POSITION PAPER

Indian Academy of Pediatrics Position Paper on Nurturing Care for Early Childhood Development

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Early childhood development (ECD) refers to the physical, motor, socio-emotional, cognitive, and linguistic development of a young child. The 'Countdown to 2030' global distribution of 'children at risk of poor development' indicates the need for urgent action and investment in ECD. Nurturing care enhances ECD, even in the presence of adversities. Strategic actions should exist at multiple levels: the family, community, health care providers and government. Previously, child health related policies and programs of the Government of India functioned in isolation, but have recently started demonstrating multi-sectoral collaboration. Nonetheless, the status of ECD in India is far from optimal. There is strong evidence that parenting programs improve outcomes related to ECD. This is dependent on key programmatic areas (timing, duration, frequency, intensity, modality, content, etc.), in addition to political will, funding, partnership, and plans for scaling up. Each country must implement its unique ECD program that is need-based and customized to their stakeholder community. Barriers like inadequate sensitization of the community and low competency of health care providers need to be overcome. IAP firmly believes that responsive parenting interventions revolving around nurturing care should be incorporated in office practice. This paper outlines IAP's position on ECD, and its recommendations for pediatricians and policy makers. It also presents the roadmap in partnership with other stakeholders in maternal, neonatal, and child health; Federation of Obstetric and Gynaecological Societies of India (FOGSI), National Neonatology Forum (NNF), World Health Organization (WHO), and United Nation Children Fund (UNICEF)

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Early childhood development (ECD) is an integrated concept that refers to the physical, motor, socio-emotional, cognitive, and linguistic development of children [1], as well as the multiple sectors required for their attainment, i.e., health, nutrition, education, social protection, and global finances. The foundation of future health, well-being, and productivity are laid down in the first three years of life. This period is considered especially critical in terms of development. Anatomically, the velocity of brain growth continues to be rapid (albeit slower than the fetal period), while psychologically, experiential learning occurs. Understandably, ECD can get affected by multiple factors; genetic, environmental, biological, social and demographic [2]. An estimated 250 million (43%) children under 5 years, from low- and middle-income countries (LMICs) are not expected to reach their expected developmental potential [3] due to risk factors outnumbering protective influences. Adverse childhood experiences like poverty, stunting and severe psycho-social deprivation have long-term physiological and epigenetic effects on brain development and cognition [4]. These may result from development of anatomical abnormalities (i.e., smaller hippocampal grey matter, and decreased frontal and temporal lobe volumes) [5]; and reduced activation of the areas of the brain involved in memory, language, and cognition. They can

also lead to a constant state of increased stress hormones due to dysregulation of the hypothalamic-pituitary-adreno-cortical axis [6].

The Nurturing care for ECD (NC-ECD) framework is a holistic approach developed by multiple global stakeholders to serve as a roadmap for action [7]. This includes measures that help young children to survive (reduce mortality), thrive (be healthy), transform (be exposed to an enabling environment), and attain one's expected human potential. The five components of NC known to enhance ECD are good health, optimal nutrition, opportunities for early learning, responsive parenting, and safety and security. It has been reported that provision of nurturing care can also reduce the negative impact of existing adversities [8]. This can be delivered by the family, community and/or the government. Strategic actions that promote NC-ECD at the country level include: lead and invest, focus on families and communities, strengthen services, monitor progress, and use data and innovation.

The Indian Academy of Pediatrics (IAP) launched a three-year (2021-2023) Presidential action plan on NC-ECD, IAP-Nurture [9]. Key evidence-based actions that have been proposed to ensure that the NC–ECD components are incorporated in pediatric practice are: changing knowledge, perception, attitudes and practices of pediatricians; changing knowledge and perception of parents, medical students and allied professionals; and documentation. The 'Mumbai 2021 Call for Action' pledge taken by the members of IAP, National Neonatology Forum (NNF), and Federation of Obstetric and Gynaecological Societies of India (FOGSI), with support from WHO, and United Nations Children's Fund (UNICEF) at the Central IAP National Conference (PEDICON) 2021 displayed a strong commitment to provide an optimal healthy, safe, nurturing and enabling environment to all children from conception to three years of life [10].

We, herein, present the position of IAP on providing NC-ECD for all children aged 0-3 years in India.

Current Status

The 2011 Indian census [11] revealed that there were 164.5 million children aged 0-6 years, with a proportion of them marginalized, unreachable and unaccounted for, in terms of benefitting from all the services that promote ECD. The status and trend of indicators related to health and nutritional status of Indian children under the age of 5 years can be compared with other countries using statistics obtained from the National surveys including National Family Health Surveys and Comprehensive National Nutrition Survey (CNNS). As in other LMICs, the challenge arises when it comes to assessing the status of the remaining components of NCECD, as data on safety and security, responsive parenting and oppor-tunities for early learning are not easily available.

