilised him, yet the amount of vision left barely ok for working made him and be aware that his

entire life hung by a thread. These and such other patients suddenly made me think of how difficult their lives were compared to mine. Would for one moment I would change places with them. Didn't so many patients of mine were dependent on me to keep them going with my encouragement and a promise that I will keep them ok with the grace of God, how could I abandon them and think only of my misery. This suddenly gave me the strength to keep going forward.

The family has been the pillar of strength for Dr. Harsh. He attributes most of the credit for his good health and positive spirit to his wife now in heaven. "She never complained when I was busy studying or attending to patients almost twenty-four hours a day at some point in time. She is a Professor at Delhi University (DU). We used to stay in a small quarter in AIIMS; she adjusted there. She used to travel from DU to home even when she was pregnant without complaining. At AIIMS, we did not have much money, yet my children never complained about anything. Instead, they would press their faces on the display windows but said, 'Dad, when we have money, I want this toy or that toy.' But they never pestered us for anything. A person can't do anything if there is no peace at home. So, it is God's grace that continues to remain with you when your family stands like a rock beside you while you work sincerely. Without my wife and children, nothing would have been possible." Seeing the success of their children, seeing them settled in their careers are the biggest sources of happiness.

Dr. Harsh Kumar's son is also an eye specialist, but he was never pressurised into becoming a doctor. In fact, he was warned about the perils of being a doctor, "I told my son that being a doctor is a real struggle, so he must rethink about it. However, seeing the joy and the peace achieved by treating all strata of patients and the blessings they bestowed left a deep impression on his mind. He was very clear about being a doctor." About the life lessons he has imparted to his children, he claims, "Many people say that you should teach your kids how to lead an ideal life. It is useless until you show them what struggle and sincerity can achieve in life. He has to see what you are doing. If you are a liar and tell him to be truthful, he will not listen. When he sees you treating poor people for free and working hard, he will take lessons from that."

The kindness of his kids also keeps him close to God. The daughter is so moved at any animal suffering that she immediately jumps out to help all

kinds of suffering life. Donating regularly to such organisations and to the poor and needy of the city footpaths is her passion.

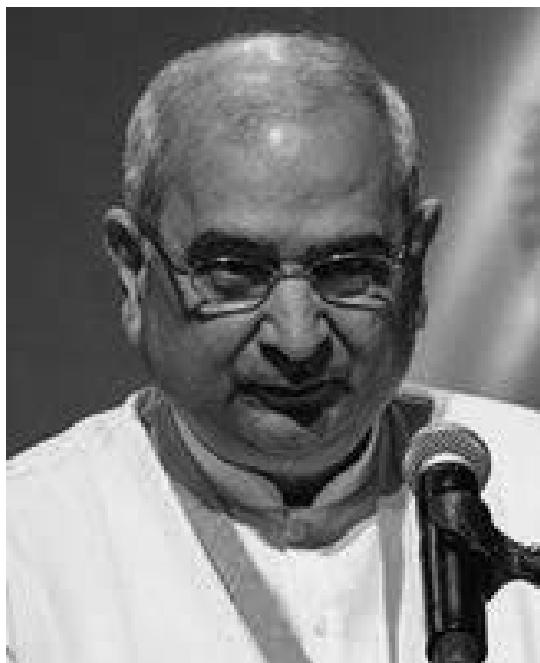
Dr. Harsh considers the eyes the most significant part of the human body. “The eyes can see the entire universe. We ophthalmologists cannot see anything inside the body, but by seeing the eyes, we can know about sugar, blood pressure etc. It is an amazing and important sense organ. The most beautiful thing you can see with your eyes is the love of the people and the tears of happiness in the eyes of the patients. I don’t like to see fights, honking, irritation and aggression of people—all of it means that you are away from God. Everyone’s eye is beautiful. Every person is a creation of God, whether rich or poor. I like every eye.” He says.

Dr. Harsh Kumar’s mantra for success is simple—do your job sincerely and honestly. “Gita is very clear on this, but we tend to forget. When you do something with sincerity without expecting any returns, you succeed. Even if you are a janitor, do your job efficiently. We say ‘I need this car. Hence, I am doing this’—that is not the way. God gives you success if you are doing your job dedicatedly.” Dr. Harsh has no regrets in life; Two things are important in life—first to forgive those who wronged you, and second, to move on without looking back. A doctor can have a very positive impact on people’s lives.

This journey is still ongoing with the hope of being able to eradicate blindness due to glaucoma in this country. We pray that his passion, hard work, never to give up approach and to find positives in the worst of the circumstances will make him achieve his laudable goal.

## Vaid Devendra Triguna, the Global Ambassador of Ayurveda and Nadi Vigyan

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India is the land of ancient knowledge and expertise. One of the most significant gifts India has given to the world is Ayurveda—the age-old system of medicine that has admirers all over the world. Vaid Devendra Triguna is one of the most prominent practitioners of Ayurveda. He is also one of the very few practitioners of the almost-extinct ancient skill of Nadi Vigyan, or pulse diagnosis.

Devendra Triguna was born into a family of eminent Ayurvedacharyas, or Ayurvedic practitioners, for the last four generations. His father, Vaid Brihaspati Dev Triguna, was also a highly respected and world-renowned

Ayurvedic physician who served people from around the world for more than seven decades of his life. Brihaspati Dev Triguna was a prominent physician and patients from all over would come to him for treatment of various ailments. He played a crucial role in spreading Ayurveda worldwide in the 1980s. When Maharshi Mahesh Yogi embarked on his worldwide journey to popularise yoga, he invited Brihaspati Dev Triguna to accompany him and spread awareness about Ayurveda. It was because of the combined efforts of Maharshi Mahesh Yogi and Brihaspati Dev Triguna that yoga and Ayurveda started becoming widely practised around the world. Brihaspati Dev Triguna had travelled the world over and opened Ayurvedic clinics. He had also given lectures on Ayurveda in prestigious international institutions like Harvard University and John Hopkins. He headed various government institutions in India and was also the personal physician of the President of India. Brihaspati Dev Triguna also played a significant role in standardising Ayurvedic medicines and certification at the Ayurvedic colleges in India. The Government of India honoured him with Padma Bhushan and Padma Vibhushan in recognition of his service to the nation and the world.

Growing up in such a family, Devendra Triguna had made up his mind to become an Ayurvedic physician. After finishing his studies in Ayurvedic college, he started practicing Ayurveda and Nadi Vigyan under the able guidance of his father. It was in the year 1974. Highlighting his father's contribution to Ayurveda and Nadi Vigyan, he says, "Father did not use his knowledge for business. It was a sadhana or worship. He thought that there was plenty more scope of research in the field of Ayurveda, and new medicines must be developed for the benefit of humanity."

Devendra Triguna still considers himself a student of Ayurveda. "Practice of Ayurveda is not easy. It needs a lot of practice and dedication. After graduating from Ayurvedic college, I kept learning under the guidance of my father for around fifteen years, and I am still learning. It is a skill that is honed with consistent practice and dedication. It cannot be computerised."

Devendra Triguna laments that today Nadi Vigyan is no longer as popular as it used to be, and no college teaches this ancient science despite steps taken by the government to promote it—for which he expresses his gratitude to the Prime Minister. "In Nadi Vigyan or pulse diagnosis, we first see the nature of the person. Then we see which of the three Doshas has been disturbed in

that patient and where the ailment resides. We have no objection to Western medicine, and we often send patients to get allopathic tests done, too.” Triguna also believes that instead of being confined to a particular group of experts, Nadi Vigyan should be learnt by everyone. “Government should promote it and teach it from the school level so that people can keep track of their health easily. People should also know what to eat and drink or what not to eat and drink in various seasons to be able to cope with seasonal changes. It will help them stay healthy.”

