

Editorial

Prof. Sirajur Rahman Khan, MBBS. MRCS (Eng). FRCS (Edin). FRCS (Eng).
Professor of Cardiac Surgery

(Cardiovasc. j. 2020; 12(2): 85-88)

When I was asked to write about my life, I thought it was more important to put down my work and experience which my Creator has given me the opportunity to do. To go back a little bit, my grandfather Marhum Khodadad Khan (R) was an eminent lawyer at Kushtia and the road in front of his house leading to the court named after him in 1930s. My father also studied law but became a magistrate. In our area many prominent lawyers were born, one very famous person was Justice Radha Binod Paul sat in Nuremburg tribunal and was famous for his dissentient judgment. Recently Justice Ruhul Amin in Dhaka Supreme Court and Barrister Amirul Islam as a Constitutional Lawyer are well known. It was natural for me to be a lawyer probably a Barrister in my life.

But my dear mother Syeda Rokyea Khanam had developed Subacute Bacterial Endocarditis and had her heart valves were damaged and she died when I was nine-year-old with four siblings younger to me. She went to Kolkata to see Dr. Bidhan Chandra Roy the then very famous politician and doctor in 1949, who told her there was no treatment in the whole world regarding her heart disease and told her to go home eat and drink as she wishes and nothing else could be done to her. She returned home and made me promise to become a heart doctor (cardiology was unknown at that time in the world) and to treat the helpless women (people) so that they do not have to leave behind young children like her. Being a pious lady, she also made me promise not to give up five times prayer which I was practising then more in fear of her cane than any fear of Allah Subhan Wa Tala. I do not know why at the tender age of nine she also asked me not to smoke cigarettes!

That is a short story of my becoming a heart doctor. I never thought of any other carrier since. I insisted all those who cared for me as domestics to call me 'daktar shahib'. I remember not eating for few days because my father asked me to drop an application at the BUET after I passed ISc where my own

'mama' was Professor of Civil Engineering, S.M.Najmul Haque.

I was not meritorious at all but my father was after me and kept saying 'read' and 'read'. So I read and read through Subal Aftab High school at Gouripur, Daudkandi where my headmaster was Babu Kailash Chandra Kar and passed my Matriculation (Now SSC) from Kushtia Municipal High school where my headmaster was Sri Rishikesh Mitra and Assistant Head master was Mir Akhtaruzzaman a very distinguished person to be remembered.

Then I went to Carmichael College, Rangpur and passed Intermediate of Science (now HSc) in 1958, where my principal was Dr. Asghar Ali who was an eminent educationist and I was taught Bangla by Babu Billamangal and Janab Mofakhkharul Islam (well known poet). Physics was taught by Babu Ashwini Kumar and Chemistry was taught by Janab Khondokar and zoology was taught by Sadrul Hasan a charming sporty non-Bengali. Came to Dhaka Medical College in 1958 June and Prof. Refatullah a famous eye surgeon was my principal. Passed MBBS in 1963, October and after House job under Prof. K.S. Alam, FRCSE, I went to Rajshahi Medical College as Demonstrator of Anatomy to sharpen my skill in Anatomy prior to and preparing for FRCS. I went to UK on State Scholarship of the then East Pakistan Government after passing Primary FRCS held at Dhaka by the Royal College of Surgeons of Edinburgh under the tutelage of Sir J.D.S. Cameron, recent past President of College of Physicians of Edinburgh who was then Director of the Institute of Post Graduate Medicine and Research (IPGMR).

Since I wanted to have training in Thoracic and Cardiovascular Surgery so after becoming a Fellow of the Royal College of Surgeons of Edinburgh in 1969 I joined as Registrar in Thoracic surgery at Hairmyres Hospital under Mr. Robert Mc. Luskie where I worked for more than a year. Then I had

