

CURRENT MEDICAL REGISTRATIONS:

For MBBS, MD (Internal Medicine) and DM(Cardiology) with the **Medical Council of India**. And also Registration with **Medical Councils of Kenya, and Uganda**.

MEMBERSHIP/FELLOWSHIPS:

1. European Society ofCardiology (ESC), International Societyfor Heart lung Transplant (ISHLT).
2. Indian Society for HeartLung Transplant (INSHLT) and Cardiology Society of India.

EDUCATIONAL QUALIFICATION:

1. **MBBS:** University of Madras,1984.
2. **MD:** Pondicherry University, 1989.
3. **DM (Cardiology):** Sanjay Gandhi PG institute (SGPGI) Lucknow1992.

PRESENT OCCUPATION :

ASSOCIATE DIRECTOR HEART FAILURE AND TRANSPLANT PROGRAM, GLENEAGLES GLOBALHOSPITAL CHENNAI

ACADEMIC ACHIEVEMENTS:

1. Passed the final MBBS examination in Feb.1984 with 68% aggregate marks in the first attempt and 3 GOLD MEDALS.
2. Passed the MD(MEDICINE) examination in March 1989 in the first attempt with GOLD MEDAL in CARDIOLOGY.
3. Passed the DM (CARDIOLOGY) examination in May 1992 in the first attempt.

GOLD MEDALS IN:

1. PATHOLOGY : 1983
2. MICROBIOLOGY : 1983
3. CARDIOLOGY : 1985

ANNUAL INSTITUTION GOLDMEDAL IN :

1. MEDICINE : 1985
2. CARDIOLOGY : 1989

LANGUAGESPOKEN:

1. Hindi
2. Bangla
3. English
4. Tamil
5. Malayalam

WORK EXPERIENCE:

1. 3 years as **Junior resident** (PG) in Medicine at JIPMER Pondicherry. 1986-1989.
2. 3 years as **Senior resident** (DM) in Cardiology at Sanjay Gandhi PGI, Lucknow 1990-1993.
3. **Pool Officer, Cardiology** at the Railway Hospital, Perambur, Madras, India. from Jan. 1993 to Aug. 1993.
4. **Asst. Profesor Cardiology** at Nizam's Institute of Medical Sciences, Panjagutta, Hyderabad, India. (Pin: 500482) from Aug. 1993 till April 1994.
5. **Consultant Cardiologist** at the Trichur Heart Hospital, Trichur, Kerala, India. From 1994-1995
6. **Consultant and Interventional Cardiologist** at the Kovai Medical Centre and Hospital (KMCH), PB No 3209. Coimbatore, India. (Pin: 641014), from May 1995 till Oct. 1998
7. **Senior Consultant Cardiologist**, ADK Hospital, Male, Maldives From 1998-1999
8. **Consultant & Head of Department of Cardiology** at **Z.H.Sikder Cardiac Care & Research Centre and Medical College Hospital, Monica Estate, West Dhanmondi, Dhaka Bangladesh.** From October 1999 till September 2002 .
9. **Consultant Cardiologist to Malar Hospitals and Shankara Heart Foundation** ,Chennai .
10. **Consultant Interventional Cardiology** in Apollo Hospitals, Dhaka ,Bangladesh . 2005-2006
11. **Interventional Cardiologist and Director Stem cell research unit – LIFELINE HOSPITALS, Chennai. India. 2006-2008**
12. **Senior Consultant Interventional Cardiology – FORTIS MALAR HOSPITALS, CHENNAI and In charge – Cardiac ECMO programme. Artificial Heart Systems and Heart Transplant since 2008**

13. Associate Director Heart Failure and Transplant Program, Gleneagles Global Hospital,CheranNagar, Chennai Since April 2017.

CARDIOLOGY EXPERIENCE:

Interventional : Experience over the last 17 Years in dealing with all variety of interventional Cardiology cases including Complex Angioplasties , second generation Stents, Emergency Primary Angioplasties ,Valvuloplasties etc. **Assisted in Setting up the HEART TRANSPLANTATION, ECMOprogramme,Artificial Heart pumpprogramme in Fortis Malar Hospital and Gleneagles Global Hospital , Chennai.**

Heart Transplant and LVAD Experience : Experience in handling Advanced Heart Failure and 207 Heart Transplant Patients along with EM Biopsy and Immunosuppression Management for this Large Cohort of cases, since 2013.

HEART FAILURE: Large Experience in Heart Failure area with Application of BIOMARKERS like NT PRO BNP and ARNI Class of Drugs for last 2 years .Started the HEART FAILURE CLINICS in Gleneagles Global Hospitals Chennai, Bangalore and Sahayadri Hospital Pune. , evolved Protocols for same . Part of the PARADIGM phase -3 Trial for ARNI drug in Fortis Hospitals Chennai in 2015-2016 .