Devendra Triguna has treated many high profile patients during his career. In 1975–76, he accompanied his father to see Babu Jagjivan Ram, who was a union minister at the time. Those were the early days of his career, and he had graduated from Ayurvedic college just a year before. No sooner than he visited Babu Jagjivan Ram that he was treating him independently. “Initially, I was very conscious that I was treating a very eminent person, and I had to be very careful. However, with time, that apprehension subsided as I got immersed in the treatment. Never again did I feel anything like that,” recollects Devendra Triguna.

Chronic patients suffering from various ailments like cancer, kidney problem, blood pressure, liver diseases and other lifestyle diseases come for treatment to Devendra Triguna. A large number of these patients come with referrals from various hospitals around the world. “When one treatment does not work, we think about something new. Every patient is a new case, and every case is a challenge for me,” says Triguna.

Devendra Triguna credits the global popularity of Ayurveda to the efforts of his father, Maharshi Mahesh Yogi and his father, Vrihaspati Dev Triguna. “In 1978, Maharshi Mahesh Yogi told my father that he wanted to take Ayurveda with yoga. He invited all the Shankaracharyas, or priests to Delhi and arranged for the worshipping of the mercury Shivalinga and embarked on the mission of spreading yoga and Ayurveda around the world. The interest among people around the world today for Ayurveda is because of this campaign by Mahesh Yogi and my father.”

Devendra Triguna has long been advocating synergy between allopathy and Ayurveda. “Every medicine system has its own limitations and advantages. On certain occasions, allopathic doctors refer patients to Ayurvedacharyas and Ayurvedic physicians also refer their patients to allopathic doctors. For

example, the ancient Ayurvedic system of surgery is no longer prevalent, and we have to refer patients to surgeons whenever a surgical procedure is needed.” Triguna says, “If Ayurveda and allopathy combine their strengths, India can give a very robust and effective system to the world.” He believes that such a system would also bring down health costs by a significant degree. “In bigger hospitals, Ayurveda and allopathy should be linked. AYUSH ministry must take a step in this regard. Look at the big hospitals in places like Delhi. The hospitals are costlier than hotels nowadays. The diagnosis itself is costly today. If the government promotes Ayurveda and yoga, health costs can come down drastically. India can also show a path to the entire world to be healthy as per our age-old slogan—Vasudhaiva Kutumbakam (the whole world is my family),” he says.

One of the most significant cases he likes to reminisce about is that of a former top bureaucrat who was suffering from blood cancer. After spending seven months in New York for treatment, he was finally told that he would not survive for more than a week. The patient decided to come back to India. On his flight back home, he was recommended by someone to consult Devendra Triguna. He rushed to meet Triguna straight from the airport. His condition was deteriorating by the hour, as the cancer was in the M4 stage. Devendra Triguna, along with his father, started treatment on him. He was advised to go for a check-up every two weeks to the All India Institute of Medical Sciences (AIMS) Delhi. Within two—three months, his condition improved. His blood counts, platelet count, etc. became normal, and cell blasts had also stopped. He was treated, and he went back to his regular life and job after the treatment. After successfully serving in important designations, he retired in due course. Sometime after retirement, he was diagnosed with pneumonia and was admitted at AIIMS. The doctors stopped his Ayurvedic medicines, and he died due to pneumonia.

Considering such tragic cases that lay bare one’s ignorance about Ayurveda, Triguna thinks a lot more is needed to be done for Ayurveda. A major impediment in the path of Ayurveda is the lack of availability of medicines and raw materials for producing medicines. “The government should make it easy for Ayurvedic practitioners to procure certain rare items like coral, Kasturi etc,” he says. Faith in Ayurveda has increased, but there is still a glaring need for better facilities and better Ayurvedic colleges so that

efficient Ayurvedic doctors are produced who can revive and take forward the glory of this ancient practice.

Another roadblock in the development of Ayurveda, according to Triguna, is the lack of government budget; and that has stalled major research work in the field. “Government says Ayurveda should be promoted, but there is no budget. The government also says there should be more research, but the budget for Ayurveda has remained the same for the last five years. The health budget is 5000 crores but the budget for AYUSH is just 1000 crores. Lip sympathy on the part of the government is not enough to promote Ayurveda, and there have to be some meaningful steps.”

Triguna feels that the apathy to Ayurveda has been there for decades. “In 1928 and 1932, the National Ayurveda Congress decided that Ayurveda should be India’s national system of medicine. Even Gandhiji was of the same opinion. But nothing happened in independent India. If there is no budget, how can Ayurveda develop?” He says.

However, there have been some efforts to develop Ayurveda, and Triguna has played a proactive role in these efforts. The National Ayurveda Institute that has been set up as a result of relentless persuasion and lobbying by the likes of Triguna is one major example. The institute imparts education on Ayurveda to students in the age-old guru–shishya tradition. There is a provision for studying Ayurveda and various aspects related to it. A student can study the Samhitas like Sushruta Samhita, Charaka Samhita and Ashtanga etc.

Following in his father’s footsteps, Devendra Triguna has been honoured with many governments and non-government recognition for his contribution to the field of Ayurveda, including the Padma Bhushan, the third-highest civilian honour, in 2009, and the Padma Shri, the fourth-highest, in 1999. He was an honorary physician to the President of India. He has headed various prestigious organisations like the Association of Manufacturers of Ayurvedic Medicines (AMAM) and the All India Ayurvedic Congress (AIAC). He was also the founder president of the International Ayurveda Congress. Triguna has been associated with various Institutions like Rashtriya Ayurveda Vidyapeeth, Ayurveda and Unani Tibbia College, Gurukul Kangri Vishwavidyalaya etc. He has been on various high-level government committees and also an advisor to many state governments throughout the country.

Triguna considers it his duty to work for a healthier society and help people become healthier. “Success comes through hard work. One should not think

of siphoning off money from patients. If you give diligent service, name and fame will come to you, and so will money. I like to help people, and it is an on-going process,” says Triguna. He claims it is his objective to work for new medicines and new treatments in Ayurveda and also to work for making raw materials for the production of Ayurvedic medicine more available. Most of these materials are not available today, and if this remains the case, Ayurveda cannot survive. He urges the government to involve Ayurvedic scholars to work together in this regard. He believes that the government should also take measures for better training of Ayurvedic physicians.

Triguna believes that an excellent Ayurvedic physician has to work very hard and practice diligently. Whether Nadi Vigyan or pulse diagnosis or Ayurveda, there is no shortcut to hard work and practice. First, you need passion, and then, you need the ability to work hard and become an excellent Ayurvedic physician or Nadi Vaid or pulse diagnosis expert.”

Dr. Kalyan Banerjee,  
the Doctor who has treated  
Forty Lakh Patients and with  
Thirty Lakh Free treatments to his credit

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Samuel Hahnemann, a German physician, developed the system of Homeopathic medicine in 1796. Since then, it has been widely debated whether homeopathy is real science or just a farce with both sides fighting their cases with unwavering determination and ferocity. Nonetheless, it is the second-most-widely used medicine system worldwide. It is also popular in India, and many people believe in this system. Dr. Kalyan Banerjee is considered the topmost homeopathic physician in India. He has treated more than forty lakh patients till now, and the count still goes on. He believes in serving humanity with his skills and his biggest objective in life is to alleviate

people's suffering. His is an inspiring story for millions of aspiring physicians who aim to serve the people.

