



PRESIDENTIAL ADDRESS (IACTS CON-2014)

PROF BHABATOSH BISWAS
PRESIDENT
INDIAN ASSOCIATION OF CARDIO VASCULAR THORACIC SURGEONS

Honourable past presidents, life time achievement awardees - Dr. S. K. Sarkar, Prof Sampath Kumar, Prof Andappan, IACTS Fellows and members, overseas Fellows, IACTS Secretary Dr. S. Rajan, Vice Presidents Dr. Kunal Sarkar, Dr. Suresh. G. Rao, Fellow executive committee members, Members of EACTS, distinguished Guests, Delegates, Students, Ladies and Gentlemen –

I deem it a great honour and privilege to stand before you as the President of our prestigious association to address this august gathering in Trivandrum, **“The Ever Green City of India”** as quoted by Mahatma Gandhi.

It is indeed an extremely proud and happy moment in my life. On this great occasion I profusely thank the almighty who has showered on me a peaceful life, sound health, ever increasing happiness, enormous success.

At the very outset, I specially remember with profound respect my parents Late Kali Pada Biswas and Late Lakshmi Rani Biswas, who fought against all odds to bring me up and my teacher Prof Ajit Nan who taught me the basics of Surgery.

Prof Nan, being a great human being and natural teacher, ignited the fire within an impulsive young man to dedicate the entire life to work with diligence, perseverance and honestly – with the goal “to learn as well as to innovate and finally to serve the common man in distress”.

I specially acknowledge my wife **“Mili”** for being a wonderful companion for me for the past 32 years. She has always stood by me and encouraged me during all my ups and downs.

I also recollect the contribution of my very **sweet daughter Dr. “Manaswita”** and her kid, **Tiny Naughty “Mithai”** who leave no stone unturned to keep me busy and lively.



I remember with great respect, Prof Sadhan Roy, whose encouragement and dynamism helped me to fulfil my ever receding dream to become a humble “**Thoracic Surgeon**”. During the long journey of my professional career, I have been very fortunate to come in contact with many legendary personalities (both medical and nonmedical), great teachers, professional colleagues, fellows, friends and students without whose constant help and motivation, my journey would not have been so enjoyable and memorable.

In this context, I would specially like to express my deep sense of gratitude to Prof Rajan Santosham, Prof Sampath Kumar, Prof S.K. Sarkar, Prof Andappan, Prof Prasada Rao, Swami Sarvalokanandaji Maharaj, Swami Muktinathanandaji Maharaj, Late V. Valsara, Prof Srinath Reddy, Prof Bipin Batra, Prof Arvind Kumar, Dr. Vishwas Mehta, Prof Satyesh Pakrashi, Prof Subha Sen, Dr. Brajesh Pakrashi, Prof A.C. Woodward, Prof Sudhanshu Bhattacharya, Prof Saibal Gupta, Prof Anil Tendulkar, Prof Devi Shetty, Prof Gautam Sen, Prof P. B. Rajesh , Sri Mrinal Sen, Sri Anukul Samanta, Sri Pradip Mitra and many others.

I am extremely indebted to my “**Century old Pioneer Institution**”, **R. G. Kar Medical College, Kolkata**, where I joined as a MBBS student way back in 1970 and completed the circle by joining again on 9th February 2006 as Professor & Head of the department, Cardio Thoracic surgery. My beloved Institution gave me the great opportunity to translate my thoughts and experiences into reality by creating a “**Model Cardio Thoracic Centre**” for delivering quality services for the common man as well as for offering “**Holistic Teaching & Training programmes**” in the speciality. The department is now known for its uniqueness of having the following service facilities as well as Teaching & Training programmes under one **umbrella**.

