

Govt. Rajaji Hospital and Madurai Medical College Madurai Institute of Paediatrics



Location – Alwarpuram, Madurai

ENTRANCE OF OLD HOSPITAL



NEW JICA BUILDING



History

- **PAST**

- The Department of Paediatrics was started in 1958 in Government Rajaji Hospital attached to Madurai Medical College with an outpatient dept diarrhoea room, nutrition rehabilitation room, immunization room and medical wards with one Chief and 4 assistant professors.

- **PRESENT**

- Six Paediatric units, one HHDU and Step down ward, DEIC, Day care centre, Nutrition Rehabilitation Centre, Haemato-oncology unit, PREM unit with all necessary Super specialty support is available.

- **FUTURE**

- New Paediatric block is under construction and a Bone marrow transplant unit is planned.

Institute of Child Health & Research Centre (ICH & RC)

Foundation & Infrastructure

- Separate block for Paediatrics was planned with Red Cross Society donation.
- Foundation stone laid on 29.08.1971;
- OP block shifted in 1977. Paediatric Surgery ward shifted to 1st floor in 2000.
- Dedicated Newborn ward carved out and renovated from the maternity block.
- Paediatric Block has stone foundation for 6 floors to house paediatric wards with super specialities.

Academic Milestones

- 1965 – Diploma in Child Health (DCH) started (2 seats).
- 1967 – MD (Paediatrics) started (2 seats).
- 2003 – Department upgraded to Institute of Child Health & Research Centre (ICH & RC); 12 DCH & 6 MD seats sanctioned.
- 2011 – 1 DM (Neonatology) seat sanctioned.
- 2020 - 17 MD seats/year as per NMC norms.

Service & Referral Role

- Tertiary referral centre catering to Madurai and neighbouring southern districts (Sivagangai, Virudhunagar, Dindigul, Theni, Trichy).
- Receives referrals from corporate hospitals as well.

Current Facilities

- 6 Paediatric Units PICU
- NICU (extramural and intramural)
- DEIC (District Early Intervention Centre)
- Paediatric Hemato-oncology ward

Faculties

- Director functions as Head of Department with multiple faculty (Professors, Associate Professors, Assistant Professors).

Organisation

- OP service is provided at well spaced pediatric OPD block and at DEIC. Immunization and well baby follow up services are provided daily.
- Speciality clinics is conducted on Tuesday, Wednesday, Thursday and Saturday for the following specialities – Cardiology, Neurology, Nephrology, Asthma, Hematology, Nutrition, and Genetics.
- IP service is provided by 6 pediatric units, each headed by a professor/associate professor.
- In addition there is a HHDU(PICU),dedicated Hemato oncology ward headed by a professor trained in hemato oncology, Day care unit for caring thalassemia and hemophilia patients, NRC for treating malnourished children and a well developed DEIC.
- We have a separate department of neonatology under institute of pediatrics catering the need of neonates of South Tamilnadu.

Organisation - Faculties

UNIT FACULTY	1	2	3	4	5	6
Director	Dr.D.Anuradha					
Professor		Dr.Nandiniku ppusamy	Dr.M.Balasubr amanian	Dr.D.Rajkum ar	Dr.E.Sivakum ar	
Associate Professor	Dr.S.Murugesal akshmanan					Dr.P.Ramasu bbramnaiam
Asst Professor	Dr.M.EdwinRaj a Dr.M.R.Lenin Dr.A.AbulHassa n	Dr.R.Venkata ramanan Dr.S.Prasann a Dr.M.Parama guru	Dr.R.Suresh Dr.D.ShyamAn and	Dr.A.Abubac karSiddiq Dr.P.Kalidass Dr.A.S.A.Niv edita Dr.P.Periyas amy	Dr.P.Kannan Dr.K.S.Sabari girinathan Dr.A.Durga	Dr.S.VijayPra bhu Dr.J.SenthilK umar

OP

REGISTRATION



WAITING AREA



OP CONSULTATION



Statistics

- Bed strength – 180

	2022	2023	2024	2025 (Till Sep)
OP	86691	89415	85755	53664
ADMISSION	Newborn - 5683 Pediatrics - 6297	Newborn – 6449 Pediatrics - 8792	Newborn – 5568 Pediatrics - 7794	Newborn – 3986 Pediatrics - 5367
DEATH	Newborn – 598 Pediatrics - 214	Newborn – 388 Pediatrics - 195	Newborn – 322 Pediatrics – 164	Newborn – 203 Pediatrics - 93

Nutrition

Cook preparing
food

- NRC ward to treat SAM children.
- NRC kitchen for preparing food for SAM children.
- Nutritionist/Dietician is available to provide dietary advice to malnourished children.