Kalyan Banerjee was born on 10 April 1949 in Balasore in Orissa. His family and childhood home is in Chirkunda, Dhanbad district. Both his paternal and maternal grandfathers were doctors. His paternal grandfather, Dr. Jnanendra Mohan Banerjee, was a renowned allopathic physician and surgeon. However, he gave up allopathy and resorted to homeopathic practice. His father, Dr. Sambhunath Banerjee, was a renowned allopathic physician too, and his mother, Sushma Banerjee, was a housewife. Kalyan's uncle, Dr. Narayan Chandra Banerjee, was also a renowned homeopathic physician. There were several other physicians among his relatives; therefore, he, too, wanted to be a physician from a young age. Kalyan is the second of four children. He has one elder sister and two younger brothers. Both his brothers are physicians. One is a dental surgeon, and the other is a practitioner of internal medicine. His sister is a computer engineer and housewife.

Kalyan's grandfather, Dr. Jnanendra Mohan Banerjee, had converted to homeopathy before Kalyan was born. There was an incident that prompted this shift from allopathy to homeopathy. Once, Jnanendra's wife suffered from a condition of the appendix known as an acute appendicular abscess. This condition could not be treated by allopathic medicine, and they consulted renowned homeopathic physician, Dr. Pareshnath Banerji, as a last resort. Dr. Pareshnath Banerji's medicines cured her, and she did not have to undergo any operation. This and other seemingly-irresolvable cases highlighted the effectiveness of homeopathy and prompted Jnanendra to convert to homeopathy. Since then, homeopathy was the most favourite system of treatment in the family. While growing up, young Kalyan also noticed that for every ailment in the family, homeopathy was the preferred choice of treatment. Therefore, despite his father being an allopathic physician, Kalyan was more attracted to homeopathy right from his childhood. His mother also wanted him to become a homeopathic physician. Apart from all these factors, there was another significant reason for Kalyan to be interested in homeopathy. Securing admission in an allopathic medical course was not easy—one needed a very high percentage of marks or influence to get admission into a medical college, apart from the fact that there were not many medical colleges in that region. Homeopathy, on the other hand, was easy to get admitted into, and there was a very good homeopathy college—Homeopathic Medical College

& Hospital of Mihijam—at a distance of about thirty kilometres from his home.

Kalyan Banerjee had studied up to 10<sup>th</sup> standard at Kulti in West Bengal. There he completed his pre-university and then up to BSC part-1 from Asansol College under Burdwan University. After that, he started his training in homeopathy at Mihijam.

At Mihijam, Kalyan Banerjee learnt the minute details of the homeopathic medicine system and various ailments. One of the teachers who had a profound impact on him was the principal, Dr. Parimal Banerji—President of the International Institute of Advanced Homeopathy. He had also set up protocols to help homeopathic physicians to choose the best suitable medicines for various ailments. These protocols are important because, in some cases, choosing a suitable medicine for a particular ailment is not easy. Kalyan Banerjee saw his mentor cure some very complicated cases using homeopathy, thereby creating a great sense of confidence in him. After finishing the four-year DHMS course, he gained an MD from Agra University. Additionally, he also did several fellowships at Mihijam.

Dr. Kalyan Banerjee remembers his first patient—a child with severe skin infection all over his body; he was in a very bad condition and needed immediate help. His treatment was effective, and slowly but surely, the child was cured completely. It gave Dr. Banerjee immense joy, and he was determined to take his practice further with passion and confidence.

His mentor, Dr. Parimal Banerji, had many patients in Delhi, and they would travel a long way to Mihijam, Jharkhand or Kolkata to see him. These patients had been requesting Dr. Parimal Banerji for a good homeopathic physician in Delhi. He then told his student, Dr. Kalyan Banerjee, to go to Delhi and set up his practice there. Therefore, he shifted his base to Delhi in 1977.

Since starting the practice, Dr. Kalyan Banerjee has treated more than forty lakh patients so far, and the numbers are continuously rising, “I did not think much about numbers. The numbers just happened,” he claims. Right from the time of starting practice in Delhi, he has been treating poor patients for free. The number of patients that he has treated for free in the last forty years is around twenty-five–thirty lakhs. What prompted him to start free treatment for patients? “My teacher Dr. Parimal Banerji used to provide

free treatment to everyone at Mihijam. My father, grandfather and uncle also provided free treatment to many patients. Therefore I started treating poor patients for free from the very beginning.”

Dr. Kalyan Banerjee has treated some of the most famous and influential people in the country. Some of these people are former Prime Ministers Morarji Desai, V.P. Singh, Choudhury Charan Singh, Chandra Shekhar, former Presidents Shankar Dayal Sharma, Pratibha Patil, Pranab Mukherjee, many union ministers, various Chief Justices of India and other judges and advocates of the Supreme Court, top bureaucrats etc. However, his humility comes in the way of talking about the eminent personalities he has treated.

Dr. Kalyan Banerjee has served as a member of the Governing Body of the Central Council of Homeopathy, Ministry of Health, Government of India, member of the Standing Finance Committee and a member of the Homeopathy Pharmacopoeia Committee from 2003-2009. He was also a member of the Special Committee for Clinical Research of the Central Council of Homeopathy, Ministry of Health, Government of India. He has served as a member of the National Children’s Fund of the Ministry of Women and Child Welfare, Government of India.

In his forty years of practice, he has treated a variety of ailments. These cases range from simple to highly complicated ones. One of the complicated cases that come to his mind is that of a cancer patient who was at an advanced stage and had come to him when every other treatment had failed after the doctors at AIIMS and Tata Institute of Medical Sciences had declared that nothing more could be done to treat her. Dr. Banerjee says, “Even I was not very hopeful of her recovery. She was around forty-five years old, and her condition was critical. Yet, I started treating her, and after prolonged treatment, she was completely cured.” However, this is not the only case of cancer that Dr. Banerjee has treated. Not only cancer but various other complicated ailments have been treated by him—organ failure, renal failure (kidney failure), liver failure, an autoimmune disorder, gangrene, liver cirrhosis, various types of brain tumours, skin diseases, neurological problems, radiculopathy, lupus, athrepsia, facial neuralgia, infertility, thyroid, autism, congenital brain defects, epileptic fits, ataxia etc. are some of the diseases that are curable by homeopathic treatment. For most of these ailments, allopathy has no cure or no cure other than surgery. “I did not let them go for surgery in most of these cases and cured them through homeopathic treatment alone,” he declares.

However, Dr. Kalyan Banerjee agrees that since there is no system of surgery in homeopathy, in certain cases, there is no other option than allopathy. For example, in trauma cases, one needs an immediate life support system. Sometimes, one also needs surgery like in the case of fractures. After that, once the condition is under control, the patient can take homeopathic treatment for complete healing.

The critics of homeopathy often say that it is not real science, but the medicines work as a placebo effect. To this, Dr. Kalyan Banerjee says, "Many people say there is no scientific proof of the effectiveness of homeopathic medicines because they do not find a trace of the elements in the dilutions. However, then, real-life experiences say that it works and has been extremely effective and life-saving in many cases. We have cured patients with homeopathy, and therefore it needs to be accepted as alternative medicine."

