DEVELOPMENTAL PAEDIATRICS AND CHILD NEUROLOGY

Developmental Paediatrics is a specialty which brings together the disciplines of Neurology, Developmental Morphology, Developmental Developmental Physiology, Developmental Psychology and Developmental Therapy. This field is an emerging academic sub- specialty of Paediatrics rendering services to children who have cognitive challenges, learning needs, behavioral difficulties, communication dysfunction, central motor dysfunction, sensory developmental needs etc.

Child Neurology focuses on all aspects of the developing nervous system in children and offers diagnostic, therapeutic and rehabilitative support for children who have neurological disorders.

OUR JOURNEY

Dr. M.C. Mathew, the retired founder Professor Head of Developmental Paediatrics at CMC, Vellore was invited by Dr. Sojan Iype, Medical Superintendent to establish a specialty department of Developmental Paediatrics and Child Neurology in MOSC Medical College and Hospital, Kolenchery. Dr. K.C. Mammen, the founder Medical Director spoke to Mr. Joy P Jacob, the CEO and Secretary of the hospital about setting up the department. That is how the department came into being on the hospital founding day, 14th September 2012.

The department started with three members in the team. Overtime, we have expanded our services in response to the needs of the families in our locality. Now, we have a team of professionals offering Neuro- developmental consultation, Neuro- developmental assessment, Neuro- developmental monitoring and surveillance and Distance developmental monitoring for children from birth to 18 years.

We conduct research activities for students and faculty who are interested in Child Development. We organize teaching programs and workshops in hospitals, schools and colleges.

The department supported the efforts of Bangalore Baptist Hospital to commence a Child Development Centre in 2019.

OUR TEAM

- * Developmental Neurologist
- * Developmental Psychologist
- * Speech and Language Therapist
- * Occupational Therapist
- * Counselor
- * Office Secretary
- * Support staff



Top row from left: Susan, Seena (recently left), Santha, Rainu, Saly, Tinu

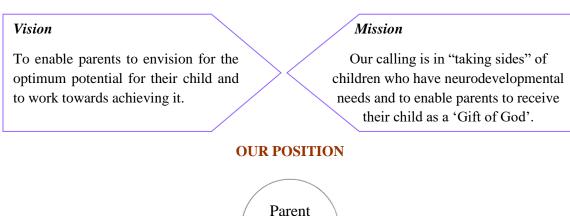
Bottom row from left: Shalini, Annie (visiting Psychologist), M.C. Mathew, Femy, Femin, Liya

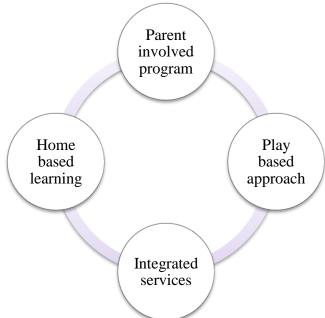
We remember gratefully those who were earlier in the team but now elsewhere for further training/ personal reasons. They made us arrive where we are now.



The department is an activity of MOSC MCH, Kolenchery and receives support from ASHIRVAD Christian Concern for Child Care, Synthite Group of Companies, CMC Vellore and other well-wishers.

OUR VISION AND MISSION





Parent involved program

We invite parental participation for all services and prepare them to monitor the progress of their children.

Play based approach

All children are welcomed to use toys for their learning. Observing children during play helps us to understand their developmental processes and in making plans to help them enhance their abilities.

Integrated services

The professionals listen to parents and each other while trying to understand the child and making plans for developmental activation. Home based learning

Through discussions, demonstrations and hands- on training, we offer parents support for enabling them to engage children in structured play at home. We encourage life experiences to become opportunities for enhancing a child's development.

OUR SERVICES

We welcome families, who need support for child development. We enable parents to enhance their child's skills and abilities during his or her formative journey.



Entrance to Child Development Centre

Families visit us from various parts of Kerala, South Indian states and overseas.