Well baby clinic

- All neonates are followed up in our well baby clinic till one year of age.



Immunisation

- Children are given vaccines daily.



Breastfeeding room

- As per the Govt. norms, there is a separate breastfeeding room for mothers to feed their children.
- A mother is feeding inside



PREM with emergencyroom

- A dedicated PREM unit as per regulations is set up.
- All sick children are stabilized here and the shifted to ward/ICU.



HYBRID HIGH DEPENDENCY UNIT - HHDU



State of the art PICU



Hemato-oncology ward

14 separate rooms are available to treat children with hematological malignancy

So far average 40-50 children every year with Leukemia have been treated in our unit

A separate Bone marrow transplant unit is planned



Supporting departments

- Lab – 24×7 central lab is available. Culture specimens are also accepted 24×7.
- Pharmacy – Separate pharmacy substore is available at PediatricOP block. All the drugs are disbursed to our patients from here.
- Radiology – Bedside portable X-ray and USG are available along with bedside ECHO.

Infection control

- Biomedical waste segregation is strictly followed.



Academics

- M.B.B.S classes are taken in 2 separate auditoriums between 8 to 9.30 am. Thereafter students are taught in the teaching annexe which is located in individual units.
- A separate library is available in the department with adequate pediatrics books for M.B.B.S curriculum and postgraduates where students can read.
- Postgraduates are regularly empowered with knowledge during the bed side rounds. Every month Journal club, Symposium, Academic Meet and Case presentations are conducted.

Scope of Services

OP SERVICES

Triaging and treatment of common pediatric infections.

Immunization and follow up of neonates.

Respiratory care.

DEIC

Nutritional Rehabilitation

Speciality Ops – Cardiology, Neurology, Nephrology, Asthma, Hematology, Genetics, well baby

IP SERVICES

Treatment of common pediatric diseases – communicable and non communicable.

State of the art PICU and NICU to treat sick children.

Peritoneal and Hemodialysis.

Upper GI endoscopy and bronchoscopy.

Day care unit

Hemato oncology unit.

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Department activities – M.B.B.S

- Bed side clinics for M.B.B.S students is taught daily between 8am to 11am. Small group teaching and self directed learning are held between 11am to 1pm.
- CBME guidelines are followed. Horizontal and vertical integration are done as suggested by CBME curriculum.
- Medal exam is conducted for Third M.B.B.S part 2 before the university examination.
- As per the instructions of Vice chancellor of TN Dr.MGR medical university, a quiz was conducted for third MBBS part 2 students from this year onwards.
- Apart from this quiz, IAP quiz is conducted every year for undergraduates and Madurai medical college holds the pride of conducting DIVISIONAL round of the quiz as well.

Department activities – M.D

- Regular bed side teaching is done.
- Monthly journal club, symposium, clinical meetings, and mortality review meetings are conducted.
- As per the instructions of Vice chancellor of TN Dr.MGR medical university, a quiz is conducted for post graduate students from this year onwards.
- Apart from this quiz, IAP quiz for postgraduates was conducted every year and Madurai medical college holds the pride of conducting DIVISIONAL round as well.
- Prof.Dr.J.V medal exam is conducted every year where MD and DNB students all over Tamilnadu participate and the winner is rewarded during the IAP state PEDICON.

Equipments

- Adequate ventilators, CPAP machines, HFNC are available in NICU and PICU.
- Inhaled Nitric oxide to treat pulmonary hypertension is available in NICU.
- Invasive arterial BP monitoring, Blood warmer, Portable bedside warmer, BIPAP, Pneumatic compression device to prevent DVT and ETCO₂ monitoring are available in PICU.

Achievements

- Our PICU is recognized as Centre of Excellence of Southern Tamil Nadu. We provide intensive care for all critically ill paediatric patients.
- Facilities: 12-bedded Hi-tech Hybrid ICU and 20-bedded Step-down Unit
- Connectivity: Equipped with teleconsultation services linking paediatric ICUs of nearby districts and medical colleges.
- Strength: One of the best manned and well-equipped PICUs in the Southern Tamil Nadu region.
- NRC unit to treat and rehabilitate malnourished children.
- DEIC – fore runner in Tamilnadu, implementing all services immediately.
- Hemato oncology unit (Next only to ICH & HC, Egmore) serving children of south Tamilnadu with all hematological malignancies.
- We are next only to Chennai in commencing DM course for neonatology.