to have experience in General surgery and Orthopedic and Emergency surgery so I went to Elizabeth II Hospital in Welwyn Garden City, Hertfordshire, Chelmsford and Essex Royal Infirmary, Isle of Wight Hospitals and Bishop Auckland General Hospital. During this time, I obtained Fellowship from the Royal College of Surgeons of England. Prior to that to obtain full registration on the British Home list I obtained LRCP (London) and MRCS (England). After some training in general surgery, Cystoscopy and Urology, Orthopaedic surgery, paediatric surgery, Vascular surgery (Mr. Peter Martin at Chelmsford Royal Infirmary, Martins pump named after him) I finally settled for Thoracic and Cardiovascular surgery at Blackpool General Hospital under Mr. James Glennie FRCS and Mr. Percy Jewsbury FRCS where I had a thorough training in Lung, Oesophageal, Pleural, mediastinal and chest wall surgery. Here there was an open-heart surgery programme where I gained experience in the full range of cardiac surgery. At that time I visited Sir Magdi Yakub FRCS a famous Cardiac Surgeon and also visited Mr. Donald Ross. In Great Britain or for that matter anywhere else one has to work hard with diligence. What is more important in training is character building rather than only learning surgery. Honesty, integrity, conciseness, sympathy, trustworthiness, sincerity, caring, dependable, intelligent, capable of learning and more are required.

At one stage I had to decide to return home so I travelled overland by car a newly bought Toyota Corolla Estate with a roof rack and stuffed everything I thought was needed on my journey from Blackpool to Kushtia, nineteen thousand kilometres, across two continents and eleven countries through autumn and winter. It took seventy-six days from 8th October to 23rd December, 1978. The journey itself was another story.

At Dhaka I started closed heart surgery like closing Patent Ductus Arteriosus, Blalock Taussig shunt for blue babies and closed mitral commissurotomy in addition to full range of thoracic surgery. The very first case was removal of a big metal weapon rusted big spear from the chest cavity under local

anaesthesia. I had to fight with the head of the department of Anaesthesia of Dhaka Medical College Prof. Afzalunnessa to get Prof. Falah that was also only part time. However gradually and eventually I got Prof. Khalilur Rahman

FFARCS, Prof. Fakhrunnessa FCPS, and many very hardworking anaesthetists.

After thirty-three closed mitral commissurotomies and few more closed heart surgery Prof. Nabi Alam Khan Joined me the next year and together we continued full range of thoracic and cardiovascular surgery with the help of Brig. Abdul Malik Director of the National Institute of Cardiovascular Diseases.

Japan Government helped us in a very big way for more than five years with continuous supply of disposables, hardware, lab equipment, entire cath lab outfit, Operation theatre equipment and Heart lung machine. A stream of specialists kept coming for every three months and they were very friendly, willing to transfer technology and wrote small booklets for everybody with beautiful pictures they drew free hand! Many of us went to Osaka National Cardiovascular Center. Late Prof. Hisao Manabe played a great role in overseeing our progress. Dr. Setsu Takatani was my personal friend who came to see me off at Narita airport, Tokyo. Dr. Kato, Dr. Ando, Dr. Ohara, Dr. Saji, Dr. Tomino and many others been here at Dhaka.

Some of the procedures I had already seen at UK, like segmental lung resection, lobectomy, lingulectomy, pneumonectomy, one stage, two stage and three stage oesophageal resections, Colon interposition in various oesophageal lesions, stent and celestine tube insertion as a palliative procedure in inoperable carcinoma of oesophagus. At Blackpool Royal infirmary I learned open heart surgery in ASD, single and double valve replacements. This was in 1970s, Since there has been a tremendous change in perfusion technology, cardioplegic methods, various measurement parameters and now beating heart surgery, minimally invasive coronary bypass, Hartport, Right Thoracotomy approach with femoro femoral cannulation etc. to name only few advances.

The first Atrial septal defect was closed on 18th September, 1981 of a man called Mostafizur

Rahman from Sitakundu, Chittagong. Since we had been doing one open heart surgery case every month. Preparing the case, arranging everything from blood, a lot of blood required in those days, post-operative bleeding was commonplace due to anticoagulation and coagulation proportion could not be perfected due to lack of activated clotting time (ACT) measurement in blood was not yet then available. Post-operative bleeding at a certain rate needed to be reopened usually at dead of night without much to see but bleeding always stopped thereafter! In addition, a battery of microbiological, biochemical, radiological, ultrasound, Electrocardiography, Echocardiography in addition all organ function tests, cerebral, endocrine, hepatocellular, kidney function, lung function tests etc. Then when we gained some confidence and started to do two cases a month people thought the interval is not long enough but then we started doing every week then people thought it was too frequent with steady result we were self-assured and started doing every day! Which seemed incredible. Then on we did two cases a day and even at times when there were opportunity three cases or even four cases a day, but not very often. Intensive care posed ultimate limitation which was in the corridor but of course converted into a 'proper' intensive care unit looking.