PROGRAMMES

- i. **M.Ch** (Cardio Thoracic Surgery)- 3 Year Programme – 4 seats
- ii. **D.N.B** (Cardio Thoracic Surgery)- 6 years programme - 2 seats
- iii. **D.N.B** (Thoracic Surgery)- 3 Year Programme – 2 seats.
- iv. **B.Sc. 3yrs Programme** (*Perfusion Technology, Critical Care Technology, Operation Theatre Technology*) – 10 x 3 = 30 seats
- v. **M.Sc . 2yrs Programme** (*Perfusion Sciences, Critical Care Sciences, Operation Theatre Sciences*) – 6 x 3 = 18 seats
- vi. **D.M (Cardiac Anaesthesia)** - 3 Year Programme
- vii. Speciality Nursing training in Cardio Thoracic Nursing
- viii. **Ph.D** programme



HOMOGRAFT VALVE BANK

Only one of its kind in Eastern India and one of the very few Valve Banks of the Entire Country.

FACILITIES

- i. Operation Theatres – 4 (*each one dedicated for specific service*)
 - 1 -Cardiac-CABG & Congenital Heart Surgery,
 - 1 -Valve surgery,
 - 1 -General Thoracic Surgery,
 - 1 -VATS
- ii. Critical Care beds – 18
- iii. Total Beds – 64
- iv. Wards : Male, Female & Paed
- v. Emergency & Casualty Services (24 x 7)

SPECTRUM OF SERVICES

- i. Cardiac Surgery - CABG, Valve Surgery, MVR, AVR, DVR
- ii. Congenital Heart Surgery
- iii. General Thoracic Surgery
- iv. Minimally Invasive Thoracic Surgery (VATS)
- v. Thoracic Endoscopies - Bronchoscopy, Oesophagoscopy, Mediastinoscopy
- vi. Management of Thoracic Trauma
- vii. Vascular Surgery



The facilities and performance of the Department offer an “IDEAL MODEL OF TRAINING” having sensible MIX of standard Thoracic, Cardiac and Vascular works along with foundation of Research, essential for the trainees during their early grooming period.

After my initial training in General Surgery under the Mentorship of Prof Ajit Nan at R.G. Kar Medical College, Kolkata, I started my journey of Cardio Thoracic Surgery in 1982 at Gandhi Memorial Hospital, Kalyani, the then the only stand alone centre of its kind in rural West Bengal. There after I had the opportunity to work in two extremely busy public hospitals, N.R.S. Medical College, Kolkata & K.S. Roy T.B. Hospital, Jadavpur for a continuous period of 12 years, before I left for Cleveland Clinic ,USA in 1994 for further training in “Adult Cardiac Surgery & Cardiac Transplant”.

The long period of intimate relationship with common man with diverse Cardio Thoracic problems in public hospitals of West Bengal, developed my keen interest in the speciality. I realised that the enormous disease burden could only be addressed by innovating customised “Teaching & Training” programmes not only for Surgeons but also for support personnel in addition to creating further physical facilities. Of course, the “Physicians Assistant Programme”, of those days of Cleveland Clinic, USA greatly influenced me to conceptualise & create structured training programmes of GRADUATE & POST GRADUATE level in PARA MEDICAL SCIENCES for addressing our needs. These Unique & absolutely Customised programmes were introduced in the department of Cardio Thoracic Surgery, R.G.Kar Medical College,Kolkata.as....

- 1) B.Sc (*Perfusion Technology, Critical Care Technology, Operation Theatre Technology*) in 2007 &
- 2) M.Sc (*Perfusion Sciences, Critical Care Sciences, Operation Theatre Sciences*) in 2013

.... affiliated to the West Bengal University of Health Sciences.

In no time, the programmes were widely recognised with high esteem, establishing once more, the importance of **CAPACITY BUILDING in Health care.**

DISEASE BURDEN

Rising incidence of Cardio Vascular & Thoracic diseases in our country is a matter of serious concern specially in view of our limited resources .India being a vast country with more than 1200 million population, is having a huge disease burden which needs to be addressed on short term as well as long term basis with innovative and out of box solutions.