Why is homeopathy not as popular as allopathy? "Allopathy gets publicity, and there is much promotion. Many people do not know much about homeopathy. Even some allopathic doctors do not know much about homeopathy. While every achievement in the field of allopathy is highlighted across town, no one highlights the achievements in the domain of homeopathy. Nevertheless, people are gradually becoming aware of homeopathy and its effectiveness. When people get cured, they talk about it to others, and it is only through word-of-mouth that we get patients. The awareness is developing gradually, but it still has a long way to go."

Dr. Kalyan Banerjee also dispels the widespread perception that homeopathic treatment is always time-consuming. "Can we let a patient suffer for a long time in case of dengue, viral fever, etc.? Homeopathic treatment is not always lengthy." He continues, "Every system of medicine has got some limitations. Some allopathic physicians also come to me when their system is unable to cure their diseases. Usually, they come for skin ailments, liver and kidney problems, joint pain, allergy and spinal cord problems etc.

Similarly, sometimes homeopaths have to go to allopaths for diagnosis too. I had to go to an allopathic physician once, but after the diagnosis, I took my medicines. Diagnosis is necessary for any system of medicine, whether it is homeopathy, Ayurveda or allopathy. For example, one needs a clinical diagnosis to understand whether a tumour is cancerous or not. Only then can one treat it."

Dr. Kalyan Banerjee's son, Dr. Kushal Banerjee, is also a homeopathic doctor. "I always had a wish that my son becomes a homeopathic physician and becomes more famous than me, but I never forced him. I told him to pursue whatever career he wanted to. But he was interested in homeopathy and wanted to follow this tradition. He is already doing well, and I hope one day, he becomes more famous than me," he exclaims. Unfortunately, his daughter is no more. She was working in the UK after finishing her Masters in Social Work from Tata Institute of Social Sciences (TISS) when she had come home for holidays and went to Rudraprayag. There, she met with an accident and was washed away in the currents of the river. Her body was recovered after ten days.

Dr. Kalyan Banerjee has received many national and international awards and recognitions. He had also been honoured with Padma Shri in 2009. He admits that being bestowed with the Padma Shri made him elated as it was government recognition of his life-long work. Yet, he considers being able to cure his patients as his most satisfying achievement. "My biggest goal is to make my patients happy," he says with a smile that is almost a trademark. He is known to meet and treat his patients always with a smiling face. "The happiness and satisfaction that I get from curing a patient help me treat the next patient with much positive energy and thus, I can make my patients feel good."

Being born into a family of renowned physicians, one wonders whether Dr. Kalyan Banerjee felt any pressure to live up to the fame of his grandfather, father and uncle? He admits, "My grandfather, my father and uncle were all very famous. I had to take the family name forward, and I had felt the pressure to perform."

A lot of patients describe him as God; someone who can eliminate suffering. He humbly dismisses such eulogies, though. "I am not God. I am just a doctor who can advise patients. If the patient does not take the steps necessary to get cured, I can do nothing. I have no extra powers. Patients come to me with very high expectations. They think they can be cured if they come to me, but there are some limitations to treatment. In certain cases, the damage is already done beyond repair, and it cannot be cured. In most of the cases, they get relief even in the advanced stage."

Dr. Kalyan Banerjee's success mantra is simple. "Just keep your mind focused, be honest, sincere and sympathetic to your patient—whether you are a homeopathic, allopathic or Ayurvedic physician—you will succeed. Those who do not have any physicians in the family to guide them on their medical path need not despair. My grandfather did not have anyone in the family to look up to, but he became a famous doctor with immense hard work."

Forty years of relentless service to mankind has still not made Dr. Kalyan Banerjee fatigued. He remains passionate about treating his patients, "When I am seeing patients, I do not remember anything else. My ambition is to eliminate the sufferings of people for as long as I can," he says with his characteristic smile.

Dr. Kalyan Banerjee's wife is Mrs. Sumita Banerjee, the elder daughter of Dr. Parimal Banerji.

# Dr. P. Hanumantha Rao, a Life Dedicated to the Welfare of Differently Abled



International Health Organization believes that out of the total world population, around fifteen percent are physically or mentally challenged. Out of these, around eighty percent are residing in developing nations. Any sort of disability makes the victim feel inferior and causes a sense of inadequacy, and to add to that, society always keeps cursing the disabled.

If there is a wrong mindset in society, then disability becomes a bane for society. If we really want to progress and develop in actuality, we need to consider disability as a disease that can be treated or at least the consequences of which can be handled with a positive outlook.

It is not that physically challenged people lack confidence. We need to shape their potential properly and ignite a feeling of self-confidence among them without showing a piteous feeling toward them. We need to empower them instead of considering them a burden on society. There is one such personality who has practically made it a reality by giving a ray of hope to sixty-nine lakh differently-abled individuals by filling their life with a sense of purpose. It is difficult to believe it, but it is a reality. The name of the person who has achieved this milestone success in the last forty-two years is Dr. P. Hanumantha Rao.

Hyderabad based pediatrician, Dr.P.Hanumantha Rao, dedicated his entire life to helping and serving the physically-challenged. He has established such an arrangement that benefits hundreds of differently-abled people every day. Dr.P.Hanumantha Rao, who established his centre forty-two years ago in Hyderabad for the rehabilitation and treatment of physically-challenged patients, has now started the country's largest centre with the help of four NGOs to help physically-challenged children and other needy people. Not only this, but Dr. Rao has also established various educational and training institutes that prepare individuals in helping and rehabilitating the physically-challenged. His social service is incredible. His efforts are extraordinary and experiments life-altering, acclaimed across the globe. His success is a great inspiration and a big lesson for the world.

His is a story that has an element of struggle, adverse circumstances, challenges, and despite it all, his successes. However, the most important aspect is perseverance, hard work and passion that led him to attain the heights that he has reached in his career.

Dr.P.Hanumantha Rao was born on 16 September 1945 in the old city of Hyderabad. In his family, his father and two uncles were registered, medical practitioners. In those days, there used to be very few doctors and medical practitioners. His father wanted him to be a doctor and help him in running his nursing home. However, Dr. Rao decided to do something big. He did not want to be just a medical practitioner, but he wanted to pursue MBBS and become a doctor. Dr. Rao's family had a good reputation in the city because of their huge nursing home. It was a joint family; income was excellent; there were all the facilities in the house. He received his education from Mufeed-Ul-Anam High School.

While refreshing the memories of those days, he says, "Those were the happiest days. There was not a single challenge. I had experienced all the luxuries during those days. I never saw those days again." Dr. Rao got admission into Kakatiya Medical College of Warangal based on his diligence and efforts. But a series of challenges came his way as he started pursuing his medical education. The joint family was broken; everyone got separated; the economic condition was nothing like before. In a way, all the family responsibilities came onto Dr. Rao's shoulders. He even had to take care of his four brothers and four sisters. This was the sole reason his father directed him to start his practice immediately after completing his MBBS so that he could run the family. But, Dr. Rao wanted to study further; he wanted to become a pediatrician. He had plans to treat patients after taking his MD degree, but his family insisted. In such a scenario, he made a big decision and told his father that he would continue with his studies and give the family six hundred rupees every month, which he would be getting a stipend. The family agreed upon this decision, and he single-handedly took care of his parents and all the siblings.