In paediatric cardiac surgery different types of atrial septal defects, sinus venosus type, very large defects, ostium primum type and so with ventricular septal defect. Tetralogy of Fallot posed a challenge which was successfully corrected in a girl called Khodeza in 1989. About at this time a paediatric surgical team from Driscoll Children Foundation Hospital, Galveston, Texas, led by Dr. James Alexander Duff came with a whole team and many disposable items and performed many paediatric cases mainly Tetralogy of Fallot. Prof. George Reed from New York Medical College, Valhalla, Upstate New York performed a number of coronary artery by-pass surgery on paralysed heart in 1990. Then Dr. Brad Vazales from Lancaster General Hospital performed some coronary bypass by enclosing the heart in a pouch of net to make the heart somewhat immobile during the coronary anastomosis. Dr. Hasan Raffa

came from King Fahad Hospital in Zeddah and performed a range of surgical procedures. Dr. Raffa demonstrated very hard work, tireless, continuously doing his homework, sleeping very little workoholic in the true sense, very inspiring indeed. Dr. Aleem Khondokar came several times from Memphis, Tennessee and learned and taught. Was very keen and maintained meticulous record. Dr. M.R. Girinath a good friend of mine came from Apollo Hospital, Chennai a did a number of cases. Prof. Dr. K.M. Cherian, Padmasree, visited us several times. He headed at that time Madras Medical Mission which was mainly Paediatric surgical Hospital having five operation theatres always busy. There was a great collaboration with many and I sent a number of our doctors to various centres.

I have furnished a list of operations with dates performed. I noticed as the number of cases went up the mortality came down. The expertise and experience were exponential.

I repaired a number of mitral valves, some had to be later replaced. I thought considering the socioeconomic condition of our country one-time operation was more desirable excepting very special situations namely child bearing age etc. Few Chinese valves were used and even now as I practice in Kushtia one patient comes regularly to see me twenty-three years later has got a perfectly functioning Chinese valve. Some tissue valves were used at that time. Porcine tissue valves were not very acceptable which made me think of starting a research on bovine (*Bos indicus*) heart valves and on preliminary studies it seemed to be quite of appropriate size to the human heart valves we deal with particularly in circumferential measurement, see article in BANGLADESH MEDICAL RESEARCH COUNCIL BULLETIN Vol XVII No2 Oct.1991 page no 75-80. Application was made to appropriate Department of the Government without any positive response.

Local problems had to be solved with local solutions. A Cardiac surgeon's job is to lead the team. A leader must know the way, show the way and go the way. Standard procedures must be followed. Before embarking on a new procedure, I

discussed with the juniors, and they were made to go over and over again, practising on the desk and finally according to rehearsal the procedure has been carried out. This cut down cross clamp time, perfusion time and overall operating time.

In the beginning the perfusion and intensive care was managed by surgeons. Then gradually the medical persons initially trained on perfusion technology and later non-medical persons could learn and manage very well. Intensive care was looked after by Anaesthetists.

I thought it is very important to establish a sympathetic relationship and understanding with the close relatives of the patients. I explained the possible outcome and also hinted the risks and also after the operations the near relatives were detailed. In case of adverse and unfavourable outcome being imminent I would immediately contact the relatives and inform them and assured them everything in my capacity is being undertaken. In case of a death I would declare myself and I would deliver if need be. Any

misunderstanding is bred on ignorance and lack of communication.

I believe prevention is better than and cheaper than cure. Particularly in cardiovascular set up. So, I started thinking of an association to make people aware and spread knowledge and information about preventing cardiovascular diseases and hence Bangladesh Heart Research Association was formed and registered with Social welfare department of the Government of Bangladesh. I have conducted more than one hundred heart camps, seeing hundreds of thousands of cases so far from Lalmonirhat to Cox's Bazar during the last thirty-five years. An Executive Committee and the doctors of the National Cardio Vascular Center helped me always.

Now I have moved to Kushtia and staying here permanently and established a small medical center at Alampur where I am planning to start preventive activities. In addition, there is a plan to start open heart surgery at Kushtia soon. I have started some closed heart surgery here in the meantime.