The common clinical conditions for which parents and families seek help are:

Family needs

School readiness

Parenting education

Transitional adjustment difficulties

School adjustment difficulties

Dysfunctional family

Post- traumatic stress

Pre-vocational planning dialogue

Children in adoption

Sibling relationship

Single parenting

Anxiety state

Parenting adolescent children

Acquired neurological disorders

Language and communication disorders

Seizure disorder

Attention deficit disorder

Hyperactivity disorder

Hearing impairment

Central Motor Disorders

Visual impairment

High Risk Infants

Learning needs

Sleep disorders

Multiple developmental disorders

Neuro- degenerative disorders

Neuro- muscular disorders

Hemiplegia with Neuro- vascular disorders

Minor neurological dysfunction

Movement disorders

Pediatric Auto-immune Neuropsychiatric Disorder Associated with Streptococcal infection

Obstructive apnoea

Neuro- endocrinal disorders

Failure to thrive

Vitamin D deficiency and its complications

Craniosynostosis

Inherited developmental disorders

Down syndrome

Fragile- X syndrome

Klinefelter syndrome

Turner syndrome

Cohen syndrome

Rubinstein- Taybi syndrome

Russell- Silver syndrome

Coffin- Siris syndrome

Marfan syndrome

Angelman syndrome

Prader- Willi syndrome

Rett syndrome

Worster- Drought syndrome

Cerebro- Oculo- Facio Skeletal syndrome

Neurofibromatosis

Sturge- Weber syndrome

Arthrogryposis multiplex syndrome

Neurocutaneous syndromes

Microcephaly/ Megalencephaly/ Hydrocephalus

Spina bifida occulta

Poland syndrome

William syndrome

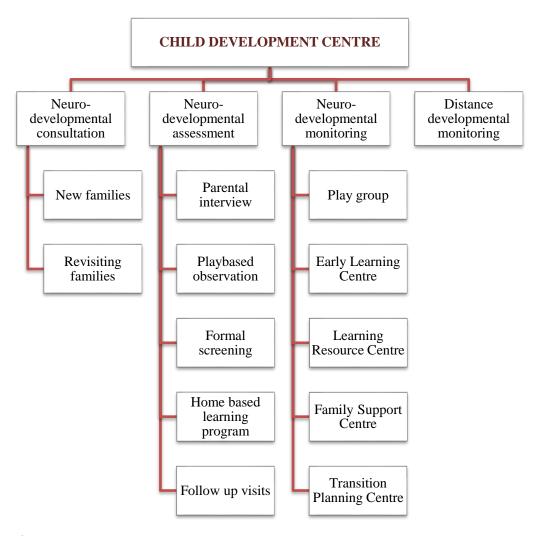
Noonan syndrome

Waardenburg syndrome

Cri-du-chat syndrome

Pfeiffer syndrome

DEVELOPMENTAL PAEDIATRICS AND CHILD NEUROLOGY



Inter departmental support

- ➤ We have a working agreement with the department of Ophthalmology, Child and Adolescent Psychiatry and ENT to run separate clinics for children referred from the department.
- We have regular contacts with Dermatology, Orthopaedics and Radiology, who provide valuable service to children whom we refer.

INFORMATION FOR PARENTS

1. Neuro- developmental consultation

- * Offered on five days of a week
- * Developmental Neurologist leads the team in the out- patient services
- * Need to take prior appointment



Ms. Tinu Paul at our office

New families (first consultation)

- ★ Welcomed on Mondays and Thursdays
- **★** Kindly bring the following:
 - Birth card/ discharge summary of hospital stay at birth
 - Immunization card
 - Information about the pregnancy period of the mother
 - Some photographs of the child since birth and one family photograph for the record in the department
 - Previous medical records such as blood results, EEG tracings, MRI Brain films etc. and developmental tests, if any.
- → Fill 5 questionnaires (profile of functions, sleep, behavior, diet and home environment) which will be provided at our office.