Dr. Rao tells that there were many doctors in Hyderabad during those days; even child's specialist doctors entered into medical space. To add to that, there was an acute shortage of doctors who could treat both mentally and physically challenged children. He observed that the parents of such differently-abled kids faced many challenges. They struggled to get their kids appropriately treated. They roamed from village to village and city to city in search of treatment for their children.

In light of such stark realities, Dr. Rao took the most significant decision of his life. He took a vow that he would dedicate his life to treating physically challenged kids and making their life better.

Dr.P.Hanumantha realised during his practice that treating and taking care of such kids was not an easy task; it required specialized training. He searched for the training related to the treatment and rehabilitation of physically-challenged kids. Then, the very next move was to take admission into the All India Institute of Physical Medicine and Rehabilitation in Mumbai. His vision became firm after getting trained in this institute. His self-confidence got enhanced, and he started treating handicapped kids and got engaged in their rehabilitation work with full zeal and enthusiasm. During this time, Dr.P.Hanumantha got his doctorate degree in the discipline of Rehabilitation Psychology from Osmania University.

Dr. P. Hanumantha Rao established the first centre in Hyderabad for the treatment of mentally-challenged kids in the year 1977. This centre was opened in a garage in the Kolsavadi area. In the beginning, there were only five children, and he kept two staff members to look after them and their treatment. This centre opened in a small garage was the foundation of a very impactful institution. It later came to be known as the most famous centre for treatment, rehabilitation, education and training of physically-challenged children.

In an extraordinary meeting, Dr. P. Hanumantha Rao narrated that in those days, the family used to hide the child who was born disabled. It was considered as a curse for the family, often related it with their past misdeeds. People were not aware that mentally challenged kids and adults could be treated and rehabilitated. Many people used to tie such patients with shackles in their homes and ostracise them from society.

According to Dr. Rao, it is not only the parents of physically challenged kids but also the parents of 'normal' kids and people, in general, were not aware of rehabilitation of such disabled children. He shares an incident to put forward an example. It so happened that the centre which was opened in the garage to rehabilitate mentally-challenged children was in a slightly upscale area. Those people living in posh bungalows near the centre did not like the idea of a rehab centre for mentally challenged kids in the neighbourhood. People conspired a lot to ensure that the centre did not come up in that locality. Once, people poured water on the centre staff and children from a high building—the primary purpose was to provoke the staff to evacuate the premises. However, all this did not deter Dr. Rao, whose vision only became clearer. He continued and rather increased the operations of the centre from that place itself.

Dr. Rao says, even doctors were not well aware of rehabilitation and treatment of physically disabled children during the '70s and '80s; there were only four pediatricians in Hyderabad. In the curriculum of the MD course, some information used to be given on mentally challenged children and adults, but that was not sufficient. If he so wished, he could have earned much wealth by treating ordinary diseases of children. But he vowed to be doing something' extraordinary. He reached out to those people who are the most ostracised, those considered incapable of helping themselves.

In the year 1981, a significant event happened in his life. He was allotted land in Secunderabad by the Indian Forces to make a big centre for the rehabilitation of mentally-challenged kids. On this piece of land itself, a spiritual leader named Guru Puttaparti Satya Sai Baba laid the foundation stone for making this new establishment. Dr. Rao started an NGO named 'Sweekaar' to help mentally-handicapped children. While telling the reason for naming the organization as 'Sweekar,' he says, "In those days, the society was not ready to accept mentally-challenged children. People had a notion that if one person in the family were 'handicapped,' then the peace of the family would get adversely affected. People were not ready to accept that there was a cure for such physical and mental disorders, as they were unaware of the advancements of medical science. That is why I thought our organisation would accept such kinds of patients who are not being accepted by society." Staying true to its name, 'Sweekaar' has become that place where disability of any kind can be treated, and any disabled person can be rehabilitated.

Dr. P. Hanumantha Rao does not even hesitate to say that many of the doctors were jealous of his social service. Some people even used to say, 'One day, Dr. P. Hanumantha Rao will go mad treating mad patients.' But he was never bothered with these things. He continued serving the differently-abled with all his heart.

After his dedicated service towards mentally-challenged children for nine years, he had a thought in his mind to start serving the physically-challenged due to various reasons. In order to execute this idea, he started serving people of various disabilities and arranging for their rehabilitation. Apart from centres for the disabled, he even started centres for drug addicts and people suffering from family affairs and mental disorders.

Later Dr.P.Hanumantha Rao established three more NGOs and self-service organisations along the lines of 'Sweekaar.' He named these institutions, 'Upkaar,' 'Aashray' and 'Suraksha.' All these organisations work as per the meaning derived from their names. Through 'Upkaar,' Dr.P.Hanumantha Rao provides every possible help to handicapped kids and other needy people. Accommodations are provided to them by 'Aashray,' and through 'Suraksha,' he provides financial and social security so that they are not exploited. All these four organizations - 'Sweekar,' 'Upkaar,' 'Aashray,' and 'Suraksha' work autonomously.

The graph of physical disability is on the rise not only in our country but everywhere on the globe. However, while serving the disabled, Dr. Rao realised that not only in India but across the world, there are very few people equipped to rehabilitate and treat them. Skilled and trained human resources are inadequate. However, the doctors to treat them are not rising in the same proportion. Dr. Rao started an initiative called 'Bhagirathi Prayas' to enable people to extend a helping hand towards the disabled across the nation. Dr. Rao opened many schools to train human resources in treating and rehabilitating people with various disabilities. In these educational and training institutions opened by him, there are around thirty different courses that are being taught to the trainees covering the vast ambit of services that are needed by the disabled. Every year, many people are trained through these centres to help these individuals. It is only the outcome of hard work, passion and the far-sighted vision of Dr. P. Hanumantha Rao that these centres have come up in the districts of Tandur, Kadapa and Guntur in Andhra Pradesh and Telangana.

Although Dr. Rao has won many accolades for 'Bhagirathi Prayas,' he received many criticisms as well. People tried to discourage him at every step of the way. Dr. Rao says, "There are some people, including some doctors as well, who believe that I have opened these many centres and organisations to amass wealth. Nevertheless, they do not know how much I have sacrificed in opening these educational and training institutes. My family members have sacrificed, as well. If we would not have invested our time, money and efforts, then 'Sweekaar,' 'Upkaar,' 'Aashray' and 'Suraksha' would not have been established. People do not know how much pain I have taken, how many challenges I have overcome, how many critics I have faced, etc. People do not know that I have borrowed money from many of my friends and well-wishers, and taken a loan from twenty-five banks to establish and run these institutions, having put my own house as collateral." Having learnt from his vast experience, Dr. Rao advises new entrepreneurs, "When anyone starts a big and unique task, then people often criticize. They try to demean his / her efforts and discourage him/her. They find ways to get him / her distracted. However, an intelligent entrepreneur is one who never pays attention to such people and ignores them completely to focus on his work. Only he/she succeed who does not deviate from his goal." Dr. Rao gives one more advice—that one should not burden oneself beyond one's capacity. "If an entrepreneur takes on more than one can handle, one gets stuck in a ditch from which it is difficult to get out of. One gets lost in the path of success."

## Dr. Ranganadham, the Neurosurgeon, who was once compelled to study in the Light of oil lamps



A child born into a low-income family feels despondent, and his heart melts when he sees others in his village suffering due to the lack of medical facilities. In his village, there was a Primary Health Care Centre, but unfortunately, doctors were never available there. No matter how severe the suffering was, be it a small issue or severe disease, every villager had to go to the hospital in District Headquarters for treatment, which was five kilometres away from the village. Many people did not even have enough money to afford any means of transport to reach the district hospital. This child has seen many people dying due to the lack of medical facilities in his village.