To address these lacunae, the 'Countdown to 2030' initiative has outlined several indicators that can be used by a country for global comparison, provided local data is available [12]. **Table I** depicts the developmental profile of ECD related indicators for 2020. The Sustainable Developmental Goal indicator 4.2.1 (proportion of children aged 24-59 months who are developmentally on track in health, learning and psychosocial well-being, by sex) [13] does not reflect the status of the first three years. Population-based global indicators like the Caregiver-Reported Early Development Index (CREDI) [14] and Early Child Development Index [15] are in the process of being developed and validated for children in this age group, but are currently difficult to ascertain in most LMICS. Till then, the most common indicator that is used to assess children at risk of poor development in young children is the 'Composite Index' (CI), which is based on the prevalence of stunting and poverty, as per the World Bank poverty rates [16,17]. Countries are color coded based on the CI–pink, ≤33%; orange, 34-66%, and red, ≥67%, with a higher index indicating lower performance [18]; Though the CI of India has decreased progressively over the years (from 72 in 2005 to 45 in 2015), it is still evident from **Table I** that urgent escalating action and investment is needed to promote, support and sustain ECD in India by all stakeholders, and that too on a war-footing.

Policy and Program Environment

ECD services should be universal, inclusive, accessible and equitable [1]. Context-specific customization is required when formulating policies and programs related to ECD as threats to ECD, available workforce, health care providers' capacities, and implementation mechanisms vary across countries. **Web Table I** depicts key policies [19-27] of the Government of India (GoI) that have been framed in the last decade, and which demonstrate multi-sectoral and multi-dimensional perspectives in relation to child health and ECD. Adjunct policies that cover maternal health and provide enabling environments for working women, encourage more women to work without the fear of compro- mising infant/child care. Worthwhile mentions are the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 [28] and the National Policy on Empowerment of Women 2001 [29].

The oldest and largest national program launched by the Government of India (GoI) in 1976 to promote child health is the Integrated Child Development Services (ICDS) [30]. Other national health programs that have been

Table I Countdown to 2030 Country Profile of India (2020)

Indicators	*2020*
Demography	
Children under 5 years	8% total population
Under five years mortality	34/1000
Composite index	-
Inequity of risk	
Gender: Girls/boys	45%/ 45%
Rural/ Urban	50%/32%
Threats to ECD	
Low birth weight	-
Preterm	13%
Child living in poverty	14%
Inadequate supervision	
Violent discipline	
Under five years stunting	35%
Developmentally on track	-
Functional difficulty	-
Services: Health	
Antenatal care	51%
Postnatal care	65%
Seeking care for pneumonia	78%
Services: Nutrition	
Exclusive breastfeeding	58%
Minimum acceptable diet (6-23 mo)	6%
Early learning	
Books at home	
Playthings at home	
Early stimulation	
Early childhood education	38%
Responsive caregiving	-
Safety & security	
Birth registration	83%
Positive discipline	
Basic sanitation	60%
Basic drinking water	93%
Facilitating environment	
Paid maternity leave	26 wk
Paid paternity leave	None
Minimum wage	Present
Child protection services	Yes (ICPS)
Code marketing of breast milk substitutes	Substantial
International conventions on	
Right of the child	Enforced
Rights of persons with disability	Enforced
Protection of children	Enforced
Sale of children, pornography, prostitution etc.	Enforced

introduced in the last decade with focus on infants and children in the first three years and cover some components of nurturing care are given in **Web Table II** [31-38]. However, despite the implementation of all these policies and programs, the status of ECD in India, as evident from the Composite Index, is far from optimal.

There have been several ECD-directed programs in other LMICs [39-52] and the Global WHO/UNICEF Care for Child Development (CCD) -3 [53], that have demonstrated a positive impact on the development of young children. All of these are parenting programs that aim at improving parent-child interactions, behaviors, knowledge, beliefs, attitudes, and practice [54]. They include high quality promotive and preventive health services, caregiver capacity building, and providing support by enabling policies. A review of these programs led to the identification of key program areas (**Box I**) with strong evidence for improved child outcomes (physical health, cognition, social and emotional well-being) and parent outcomes (better parental behavior/ parenting practices).

There has been a paradigm shift in health policy in the last two decades from survival to healthy survival and

Box 1 Key Program Areas with Strong Evidence for Improved Child and Parent Outcomes for Early Child Development

Political and legal will: Strong legal frameworks and policies for inter-sectoral coordination. Creation of apex bodies at top levels of government for efficient coordination among stakeholders, and to assure accountability and alignment across financing streams.

Partnership: Involvement of international and national agencies, non-government organizations, professional organizations, policy makers, and funding partners.

Content: Programs based on NC-ECD modules, Care for Child Development modules, Road to Health cards that include all components of NC-ECD, or responsive caregiving, supported parent behavior management skills, and positive discipline.

Duration, frequency and intensity: The minimum duration should be 12 months. Best outcomes are seen with at least 2 years. The frequency should be high enough to ensure that practices change according to the developmental needs of the child (>9). Good quality intensity should allow direct interaction between the child and the parent. Didactic doctor-parent sessions are considered low quality with no or minimal impact.

Program modality: Multiple modalities are most effective. These include: individual sessions with active parent-child engagement; group sessions; home visits; illustrated posters/ cards depicting opportunities for play and responsive parenting; guidance on parenting practices, and problem-based strategies.