Research Activities - 2022

- Prevalence of hearing impairment among high risk NICU graduates in tertiary care hospital
- A study on correlation of cranial ultrasonogram and neuro developmental outcome in term neonates with hypoxic ischemic encephalopathy
- Prevalence of tuberculosis in moderate and severe acute malnutrition children in tertiary care hospital
- Feasibility of using MCHAT-R as a tool to assess the risk of autism spectrum disorders for at-risk infants
- A study on prevalence and pattern of measles and rubella in children with fever and rashes in a tertiary care hospital
- Usefulness of pre procedure midazolam nasal spray for pain tolerance and anxiolysis during intravenous catheter insertion in children
- Neuro developmental outcome of NICU graduates
- A Study on predicting the outcome of status epilepticus in children using STEPSS score (Status Epilepticus in Paediatric Patients Severity Score)
- Prevalence of immunisation dropouts among children during COVID 19 pandemic
- Prevalence of behavioural problems in children with epilepsy
- Assessment of quality of life in children with nephrotic syndrome
- Alterations in lipid profile in children with newly diagnosed epilepsy on sodium valproate
- Prevalence of urinary tract infection in children with fever without a focus in a tertiary care hospital
- Bacteriological profile and their sensitivity pattern in children with leukemia
- Effect of hemophilia prophylaxis on the outcome of annual bleeding rate and joint health score
- A Study on follow-up monitoring of severe acute malnutrition children after discharge from Nutritional Rehabilitation center in a Tertiary care Hospital

Research Activities - 2023

- Prevalence of metabolic syndrome among adolescent girls of government and private schools in Madurai district - A comparative study
- Prevalence of hearing impairment among type 1 DM children in a tertiary care centre
- Diagnostic accuracy of lung ultrasound in early identification of ventilator associated pneumonia
- A comparative analysis of ISAA and CARS2 in autism spectrum disorder among south Indian population
- Lactate vs lactate albumin ratio and lactate clearance - predictor of mortality in critically ill children in PICU
- Clinical and biochemical spectrum of Thyroid hormonal status in children with Nephrotic Syndrome
- Assessment of pSOFA- L score in predicting the clinical outcome of critically ill children admitted to PICU in a tertiary care centre
- Early detection of subclinical Acute kidney injury based on structural and functional biomarkers in critically ill children admitted in PICU
- Prediction of clinical outcome in children presenting to Pediatric emergency care with severe pneumonia using Paediatric early warning score
- Correlation of mean arterial pressure with anthropometric measurement in school going children (6 to 10 years)
- Correlation birth risk factors and clinical patterns in cerebral palsy
- Prognostic value of CRPV in infection
- Role of chloride in predicting mortality in critically ill children
- Study on incidence and clinical significance of hyponatremia in paediatric children with lower respiratory tract infection
- A study on clinical correlation of cytogenetics in children with acute leukemia
- Correlation between serum uric acid levels and severity of asthma
- Evaluation of corrected count increment (CCI) in hemat- oncology children receiving random donor platelet transfusion during different phases of chemotherapy

Publications in the last 3 years

- Clinic-epidemiological profile and acute kidney injury among Pediatric snake bite cases admitted in a tertiary care center of South India National Journal of Physiology, Pharmacy and Pharmacology 2023 Vol.13, issue 10 – Guna et al.
- A Comparative Study on Efficacy of High Flow Nasal Canula versus standard Oxygen Therapy in children with Bronchiolitis: A Randomized controlled trial from South India International Journal of Pharmocutical and Clinical research 2023; 15(3); 202-207 - Guna et al.
- Serum interleukin-17 as a biomarker in paediatric bronchial asthma: A case control study
- Sri Lanka Journal of Child Health, 2023; 52(3); 293-298 – Venkataramanan et al.
- An observational study on Serum Magnesium levels in children with status epilepticus attending a tertiary care hospital in Southern Tamilnadu International Journal of Academic Medicine and Pharmacy 2023; 5(2); 252-256 – Venkataramanan et al.
- Urinary Tract Infection As A Precipitating Factor For Relapse In Nephrotic Syndrome. RJPBCS – Prasanna et al.
- A Study On Thrombocytosis As A Predictor Of Serious Bacterial Infection In Young Infants. RJPBCS – Kannan et al.
- Urinary Vitamin D binding protein as a predictor of steroid resistance in Nephrotic syndrome in South Tamilnadu - Venkataramanan et al.