Revisiting families

- Welcomed on Tuesdays, Wednesdays and Fridays
- **★** Kindly bring the following:
 - Details about the medical or developmental tests conducted earlier on
 - Some photographs of the child since birth
 - Previous medical records such as blood results, EEG tracings, MRI Brain films etc.
 - Medical investigation reports as per the suggestions in first visit.

80% of families who visit the out-patient services are in regular contact with us.

2. Developmental assessment

- * Offered on all working days.
- * Welcomed by Developmental Psychologist, Speech and Language Therapist and Occupational Therapist.
- * Need to take prior appointment



Sensorimotor room

- **→** Kindly bring the following:
 - Forms which were provided at first visit
 - Videos of child engaging in play activities at home
- + Process:
 - Interview with parents
 - Play based observations
 - Formal screening tests
 - Gather information from videos and questionnaires filled by parents
 - Home based learning program is discussed and demonstrated to parents
 - Review child's developmental progress as per his or her need.

50% of families who visit the out- patient services receive developmental assessments and support.



Play is the answer to how anything new comes about

Jean Piaget

Developmental assessment room

3. Play group

- * Weekly get together of parents and children who are below 5 years
- * Welcomed by a team of Therapists and Psychologist

To help every child to discover how to learn from play based experiences.



Facilitating play

4. Early Learning Centre

- * 3 month parent involved program
- * Individualized learning program in discussion with parents
- * Periodic review of developmental plan
- * Welcomed by Psychologist, Occupational Therapist, Speech and Language Therapist and Counselor



To help children develop their play skills, communication intent and content, social skills and emotional responsiveness through carefully designed play activities.

Activity room in Early Learning Centre

Children need the freedom and time to play. Play is not a luxury. Play is a necessity.

Kay Redfield Jamison



Outdoor play area

70% of children who attended Early Learning Centre have moved on to mainstream schooling with some support.

The others are receiving special education.

5. Learning Resource Centre

- * 6 month parent involved program
- * Welcomed by a Specialist in Child Development, Psychologist, Occupational Therapist and Speech and Language Therapist



Corridor to learning space



To enhance preschool skills, communication skills, social skills and interactive behavior in a small group setting.

Indoor play area

All children who have attended Learning Resource Centre were enabled to be school-ready.

They are attending mainstream schooling with some of them receiving additional support in the school.

6. Transition Planning Centre

- * Parent involved program for adolescent girls
- * Plans with family for transition during adolescent years
- * Hands-on experiences in self care, home care, pre-vocational and vocational skills
- * Welcomed by Developmental Psychologist and Occupational Therapist

7. Family Support Centre

- * Welcomes parents to have conversations/ discussions with professionals
- * Parents can educate themselves about developmental processes of children by looking at the child development exhibits on display.



Exhibits in Family Support Centre

8. Distance Developmental Monitoring

- * Families who stay away from our place can choose to enroll in this program.
- * Parents can stay in touch with us through telephonic conversations, emails, postal services and video recording of children.

INFORMATION FOR PROFESSIONALS

1. Academic activities

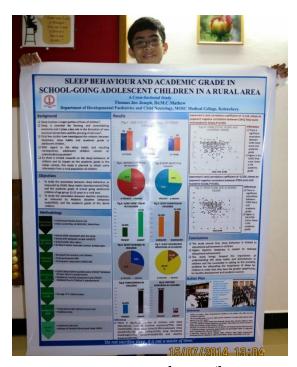
- Journal club: Weekly discussions on current research publications and popular articles
- Clinical discussion: Weekly clinical presentations of children visiting us
- Academic meeting: Weekly presentations on relevant topics in child development
- Interdepartmental clinical meeting: Fortnightly meeting with clinicians from related departments to discuss various clinical conditions of children welcomed in the department (currently suspended)
- Specialty clinics: Weekly specialty clinics (Language and communication, epilepsy, dysmorphic disorders, central motor disorder and learning needs)

2. Research activities

- * Areas of interest:
 - Vitamin D deficiency
 - Sleep disorders in children with developmental needs
 - Handedness in children
 - Parenting
 - Influence of screen time on language and behavior of children
- * We have published 11 papers in journals.