The child was brilliant and bright in academics. He decided to become a doctor upon seeing the extreme suffering of his fellow villagers. He was so keen to alleviate their helplessness due to medical inaccessibility. The aim was

so firm and determined that he did not take any chance to achieve the goal. He did not let any obstacle prevent him from attaining his ultimate goal—neither poverty nor rural background could act as a hindrance in his path that was full of passion and perseverance. He always excelled in all the school and college examinations. He passed his tenth standard and bagged a state rank. He earned the eligibility to take admission to the state's most famous college that was far from his village. He even cleared the pre-medical entrance examination in his first attempt. He completed his MBBS. Then, he went to the country's capital city and learnt neurosurgery in AIIMS. Later on, he started his practice in Hyderabad. Today, he is considered as one of the most famous and well-established neurosurgeons in the country. The child and doctor who is being talked about here is Dr. Paidi Peddigari Ranganadham, one of the most renowned neurosurgeons across India.

Ranganadham was born in the Kintali village of Srikakulam district of Andhra Pradesh. His father was a poor farmer. His mother, while discharging family responsibilities, used to assist his father in farming. There was only one room that accommodated all the five children, along with parents. The kitchen, washroom and bedroom were all in one room. His parents were illiterate. He is the youngest of the five children—two brothers and two sisters. One elder brother somehow managed to clear his tenth standard. Since the family did not have enough financial earnings to send all children to school and maintain the stationery expenditures, except two children, all had to drop out of school. Ranganadham was fortunate that he was sent to school, albeit the government school of the village. The condition of the government school was not better than his family's condition. Even in school, Ranganadham was compelled to sit on muddy ground as there was no proper sitting arrangement. However, he was not an ordinary child; he was brilliant, and his memory was extraordinary. He could memorise the entire chapter written on the blackboard by the teacher. Whatever the teacher would teach, Ranganadham would learn it quickly. All teachers were very fascinated by his capabilities; on observing his skills, talent and potential, the teachers foretold that he would become a successful man in the future. The parents were very proud of their child and would feel elated upon hearing the appreciation of the child from his teachers. Ranganadham lighted a new ray of hopes in the mind of parents. His parents were confident that their son would be a big man one day and would eradicate the family's poverty and suffering.

Ranganadham left no stone unturned in his quest for success. He studied very hard and did not miss any opportunity in academics. His village was very backward and underdeveloped, as a result of which there was no electricity, but even the darkness could not stop him from studying—he studied using oil lamps. His hard work paid off ultimately. Later, everyone across the state got to know about his brilliance and intelligence. In the tenth grade examinations, Ranganadham secured the third position. A boy from a very backward village came into the limelight.

Ranganadham says, “When I was in school, I heard that Andhra Loyola College was the best in the state. Whosoever got admission to this college turned out to be an engineer or a doctor. I, too, wanted to be a doctor. When I got the third rank in the state, I chose this college, and since I wanted to be a doctor, so I opted for Biology, Physics and Chemistry as subjects in intermediate.” One important point is that he was very much affected by the adverse conditions of his village and inadequate healthcare facilities by the Primary Health Care Centre. All this gave him the impetus to pursue medicine as a career. In those days, all the villagers had to go far for their treatments. Despite struggling here and there, they could not get accurate treatments. The miseries of villagers left a deep impact on his mind.

In his initial days at Andhra Loyola College, he had to face many challenges. He wanted to study in the English medium. But because he had received his education till the tenth in Telugu medium, he had to continue with that mode in Intermediate as well. He was a bit disappointed, but he did not lose hope. His ambitions were firm and determined. In Andhra Loyola College, when first semester exams were conducted, he secured the first position. In terms of marks, he even defeated English medium students. By this time, he proved his mettle to everyone.

One more challenge came his way. In those days, Naxalite movements were very much prevalent and were being discussed everywhere one went. Ranganadham was from Srikakulam district, and this was the chief centre for the Naxalite movement. In Andhra Loyola College, some students used to tease him by addressing him as the “Naxal of Srikakulam” and bother him quite a lot, but he rendered everyone speechless by excelling in exams.

Ranganadham firmly believed in God. He has full faith in religion, which is why he used to put Tilak on his forehead. As he belonged to a poor family,

he used to wear slippers and cotton shirts. Tilak, cotton shirts and slippers became his identity in college days.

In Andhra Loyola College, he had to stay in the college hostel for his education. Vijayawada city was very far from his village. He spent quite some time adapting to the urban way of life, but he was happy to get food on time in the hostel. There were good arrangements for studies; even the teachers were very qualified and helpful.

The commendable thing was that he did not put any burden on his parents for his Intermediate education. He was awarded the national merit scholarship on attaining the third rank in the state in the tenth standard. With the scholarship money, he could finance all his expenditures related to education. During his intermediate studies, he even cleared the pre-medical entrance exam for admission into the MBBS programme. As per his expectations, he secured a high rank, and he was now eligible to enrol in a medical college. He becomes very sentimental about reflecting on that day. His eyes are seen in tears. He says, “That day, the entire village came to my house. Everyone was very happy. A child from poor family was going to be a doctor soon.”

Ranganadham got admitted to the Andhra Medical College in Vishakhapatnam. As always, there, too, he studied very diligently. Every year, he passed the examination with good marks. When he was supposed to start his internship during MBBS days, he took a decision that surprised everyone—he opted for neurosurgery for his training. In those days, there were very few doctors who used to opt for neurosurgery. Ranganadham says, “During the 1980s, when I chose neurosurgery as the main subject, people mocked at me. In those days, it was a belief that a patient sent neurosurgery had only a few days left. Neurosurgery was the last attempt to save a patient’s life. In those days, the technology for neurosurgery was not as advanced as it is today.” Ranganadham later said, “Those patients who were sent for neurosurgery used to be in very critical condition. Someone’s limbs were dysfunctional, and some lost their voices.

In some cases, the mind stopped working. I observed that some doctors could treat such paralyzed patients. I took a vow that I would be taking this challenge.”

After completing MBBS, in 1981, he wrote the entrance exam for AIIMS. As always, he succeeded in that, as well. While taking admission in AIIMS,

he intimated his professors that he would want to excel in neurosurgery. Upon hearing this, the Head of Department gave him a time of almost one month to reconsider his decision and make a wise choice. During this one month, he worked with other students at AIIMS in the outpatient ward. After completion of one month, when the Head asked him his final decision, it was still the same—Neurosurgery! Even his other teachers and professors asked him to rethink his decision about neurosurgery, but he was firm and keen to pursue his passion.

Ranganadham is one of the most famous neurosurgeons in India. Sixty-one years old, he has successfully played his role in around nineteen thousand operations related to the brain and the backbone to date. He performed his first surgery in AIIMS itself. At the time, he was a senior resident and duty doctor. There was a man named Rawat who had met an accident. His condition was severe; there were many fractures; his head was hurt very badly. The consultant asked Ranganadham to operate, and it was successful. The patient was saved. Ranganadham recollects, “It was a good start for me. My confidence increased manifold.” Over the years, he is proud of the success rate of the operations conducted and not the number. Ranganadham says, “It is only God who has given me everything. My expertise is a blessing by God. I pray to God before every operation to give me success in treating the patient.”

