

Syllabus and Training Schedule for Fellowship in Pediatric Cardiology

1. Duration of Fellowship One year
2. Qualification MD /DNB (Pediatrics or Medicine)
DM/DNB (Cardiology)
FNB (Pediatric Cardiology)
3. Objective of Fellowship
 - To provide one year's all-round training and experience in all areas of pediatric cardiology
 - To develop practical skills in invasive and noninvasive pediatric cardiology
 - To develop a systemic approach to the patients problem and decision making skills in management
 - To perform and interpret various diagnostic and therapeutic procedures
 - To obtain experience in scientific data collection, analysis interpretation, publication and medical audit.
4. Training schedule
 - A) Wards/OPD – 3 months — Minimum No. 200 patients
History taking and cardiac assessment, Nutrition, Growth and Developmental assessment, Basics of CVS examination and interpretation, Investigations and interpretation, Case presentation
 - B) Echo Lab – 3 months – Minimum No. 300 echo studies
Performing, recording and interpreting echocardiogram, reporting of echo, presentation and correlation with clinical findings
 - C) Cath Lab – 3 months – Minimum - No. of caths: Right heart 50, Left heart 50, Interventions - 10
Precath assessment, performing right and left heart cath studies, interpreting and reporting cath and angiogram, case presentation and family counseling, assisting in cath interventions, assisting in Electrophysiology procedures
 - D) Pediatric Cardiac ICU – 2 months –No. of patients -100
Monitoring and managing postoperative and medical ICU cardiac patients, ventilator care, hemodynamic monitoring, management of ICU related problems in children with heart disease
 - E) Special optional posting- 1 month in Echo Lab / Cath Lab/PICU or Research

5. Academic requirements

- a. Minimum of 6 Journal / articles reviews
- b. Minimum of 6 topic reviews
- c. Preferable: One research project involving data collection, analysis and writing a paper / abstract presentation
- d. Log book of clinical work, Echo, Cath, presentations, etc

6. Syllabus

- a. Anatomy of the heart
- b. Embryology of the heart
- c. Cardiovascular physiology
- d. Cardiac pathology
- e. Cardiac pharmacology
- f. Cardiac investigations – Electrocardiogram, radiography, echocardiography, cardiac catheterization, angiography, Holter ECG, stress testing, cardiac output measurement.
- g. Clinical assessment of paediatric cardiac patients
- h. Congenital heart diseases
- i. Rheumatic heart disease
- j. Inflammatory diseases of the heart
- k. Cardiomyopathy
- l. Pulmonary hypertension
- m. Diseases of coronary arteries
- n. Cardiac arrhythmia
- o. Hypertension
- p. Congestive Heart failure
- q. Cardiac emergencies
- r. Paediatric Intensive Cardiac Care
- s. Postoperative paediatric Cardiac Care
- t. Natural history and postoperative follow-up of congenital heart diseases
- u. Infective endocarditis
- v. Developmental issues in congenital heart disease
- w. Adolescent and adult congenital heart disease
- x. Foetal heart disease – detection and management
- y. Preventive cardiology

7. Examination pattern: Total marks – 200

I Theory examination: Duration 3 hours
Total marks 100

Either 10 short notes or MCQs with one best answer

II Practical Examination: Total marks 100

a. Case I Duration 30 minutes
Marks: 25

b. Case II Duration 30 minutes
Marks: 25

c. Clinical spotters Duration 30 minutes
Marks: 25
ECG, Xrays, Echo, Cath data, angiograms, CT scans, etc

d. Viva voce Duration 15 minutes
Marks: 25