3. Visitor- observership

- Pediatricians, Psychologists, Social workers, Child development specialists and undergraduate medical students during their holidays
- * There is a mentoring support for research.



Poster presentation by Mr. Thomas



Medical students before internship

We welcome medical and allied health science students and professionals to our department.

We offer internship opportunity for allied health professionals.

Kindly arrange a mutually convenient date and time before your visit.

4. Outreach programs

- > Memorandum of Understanding with St. Peters School, Kadayirippu:
 - o To develop inclusive education services and a resource room
 - o Capacity building of teachers for inclusive education
 - o Conducted health check-up for children up to Vth standard
- > Bangalore Baptist Hospital: Advisory role to start Child Development Centre, through monthly visits

5. Debriefing of team members

- * We meet weekly to share the experiences of the week.
- * We are in touch with Counselors who visit us periodically with whom we have conversations.
- * We celebrate special occasions in the department.



Debriefing with Ms. Annie George, Psychologist, CMC, Vellore

RESOURCE GENERATION AND SHARING

- * *Christmas Cheer*: An annual exhibition cum sale of handicraft and food items prepared by the team members and their families during their leisure times. This is organized around Christmas time.
- * One- rupee campaign: 'Save a rupee a day' campaign is conducted among staff and students of MOSC family in the month of November, every year.





The proceeds from these activities are used for providing support for deserving families, to upgrade existing facilities and develop newer facilities in the department.

Medical students have enthusiastically taken part in the activities of our department.





Preparations for Christmas celebration





Get together for students

OUR DIRECTION

- + Provide training program for Paediatricians, Psychologists, Speech and Language Therapists and Occupational Therapists in child development and developmental appraisal.
- **→** Develop resources for parenting education

In connection with our 8th year anniversary, there is a proposal to expand the facility by including more services.

CURRENT PROFESSIONAL OPENINGS

We are looking for professionals in the following specialties:

Psychology

Speech and Language Therapy

Occupational Therapy

Story of a child and family who enlarged our thinking

Maya* 1 year 9 months old child came to visit us on the recommendation of her pediatrician about two years ago. Her parents needed help for her delay in language acquisition and preferred play patterns. During the interview with parents they informed us, that she was exposed to screen time from early childhood for almost 4 hours a day. She had fewer opportunities to interact with children of her age.

Following the Neuro- developmental consultation, we suggested blood investigation, an EEG, Ophthalmology consultation and developmental assessments. The blood investigations indicated vitamin D deficiency, and low Haemoglobin. She received vitamin supplements. She had a squint and needed occlusion exercises. She is using corrective glasses now. She needed medial arch support to correct her flat feet. She is on treatment for electrical rhythm disturbance.

Maya had age adequate mobility and motor skills. She had skills in self care. She was behind in play skills, receptive and expressive language skills. We encouraged the family to reduce her screen time and regularize her interactive play. We welcomed her to the weekly play group here and suggested the family to join her in Anganwadi.

Her mother, a teacher decided to take a break from her job to be available to respond to the developmental needs of her daughter. The weekly play group visits gave the mother more ideas to engage her daughter in play at home.

Maya joined Early Learning Centre (ELC). She received activities to enhance her attention, understanding, social skills, language skills, and play pattern. The family made the home, a place for learning and fun.

After having been in the Early Learning Centre for about 6 months Maya started attending a play school on days she did not visit the ELC.

The opportunity to mingle with her peers helped her in being independent for social initiatives. Maya has advanced in her language and communication skills. She is socially relational and interactive.

*Name changed for protecting identity

FEEL FREE TO CONTACT US:

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Kindly fix up an appointment before visiting us

We are open from 8:30 am to 4:30 pm on all days

[except Sundays and hospital holidays]