One of the most complicated and challenging operations he has performed till date involved a patient named Venkatramana, who had a big tumour in his brain. Ranganadham was supposed to remove the tumour in small pieces. The operation went on for precisely fifteen hours. He did not take rest even for a moment during this period. Ranganadham says, “It has been more than twenty years since I performed that operation, but it is etched in my brain like it was yesterday. Even today, Venkatramana comes for review. It gives me immense pleasure to see him.”

After obtaining his degree from AIIMS, Ranganadham went to Hyderabad, where he got a job in a government hospital called Nizams Institute of Medical Science (NIMS). He started working as a consultant Neurosurgery. After working there for a few years, he left his government job and started offering services in corporate hospitals. This decision was one of the most challenging decisions he had ever taken in his life because, he says, “I did not want to leave a government hospital. Due to pressures of time, I had to take a call to join a private hospital. During that time, my wife and I were blessed with a

“ baby. I used to feel that with a government job, I would not be able to raise my son nicely. I did not want my son’s education to suffer because of financial constraints. Just for my child’s sake, I left NIMS.”

From 1992 onwards, Ranganadham got associated with Yashoda Hospital. Today, his son is a grown-up, and he, too, is ready to become a doctor. Unlike his father, he chose cardiac surgery, which means that he would not be treating the mind; instead, he would be performing the heart’s operation. Ranganadham advises the future generation of doctors, “Doctors save lives of people. My advice is that new people should take up new areas in the field of medicine. Some should take up the eye, some nose, ear, etc. We need doctors of all kinds. I would say that whatever work one enjoys, he/she would take that up and fulfil its duties wholeheartedly.”

Ranganadham has one more interesting aspect of his personality. Unlike other doctors, he believes in astrology. He decides the time for his patients’ operation as per astrology. Ranganadham says, “There are many things that are performed according to astrology in India. To begin a child’s education, the appropriate time is estimated as per astrology. Marriages are fixed, and even in elections, it is seen that candidates file their nomination guided by the precepts of astrology. Considering all this, how is the use of astrology to decide the time for operation unjustified?” However, he says that in cases of emergencies, it is not possible to look for the right time as per astrology. Saving a life is most important. He says that many patients consider Tuesday as an inauspicious day and hence do not prefer going under the knife on that day. Not only this, many do not go for an operation on the day of Amavasya (new moon day). Apart from this, females do not go for operation during the days of their menstrual cycle. “So, there are many oddities in this profession,” he exclaims.

Ranganadham reiterates that it was only his village’s poor condition in terms of health care facilities, which motivated and inspired him to become a doctor. That is the reason he does not charge any fee from the patients of his village and the entire Srikakulam district. Even the surgeries are performed free of cost.

Dr. P.V.L.N. Murthy,  
who studied in the Light  
from the Hearth and made it big  
in the medical field

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There is a farmer's home in a village. The walls are made of rough pieces of stones, and the ceiling is made of mud. There is no electricity and water. One mud hearth is there at home. The entire family lives in this small home—the farmer, his wife and four children, one boy and three girls. The farmer's only source of income is his field. If there is a good yield, then the income is stable; otherwise, he is compelled to give his labour elsewhere. Since the farmer is poor and not capable enough to feed all six members alone, others in the family have to support him in farming. Even the kids work in the fields as

per their capacity. One day the farmer has a realisation that if his son is also illiterate, then he, too, will have to suffer and face challenges like his father. The farmer then decides to send his child to school. He works hard day and night along with his wife so that their child can do well in school. He works in his field and in addition to that, he also works in others' fields so that he can have extra income to finance his child's education. The child puts in his best efforts upon seeing his parents' struggle. There is no electricity in the house, but such hurdles prove to be inconsequential to a bright young boy who is devoted to his education. The child studies in the light of oil lamps; not only that, he even studies while his mother is cooking food on the hearth in the light emitted from the fireplace so that the oil can be saved. The child grows up to be a doctor and turns out to be a famous surgeon. He earns a lot of respect and recognition in society. The world salutes him.

Upon reading so far, one must have felt that this is a story straight out of a movie. Some may even feel that this is an imaginary story. However, this is neither a story nor imagination. This is a real story of a personality called Dr. P.V.L.N.Murthy.

His story begins from a village which is situated in South India, almost three-hundred-and-thirty kilometres away from the big city of Hyderabad. Murthy was born in a town called Allagadda of undivided Andhra Pradesh. Murthy was the first child of his parents, Panchala Pedda Dasthagiraiyah and Nagamma. After Murthy, the couple had three daughters. The father was a farmer, and he had five acres of land, which was fertile, his only source of income. Both the parents were illiterate, but they decided to educate all their children. The income from the fields was not enough to manage all the expenditures related to children's education. His parents, therefore, started working in others' fields to have extra income to finance their children's education. Murthy was a kid, yet he had an understanding of the hard work his parents put in to ensure their children received an education. He also worked with his parents in the fields from a very young age. With his small hands, he used to collect trash from the field and throw it out. He ensured that he studied diligently to fulfil their expectations and dreams.

Murthy completed his primary education from Bharathi Vidya Mandiram School in the Allagadda town. After that, his uncle took him to Lakkereddypalli of district Kadapa. His uncle does not have a male child, so he took responsibility for Murthy's education. In Lakkereddypalli, Murthy

studied at the Zilla Praja Parishad High School. After studying there from fifth to the eighth standard, his uncle got him admitted to the Sharada Nilyam High School of city Kadapa. He studied in Telugu medium till the tenth standard. It was only in Intermediate that he got the opportunity to study in an English medium. He faced difficulties in adopting the English language since he had a rural background with his early education being in the Telugu medium. However, he overcame all the challenges with his determination. He was later admitted to Nagarjuna Residential junior college at Kadapa in the science stream with Biology, Chemistry and Physics as main subjects.

During those days, one incident happened, which motivated him to take a pledge to become a doctor—Murthy's grandmother fell ill. The family did not have enough money to get her admitted to a private hospital for treatment. So, his grandmother was taken to a government hospital for her treatment. He then started visiting his ailing grandmother in the hospital. He did not know what happened with her that suddenly she started proclaiming to everyone that her grandson is a doctor. She used to say even to the doctors of that hospital that her grandson is a doctor!

Murthy tells while recollecting the memories of those days, “I do not know why my grandmother started saying like that, but her words left a great impact on the mind. For me, it became the goal of my life to become a doctor. I was pained that the doctors could not diagnose her disease. What was the reason for her pain? She expired five days after being admitted into the hospital.

He focused all his attention on his studies after this accident. According to Murthy, “I had a lot of issues while studying in the eleventh and twelfth standard. It was challenging for me to remember the heavy jargon of Biology, Chemistry and Physics in English as I had received my early education in Telugu medium. It was a big challenge to understand English completely. I was very nervous initially, but gradually, I started learning. I feared to let down my parents; their dreams would be broken, as all their hopes lay on me. This was the only dominant thought in my mind, and that is what kept me going.

Murthy followed a technique to understand Science books in English. He got the same books in Telugu and started acquiring bilingual knowledge in the subjects. He says, “I used to study two books for every subject while the others had to read only one book. I always used to have a dictionary with me, which I would turn to immediately if I did not understand any English word. I used

to write the Telugu translation of the word in my book, so this could help me during revision.”

