

Developmental Therapy: Habilitation in Pediatric Care

GV Basavaraja

National President

Indian Academy of Pediatrics, 2024

president@iapindia.org

I had the distinct privilege of inaugurating the 21st National Conference of the Indian Academy of Pediatrics (IAP) Chapter of Neurodevelopmental Pediatrics (NDP) in Bangalore, Karnataka. Engaging in discussions with fellow professionals, I was truly astonished by the advancements made in the field of neurodevelopmental pediatrics. I believe it's essential to share some of these progressive ideas with my colleagues across the country.

The First 1000 Days of Life (270 Intrauterine and 365 + 365 Postnatal days)

One of the most significant concepts that emerged during the conference is the "First 1000 Days of Life," which encompasses 270 days of intrauterine development and the subsequent two years of postnatal life. This initiative, championed by organizations such as the World Health Organization and the UNICEF, emphasizes the crucial role played by the obstetricians, neonatologists, and pediatricians in ensuring that a child's journey from zygote to young adult is healthy and well-supported.

Role of the Obstetrician

The arrival of a first child is often one of the happiest moments in a couple's life. Parents desire to see their child not only survive but thrive. To achieve this, medical professionals must appreciate the continuum of growth that begins well before birth. The intrauterine period is especially critical; during these 270 days, essential organs develop, mature, and gain functional competence. Factors such as genetic abnormalities, metabolic disorders, intrauterine infections, and growth restrictions can severely impact this developmental trajectory, leading to birth defects and potential global developmental delays with far-reaching consequences later in life [1].

Role of the Neonatologist

Neonatologists play a vital role in providing developmental care for high-risk newborns in the neonatal intensive care units (NICUs) and special newborn care units (SNCUs). Implementing developmentally supportive care can significantly reduce the length of

hospital stay, enhance weight gain, facilitate quicker transition to full enteral feeding, and improve neurodevelopmental outcomes [2].

Follow-Up Care for NICU Graduates

As the survival rates of very premature and intrauterine growth-restricted (IUGR) infants have increased over the last two decades, so has the burden of neurological morbidities [3]. It is imperative for the neonatologists, developmental pediatricians, and pediatricians to organize systematic neurodevelopmental follow-up and early stimulation initiatives for NICU/SNCU graduates in their first year of life. Early interventions that offer nurturing care during the antenatal period, extend into a developmentally supportive nursery environment, and include family-centered care are essential for fostering healthy growth and development up to three years of age [4].

Role of the Developmental Therapist

Developmental therapy is a specialized discipline dedicated to monitoring a child's growth and development during these crucial first 1000 days, with the potential to extend the focus up to six years. The National Commission for Allied and Health Care Professions Act, 2021, defines the role of a Physician Associate/Assistant, who performs clinical and administrative tasks to support patient care and is trained in a medical model such that he is qualified and competent to perform preventive, diagnostic and therapeutic services under supervision within a medical framework [5]. In this context, a developmental therapist acts as a vital associate to neonatologists and developmental pediatricians.

Key Responsibilities of Developmental Therapists

A developmental therapist is specifically trained to provide support in several critical areas:

1. *Mother-oriented early stimulation:* Engaging in activities designed to foster infant development within NICUs and SNCUs as part of developmentally supportive care.

2. *Lactation management*: Assisting mothers in breastfeeding to ensure optimal nutrition and bonding.
3. *Neurodevelopmental follow-up*: Implementing systematic follow-ups to monitor developmental progress in NICU/SNCU graduates.
4. *Management of developmental delay*: Identifying and addressing potential delays early on to optimize developmental outcomes.
5. *Screening for neurodevelopmental disorders*: Utilizing standardized tools to screen for neurodevelopmental disorders, followed by appropriate referrals to District Early Intervention Centers (DEICs) or Child Development Centers (CDCs), when necessary.

Understanding Habilitation

The overarching theme of this discussion can be encapsulated in the term “habilitation,” which focuses on the prevention of impairments that could lead to disabilities [6]. This contrasts with rehabilitation, which aims to address disabilities that have already manifested. Habilitation can span several developmental domains, including cognitive, fine motor, gross motor, mobility, daily living activities, social communication, and overall quality of life.

Strategic Plans for Habilitation

In line with the IAP NDP Chapter's Consensus Statement on Habilitation [7] championed by Dr MKC Nair, a doyen in the field of behavioral and developmental pediatrics, a strategic plan has been established to facilitate prevention, early detection, and intervention for developmental issues. This includes:

- *Preconception counseling*
- *Newborn resuscitation*
- *Lactation management*: Supporting breastfeeding as a cornerstone of infant nutrition.
- *Risk stratification of NICU graduates*: for closer monitoring and intervention.
- *Developmental follow-up and early stimulation*: Implementing structured programs for ongoing support.
- *Newborn screening*
- *Parental counseling*
- *Developmental delay screening*: Utilizing simple, culturally relevant tools for early identification of delays.

- *Holistic assessment of neurodevelopmental disorders*: Collaborating within a multidisciplinary team to assess and confirm diagnoses.

Commitment to Ongoing Education

The IAP is dedicated to promoting continuous educational programs in developmental pediatrics. This includes training developmental therapists to manage Block Early Intervention Centers (BEICs) and community mobile units under the guidance of local pediatricians. Such initiatives have already been successfully piloted by the Government of Kerala and demonstrate the potential for positive change in our healthcare delivery system.

It is crucial that we foster collaboration among healthcare providers, ensure effective training for developmental therapists, and focus on the holistic care of infants and children during these formative years. By prioritizing habilitation, we can lay a strong foundation for future generations, ensuring that every child has the opportunity to thrive.

REFERENCES

1. Juneja M, Gupta A, Sairam S, et al. Diagnosis and Management of Global Development Delay: Consensus Guidelines of Growth, Development and Behavioral Pediatrics Chapter, Neurology Chapter and Neurodevelopment Pediatrics Chapter of the Indian Academy of Pediatrics. *Indian Pediatr.* 2022;59:401-15.
2. Coughlin M, Gibbins S, Hoath S. Core measures for developmentally supportive care in neonatal intensive care units: theory, precedence and practice. *J Adv Nurs.* 2009; 65:2239-48.
3. Song IG. Neurodevelopmental outcomes of preterm infants. *Clin Exp Pediatr.* 2023;66:281-7.
4. Maria A, Upadhyay S, Vallomkonda N. Nurturing beyond the womb - early intervention practices in newborn care unit. *Indian Pediatr.* 2021;58 Suppl 1:S53-9.
5. The Gazette of India. The National Commission for Allied and Health Care Professions Act, 2021, No.14 of 2021. Ministry of Law and Justice, Government of India; New Delhi, March 28, 2021. pp 28. Accessed on Sep 2, 2024. Available from URL: <https://thc.nic.in/Central%20Governmental%20Acts/National%20Commission%20for%20Allied%20and%20Healthcare%20Professions%20Act,2021.pdf>
6. United Nations. Convention on the Rights of Persons with Disabilities. Article 26 - Habilitation and rehabilitation. Accessed on Oct 17, 2024. Available from <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-26-habilitation-and-rehabilitation.html>
7. Nair MKC, Ahmed S, Multani KS, et.al. Consensus Statement of the IAP - Neurodevelopmental Chapter on Neurodevelopmental Disorders Habilitation Process: Strategic Plan for Prevention, Early Detection and Early Intervention. *Indian Pediatr.* 2024;61:10-23.