CURRENT SCENARIO

Cardio Vascular & Thoracic surgery has grown with **High Pace** in India. In 1993, only 27,000 Cardiac surgeries were performed. In 2009 the figure went up to 80,000. We performed 1,25,000 surgeries in 2012 and 1,50,000 in 2013.

Though the growth rate of Cardiac Surgery seems commendable, but is not enough to meet our huge requirements. In 2012, USA performed almost 700 thousand Cardiac Surgeries for their population of less than 1/3rd of ours.

Computation of these data cater us dismal information. Currently India performs 125 Cardiac Surgeries per million of population per year, whereas USA performs 1700.

SO WE ARE FAR, FAR BEHIND.

Thoracic Surgery & Vascular Surgery services being scattered across the country & practised by General Surgeons as well as Cardio Thoracic Surgeons in a wide range of Health Care Institutions, exact data is not available.

To bridge the gap we have to reorganise our teaching & training programmes in addition to concentrating on creation of specialised health care Institutions only.

CURRENTLY EXISTING TEACHING & TRAINING PROGRAMMES IN CARDIO VASCULAR & THORACIC SURGERY IN INDIA

- i) **M.Ch** (Cardio Vascular & Thoracic Surgery) - 3 years post MS/DNB programme. We have 57 Institutions having yearly intake capacity of - 188 candidates.
- ii) **DNB** (Cardio Vascular & Thoracic Surgery) - 3 years post MS/DNB programme. We have 20 Institutions having yearly intake capacity of 38 candidates.

Taking both M.Ch and DNB programmes together, we have 77 Institutions with yearly intake capacity of 226 candidates only.



Most of these facilities are concentrated in the metropolis of five Southern States – (Andhra, Tamil Nadu, Pondicherry, Karnataka and Kerala) - 40%, Maharashtra - 15% and Delhi - 15%.

Whole of the North Eastern part of India is totally uncovered excepting one centre with yearly intake capacity of **ONLY ONE** candidate in Assam.

Eastern India having 40% population of the entire country is catered by only 10% facilities, largely concentrated in the City of Joy - **KOLKATA** only.

In this context, I like to draw your kind attention to another matter of great concern.

Due to decreasing interest of trainees for Cardio Vascular & Thoracic Surgery, approximately 50% of M.Ch seats and almost 90% of DNB seats remain vacant.

This trend of non-opting for Cardio Vascular & Thoracic Surgery will have a serious short term as well as long term impact on the Cardio Vascular & Thoracic Health of India.

We, at National Board of examination explored all the probable avenues to address this serious issue and finally came out with innovative solutions by introducing the following new programmes.

- i) DNB (Cardio Vascular & Thoracic Surgery) - 6 years post MBBS programme has been introduced and started in 21 Institutions with an annual intake capacity of 41 candidates from January 2011.

Overwhelming enthusiasm and interest have been observed in young post MBBS trainees for opting for Cardio Vascular & Thoracic Surgery.

ALL THE SEATS HAVE BEEN FILLED UP.

- ii) DNB (Thoracic Surgery) – post MS/DNB 3 years programme, has been introduced and started as a pilot project in **two pioneer Institutions of our country – R. G. Kar Medical College, Kolkata and Sir Ganga Ram Hospital, Delhi** with yearly intake capacity of 4 Candidates only.

This programme will be introduced across the country in large number of accomplished Institutions in due course.

However DNB (Cardio Vascular & Thoracic Surgery) -post MS/DNB, 3 years programme & DNB (Thoracic Surgery) -post MS/DNB, 3years programme will be phased out & will be substituted with DNB (Cardio Vascular & Thoracic Surgery)- as well as DNB (Thoracic Surgery) 6 years post MBBS programmes in due course.

HOW EFFECTIVE WILL BE THESE VENTURES OF THE NATIONAL BOARD?

LETS WAIT FOR THE FUTURE TO ANSWER.