Murthy’s uncle believed that he would have no difficulty becoming a doctor as he was exceptional in studies and hardworking as well. However, despite Murthy’s perseverance day and night, he could not score enough to crack the pre-medical entrance test to grab a seat in medical college. He was heartbroken, but he did not give up; he was still hopeful. He decided to write the exam again the following year. His father got him admitted into the Kora Coaching Centre of Nellure so that he could prepare for the examination nicely. He did not waste even a single moment there and studied dedicatedly. Murthy was well aware that a failure in his second attempt would result in destroying all his parents’ dreams. His parents had earned all the money for his education all these years through hard labour. They also had the responsibility of three daughters. All hopes were lying on Murthy.

During this conversation, he got very emotional discussing one particular incident of his life. Murthy describes, “When I went to write my entrance exam for the second time, my father came to the Nellore city from our village. He did not tell me that he was coming and surprised me. He reached the city early in the morning, but he did not come to my hostel. He kept waiting at the bus station only. He felt if he would come to me in the morning, he might disrupt my preparations. He appeared at my doorstep exactly at the time I was leaving for the exam. I was elated upon seeing him. My feelings were immeasurable. He had always been lucky for me. I had always succeeded in every exam when I entered the exam hall after seeing him. I got the assurance that this time I would certainly be getting a seat. Of course, it went very good.” Seeing his father and taking his blessings before the exam really worked for Murthy. He secured a high rank and got a seat in Andhra Medical College in Vishakhapatnam.

His college was very far from his village. Murthy shares that the initial days at Andhra Medical College were very troublesome. This was for the first time he came so far from his village and secondly, the language accent was very different for him. On reflecting back on his medical college days, Murthy says, “I was ragged very badly. The language was Telugu, but my dialect was different. I was from the Rayalseema region, and the language of that part is different from other parts of Andhra Pradesh. Some students used to mock me because of my language, which made the entire experience very strange

for me. This issue outside classrooms did not bother me much, and I could handle it, but there were serious issues in the classroom. I was not able to understand what was taught in classrooms by the lecturers. The curriculum of MBBS started frightening me; I got scared of the medical parlance yet again, so much so that I boarded the train for my village. When I reached my village and told my father the reason for coming back, he was taken aback. But very soon, he recovered from this shock and reminded me that if I did not become a doctor, then the entire family would continue to suffer in poverty. He tried his best to make me understand in various ways. Finally, I understood that it was very important for me to go back to college for the welfare of the family.” Murthy again reached Vishakhapatnam and started focusing on his studies. His classmates knew that Murthy came from a rural background, and despite that, he was scoring better than them. His classmates were even bothered by the fact that he was being helped by the seniors, who were very supportive of Murthy. Murthy, however, was unperturbed by all these externalities and did his best to become a doctor. He even overcame the hurdles that came his way due to the language barriers and his rural background. His hard work paid him off, and he completed his MBBS in the year 2000 to finally become a doctor.

While pursuing MBBS, he was inclined towards surgery. He had dreams of becoming a plastic surgeon. Murthy says, “Plastic surgery was a challenging task. I was very fascinated with the technique that could make someone’s face, which gets burnt out of an accident, normal. Unfortunately, I could not become a plastic surgeon. Based on my rank, I was sent to the department of Nose, Ear and Throat (ENT).” Murthy was given a seat at Rangaraya Medical College of Kakinada for his ENT specialization.

Meanwhile, one incident happened that reminded him of his family responsibilities. Once, his father asked him, “You have become a doctor now, so when will we get the food for us with your income.” These words of his father shock him to the core. Murthy was in a great dilemma now, and he could not make his father understand that he would start earning only after his specialisation. Not only this, but other villagers also used to even taunt his father by saying, “You say that your son has become a doctor, then why are you still working in fields? Has your son become a doctor?”

Murthy understood that it was challenging to make his father understand the exigencies of his profession in such a situation. So, he decided to work

alongside his studies. He got a part-time job under a doctor named Dr. Radha Krishna, who was a paediatrician. He used to study for his PG entrance Exam during the day, and at night, he used to work with Dr. Radha Krishna. Murthy reminisces, “I got various benefits from working with Dr. Radha Krishna. Dr. Krishna gave me a lot of insights into Diagnosing & treating children. He taught me how to handle pediatric patients and treat them. I became a paediatrician in a way. The other benefit was in the form of earning—my father did not have to finance my education anymore. Even my father started telling villagers, “See, my son has become a doctor. He has started earning and hence does not ask for money from me anymore.”

After completing his specialisation in ENT, Murthy started his practice. He is a well-known surgeon today—an expert in curing the diseases of ear, nose and throat among children. He is now rendering his services in two leading corporate hospitals.

He took many responsibilities of the family as he started earning as a doctor. He arranged money for his second sister’s wedding; he helped his third sister in her education, and because of that, she is now a dental surgeon in Allagadda town. His father got his first younger sister married as he was not in a position to support them financially at the time. Dr. Murthy has now built a nice house in his village, with all the facilities that were unavailable during his childhood. His life has changed for better, evidently, thanks to his profession.

Recollecting the memories of his PG days, Dr. Murthy said, “In those days, my Post graduation was going on. A patient who has throat cancer approached the hospital. He was having immense difficulty in breathing. I performed ‘Tracheostomy’. I bypassed the obstruction so that he could breathe easily, and the patient started recovering. I did the Tracheostomy dressing for that patient on all the days he was admitted in the hospital. He was then sent home. One day, that patient came to the hospital with a domestic hen and handed that over to me. As he gave the hen to me, he said, “I am poor. I cannot give anything else to you. I just have this hen, and I thought I should give this to you. You have helped me a lot, and I will always remain indebted to you.” The notable thing was that when he gifted Murthy that hen, in front of his professors, doctors, and many patients present. This patient died four months after this incident, and Dr. Murthy helped his wife financially.

Dr. Murthy even discussed the most challenging operation in his career. He said, “A six-year-old kid from Yemen came to the hospital. He, too, had

problems breathing. His parents took him to several places, having conducted around two to three operations. However, the child's suffering was still persistent. His parents did not speak a language that I could understand; I did not know the language in which they were speaking. I got to know about this child's issue with the help of a translator. I was very confident that I could treat this child. I performed the operation on his trachea, and it was successful; it was a complicated operation, and my experience was of great use."

Dr. Murthy even said, "Operating upon children is challenging. There is a small airway in kids; the air pipe is very soft and delicate; the lung vital capacity and volume is also low." He continues, "Adults can explain their issues, but kids cannot express what exactly the issue with them is. So, doctors are expected to perceive the children's problems themselves. I learnt this technique of sensing the issue of kids while working with Dr. Radha Krishna in Vishakhapatnam."

About his goals, Dr. Murthy says, "My life has only two-three motives. The first one is to help as many people as possible. The second is to fill happiness in the lives of as many kids as possible by curing their diseases. The last one is to keep my family happy and to serve my parents in the best possible manner."

While conversing with him, it could be felt that he is very much inspired by his father. His father is the most valuable asset for him. In one context, Dr. Murthy says, "My father becomes extremely happy with my achievements, but he never expresses his emotions. He often shares his happiness with others. I only get to know about his happiness from others. My father never wanted me to become arrogant and develop a false ego. He used to feel that if he would praise me, then there were chances that I would become arrogant. He always used to tell me one thing, 'Never consider yourself great. Do not think that the work is over. There is a lot of work that is pending, a lot of work in this world that is yet to be done. You must be at the forefront of bringing about this transformation in people's lives.'"