TYPE OF INTERVENTIONAL CASES DONE:

1. Coronary Angiograms : More than 5000
2. Cardiac catheterization (Adult&Paedatric) : .2000
3. PTCA”S (Including Stents) : Approx 750
4. Permanent Pacemakers :Approx 500
5. PDA & ASD Device Closure : 50
6. Peripheral and Renal Angioplasties : 100
7. Valvuloplasties (Mitral , Aortic) : 200
8. Radial Angiography and Angioplasties : more than 200
9. Emergency/Rescue Angioplasties : 100
10. IntraAortic Balloon Pump(IABP) Insertions : 100

11. HYBRID ASD,VSD CLOSURES – 20
12. ENDOMYOCARDIAL BIOPSY : 200
13. ECMO PUMP: 18
14. RV ASSIST PROTEK DUO: 1

EXPERIENCE OVERSEAS:

1. I had Initiated Interventional cardiology work at the Cardiology Departments and assisted in Starting Cardiac Surgery Facilities in ZH Sikder Medical College ,Dhaka Bangladesh in 1998 and Apollo Hospitals, Dhaka in 2005.
2. I am Also Visiting Consultant for Karen Hospitals and MP SHAH Hospital Nairobi Kenya ,as well as Kisubi Hospital Kampala, Uganda.

EXPERIENCE IN MANAGING AND DIRECTING CATH LAB:

I have more than 10years' experience in supervising and Directing Large Interventional Cardiac units including supervision of Interventional procedures, Inventory of Consumables, Maintenance of Equipment , Training of Cath Lab Personnel and Costing of cases etc.

I HAVE ALSO INITIATED:

1. **RADIAL ANGIOGRAPHY SUITE with DAY** Angiograms/ Radial angioplasties in Lifeline Hospital and Apollo Hospitals Dhaka Bangladesh .
2. The **Acute Heart Failure program** with IABP and Biomedicus Pump support programme in Fortis Malar Hospitals, Chennai
3. The **Hybrid Angioplasty** with Limited incision CABG program in LIFELINE .
(**REF Website news :[www.http://in.news.yahoo.com/070906/43/6kf2f.html](http://in.news.yahoo.com/070906/43/6kf2f.html)**)
4. Plan to start the “ Heart failure and Transplant Followup “ clinic in Fortis Malar Hospitals Chennai.

NON INVASIVE CARDIOLOGY PROCEDURES:

Holter Analysis:

1. I have Extensive experience in Detailed Analysis of ambulatory ECG in all types of Holter systems like Mortara, Philips Zydus ,Marquette GE etc.

2. I have also Experience in Tele- Reporting of 24 hours Holter conforming to HIPAA Guidelines and with HL7 compatible technical systems. I have also experience in training Medical professionals in Electronic ECG analysis and Holter reporting. Also has Special Experience in Accurate diagnosis of all Arrhythmias, QT segment analysis and Pacemaker Rhythm Analysis.
3. Echocardiographies (Adult & Pediatric) : more than 3000
4. Exercise stress ECG'S and Stress ECHOES : more than 2000
5. Transoesophageal Echocardiographies: more than 500

EXPERIENCE IN MANAGING INTENSIVE CARE UNITS:

1. 9 Years' Experience in Managing large Modern Intensive care Units with Ventilators, Intra-aortic balloon Pumps, Infusion Pumps and Central line Monitoring in All variety of cardiac and Non cardiac Critically ill patients .
2. I have also Special Interest in Radial Angiographies and I am also registered in E-group www.radialforce.org.

HEART TRANSPLANT, LVAD AND ECMO DEVICES:

1. **Indian Cardiologist with LARGEST EXPERIENCE in Heart Transplantation and TRANSPLANT IMMUNOLOGY.** Assisted in setting up the ECMO and Artificial Heart device programme with Dr KR Balakrishnan/ Dr Sandeep Atatwar and also Assisted in the First Heart Transplant Done at Fortis Malar Hospitals ,Chennai (**First Heart Transplant in Fortis Group**) AND later 50 Initial Heart Transplant cases in Gleneagles Global Hospital Chennai .**Experience in Assisting and Following Up 250 HEART TRANSPLANTS IN CHENNAI.**
2. **Indian Cardiologist with Largest Experience in managing LV assist devices like HEARTMATE3 and CENTRIMAG pumps .**
3. **CARDIOLOGIST from India selected to be ABSTRACT reviewer and FACULTY DISCUSSANT in the ISHLT Transplant Conferences – NICE France and San Diego USA 2017-18.**

STEM CELL RESEARCH:

1. Initiated the Adult Autologous Stem cell Programme in Lifeline Hospitals Perungudi Chennai in Association with NCRM Chennai and Madras University . This programme involves development of new processes and technique along with clinical trials for using Stem cells in LV Dysfunction, Spinal Injuries and degenerative neurological diseases.
2. Presently Involved in a Research Project in Indian Institute of Technology (IIT) Madras for “ **Effects of Microgravity on Cardiomyocyte cell Behaviour** “ .(**DRDO Grant project**)
3. Also associated with SBARRO institute, Temple University, Philadelphia USA on a Research project involving “**Stem cell coating of Coronary stents aided by Microgravity**”.