FURTHER CHALLENGES & REMEDIES

- i) **Battle between Cardiologists & Cardiac Surgeons** :- My fellow Cardiac Surgeons some times feel unhappy as the **majority of Cardiac works** - are being taken away by the Cardiologists largely due to **relative less invasiveness of their procedures**.

This is a matter of serious concern. Fortunately CSI & IACTS have been working in close co-ordination to address this issue.

I feel that there should be hardly any fight between Cardiologists & Cardiac Surgeons if the procedures are “**patient centric**” only

Strict adherence to the established guidelines by the members of both the sister fraternity will certainly settle this issue in a win-win situation.

However, I also feel that Cardiac Surgeons must equip themselves with **Cutting Edge Technology and updated knowledge** to overpower their fellow Cardiologists and to offer a better alternative to their patients.

This, in turn will enable the Cardiac Surgeons to occupy the driver’s seat again.

- ii) **Training of Cardio Vascular & Thoracic Surgeons** :- Does not appear to be holistic in view of the recent progress and advancements of Science & Technology.

In the age of exponential growth, compromised training of a professional will not allow them to deliver effectively.

Let me discuss couple of relevant issues in this context.

- a) Invasive works - Cardiac Cath, Angiography & Angioplasty should be included in the training programmes of Cardio Vascular & Thoracic Surgeons once again.
- b) Endovascular works should also be included in the training programmes to address complex vascular diseases.
- c) **Endo bronchial invasive procedures** also deserve to be included in the Thoracic Surgery Training programme.



d) **“Robots” are reality.**

Inclusion of “Robotics” in the training programmes of CVTS is essential to keep pace with the modern scientific advancements.

e) **Role of “Hands on work”** during training programmes is well established.

In Lap surgery “Simulators” have already proved their usefulness.

Initial training of Cath Lab procedures have been taken over by the **Virtual Cath Labs**.

There is no denial that something needs to be introduced for initial training of a Cardio Thoracic Surgeons to acquire skill in the highly demanding and delicate operative works like coronary grafting, repair of complex congenital cardiac defects, repair of heart valves, VATS or Robotic Thoracic Surgery.

Wet lab and dry lab practice sessions, initially with cadaver hearts and subsequently with animal models (if required) should be introduced in the curriculum of both M.Ch & DNB programmes.

iii) **Setting our own standards for quality outcome after Cardio Vascular & Thoracic Surgery:-**

We have to set our own standards.

In this era, “Re-use of disposables” for cost containment in cardiac surgery remains a major issue.

“Left & Right” re-use of disposables is certainly going to compromise the quality of outcome. Adherence to, well established guidelines of authentic agencies will enable us to take sensible decision in this regard.

iv) **Database** :- There is no controversy regarding usefulness of “Database & National registry”. We have been discussing this issue regularly. Most of the developed countries have their own “Database”.

U.K. National “Registry” was started in 1977 by Sir Terence English.

This was absolutely voluntary and anonymous. Though this was only a modest start, but it certainly laid the foundation stone, on which strong “National Registry” of U.K. was built up subsequently.

Let us learn a lesson from them and start working to create our own **DATABASE** without any further delay.

I would like to conclude with a quote from the famous Lebanese artist, poet & writer, **Khalil Gibran--**
“A little knowledge that act, is worth infinitely more than much knowledge that is idle.”



Dear friends I am sure, there is no dearth of knowledge in our fraternity.

Let us work together as a team.

We will succeed to solve our problems ourselves.

Let us maintain the high esteem of our speciality & our beloved association

Young friends, be assured:-

“FUTURE IS ABSOLUTELY BRIGHT FOR BOTH CARDIAC SURGERY AS WELL AS THORACIC SURGERY.”

Thanks once again for giving me this unique opportunity to express my feelings & emotion in front of you.

Long live our beloved **Indian Association of Cardio Vascular Thoracic Surgeons.**

Jai Hind

Bhabatosh Biswas .

PROF BHABATOSH BISWAS
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INDIAN ASSOCIATION OF CARDIO VASCULAR THORACIC SURGEONS

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