RESEARCH EXPERIENCE:

1. Involved in Clinical drug Research with Quintiles Corporation USA.
2. Undertaking a trial of Adult Stem cell therapy for Post MI Patients.
3. Associated with Ongoing research projects using Microgravity for Stem cell Coating of Coronary stents and Cardiomyocyte cell growth .
4. Late Phase studies for Drugs like ,Sacubutril , R-TPA and Bosentan.

VISITING FELLOWSHIP:

1. University of Michigan : For Artificial Heart. ECMO devices and Heart Transplant IN 2009.

PUBLICATIONS:

1. Ravi Kumar et al : Aneurysm of the left Sinus of valsalva causing severe Mitral regurgitation. Int.J. Cardiol,1991 : 31 ; 245-247 .
2. Ravi kumar .R , Sinha N , et al . Etiology of Isolated Mitral regurgitation : A Clinico-pathological study. Indian Heart Journal. August 1993.
3. Ravi kumar R ,Sinha N . Randomized Trial of the Effect of Diltiazem and metoprolol on the TIB in chronic stable Angina.Int . J. Cardiol ,1993 : 41 ; 191-199
4. Bone marrow derived stem cells for Spinal cord injury – A clinical study. Regenerative medicine.Vol 33, November 2007 .
5. B.Komarakshi ,Ratnagiri R et al . Influence of Pulmonary Vascular Resistance and pulmonary Elastance on postoperative Recovery parameters after Heart Transplant .**J Heart Lung Transplant (Supplement)** ,April 2017; Vol 36 No 4 :S 230

6. K Balakrishnan, Ratnagiri R et al Limiting the Number of Endomyocardial Biopsies does not impact one year survival after Heart Transplant . J heart Lung Transplant .**J Heart lung Transplant. Supplement April 2016 Volume 35; Issue 4, Supplement : S210**
7. Ratnagiri Ravi kumar Et al Novel percutaneous right ventricular support using a dual lumen cannula and centrimag pump for right heart failure after left ventricular device implantation . **AbstractD-HF CSI meeting. Frankfurt. Germany**

PAPERS PRESENTED AND WORKSHOPS:

1. Annual Conferences of the Cardiology Society of India : October 1990 , November 1991 November 1992 , December 1996 and December 2009 .
2. INCLIN CAIRO Egypt, APRIL 1991.
3. PASCAR All African College of Cardiology Annual Conference – Kampala Uganda 2011
4. World Congress of Cardiology ,DubaiUAE April 2012 .
5. International Stem cell Conference , Boston USA October 2007
6. Regional Cardiology workshop, Hong Kong January 2006 .
7. Interventional Cardiology Workshop New Delhi 2006
8. Interventional Cardiology Workshop ,Dhaka ,Bangladesh 2001
9. Live Interventional Workshop .Karen Hospitals ,Nairobi ,Kenya August 2010
10. CME lecture to Kenyan Cardiac Society, Nairobi Kenya May 2010 .
11. Interventional Cardiology Workshops Fortis Hospital Chennai India May 2009 and January 2012 .
12. Interventional Cardiology Workshop Hyderabad ,India September 2011
13. Cardiology CME Conference ,Covenant University . OTA Nigeria December 2011
14. FORTIS ECMO MEETING, GURGAON 2015.
15. International Society of Heart Transplant Annual Meet- Washington USA 2016.
16. Indian Society for Organ Transplant annual Meets 2015, 2016, 2017, 2018
17. TCT Interventional Cardiology Meet Delhi 2016
18. TN Cardiology society annual meet, Thanjavur 2017
19. Heart Failure Society of India meet Mumbai 2017
20. Oman medical society meeting – 2018
21. Cardiology Society of India meeting 2016.(on Cardiac Biomarkers) & 2017
22. Society for Heart failure meeting ,Kochi, Coimbatore (Chairperson)- 2016, 2018

MEMBERSHIPS:

1. Life Member of the “CARDIOLOGICAL SOCIETY OF INDIA “.
2. Member of the “ SOCIETY FOR CORONARY ANGIOGRAPHY AND INTERVENTIONS (SCAI) “ USA .
3. Member of the “LASER SOCIETY OF INDIA”
4. Member of the “ INTERNATIONALSOCIETY FOR HEART LUNG TRANSPLANTATION (ISHLT) USA
5. Member of the “ INTERNATIONAL SOCIETY FOR CELLULAR THERAPY “(ISCT).
6. Fellow of the European Society of Cardiology (ESC) Task force for Heart failure .
7. Founder Member and Executive Committee of the Indian Society for Heart lungTransplantation(INSHLT)

REFERENCES:

1. **DR KR BALAKRISHNANMS** ,MCH– Director Cardiac Sciences
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2. **Dr KK Talwar** MD DM ,
Senior Cardiologist,
EX Director AIIMS and PGI Chandigarh
3. **Prof R.S Verma** Associate Professor of Biotechnology ,
Indian Institute of Technology . Chennai India .

E-mail : vermars@iitm.ac.in

4. **DrJignesh Patel** Senior Transplant Cardiologist,
Cedars Sinai Hospital , Los Angeles , USA and
Chairman Heart Transplant Council, ISHLT .
5. **PadmashriDr AK Gokhale**Mch
Senior Heart Transplant Surgeon.
Apollo Hospitals. Hyderabad.