Use of other platforms: Digital media/portals, mobile apps and/ or text messages can be used to disseminate information, and serve as reminders of scheduled visits.

Optimal service provider: Authority figures (doctors, nurses and educators) are most effective for office practice. Community health workers with higher education and training are associated with higher program quality in the field.

Administrative: All care providers should receive proper incentive and remuneration.

Scaling up: Starting small, learning, adapting and increasing coverage.

transformation. To give effect to this policy change, a three-pronged approach would be required. First, overcoming existing governance challenges in ECD-directed national programs [55]. All stakeholders need to be made aware of the advantages and cost-effectiveness of multi-sectoral action for ECD directed programs, especially when there are competing interests, and ineffective inter-sectoral collaboration between government agencies and public initiatives. Second, capacity of healthcare providers has to be built in order to deliver frequent, intensive and interactive parental counselling on NC-ECD. The missing NC-ECD components i.e., early learning opportunity, responsive caregiving and safety and security need to be added to existing public health programs and office practice. Barriers that will need to be overcome include low sensitization of health care providers regarding the importance of NC-ECD [56,57], poor competency levels due to lack of training in ECD, and time constraints of the clinician that precludes including parental education during a health visit. A critical barrier is the lack of felt need of parents resulting in low demand generation for such services by the families. The concept of well-child visits needs to be popularized, along with creating awareness in the community about the advantages of adopting child-care practices that influence their children's develop-mental outcomes [58].

IAP POSITION ON EARLY CHILDHOOD DEVELOPMENT

IAP has been actively involved in several ECD-directed presidential action programs/activities during the last decade including the National training program on parent skills for children and adolescents. Poor scholastic performance program (2012), Child Rights and Protec-tion program (2012), Mission uday (2013), Cradle to crayons program (2016), Management of school emergencies: Child safety module (2019), and IAP Palak Project (2019).

IAP recognizes the strong felt need for, and positive implications of incorporating ECD directed child and parent comprehensive services into routine office practice and this has resulted in the launch of the 2021-2023 Presidential Action Plan for NC-ECD [9, 10], and the release of the 2021 IAP guidelines for parents [59]. IAP's 30000 members can become a collective workforce capable of making a significant impact in the lives of young children and their families.

Based on the aforementioned lessons learnt, and in continuity with the 2019 IAP consensus statement and guideline on ECD [60], we propose the following universal recommendations intended for all children between the age of 0-3 years, irrespective of their needs or circumstances. IAP Recommendations for targeted (at high risk) and indicated groups (children with developmental disorders/disabilities) including some of the individual components of NC-ECD [61-68], which are available in the public domain are not addressed in the current position paper.

1. For Expanding Well-Child Visits

1.1 Initiation of at least 11 well-child visits in the first 3 years of life of a child will include ECD-directed elicitation of history, evaluation (monitoring of growth), delivery of specific health care services, counselling and anticipatory guidance related to the components of NC-ECD.

1.2 The schedule will be as follows: within a week of birth, 1.5, 2.5, 3.5, 6, 9, 12, 18, 24, 30 and 36 months.

1.3 The focus and content will vary according to the age of the child.

1.4 This should be a collaborative effort by multiple service providers (pediatrician, clinic staff) using multiple modalities (administering a checklist, one-on-one counselling, group sessions, demonstration, audio-visual programs, hand-outs and displays in waiting area, etc.) and providing resources to the parent for self-learning.

1.5 An appointment system can be utilized so that the well-child visits can be staggered according to the convenience of the practitioner to avoid interference with service delivery for sick patients.

2. Addition to Missing Links and Developing Competencies in the Pediatrician/Office Staff

2.1 Health-related issues currently not covered in routine well-child visits should be added i.e., referrals for screening hearing or vision, educating parents about oral, sleep and personal hygiene, screen time, sanitation, and safe drinking water.

2.2 Select components of the revised GoI Mother-Child Protection (MCP) card [69] should be used at each visit for growth and developmental monitoring and parents advised to refer to the information related to developmental stimulation and other health related messages.

2.3 Counseling regarding age-appropriate minimal acceptable diet (frequency, dietary diversity, healthy foods).

2.4 Parents should be provided information on parental education on safety at home, during play, and on the road.

2.5 Pediatricians should learn to recognize signs of possible child neglect and abuse, and manage cases of child abuse according to the established protocols.

3. Developing Parental Competencies

3.1 Issues related to responsive feeding, responsive

caregiving, positive parenting and positive discipline should be discussed.

3.2 Early stimulation and play-based non-formal education should be taught by demonstration and interactive sessions to help parents provide opportunities for early learning at home.

3.3 Special emphasis to be given to involve fathers in the delivery of interventions actively.

3.4 Other caregivers from within the family like siblings older than 12 years, uncles, aunts and grandparents should be involved.

3.5 Provision of standardized resource material and IAP guidelines to parents.

3.6 Display of salient health messages in office displays.

THE ROAD AHEAD

High quality peri-conceptional, antenatal, intrapartum and postnatal care during pregnancy and the first three years of life increases the likelihood of physically and developmentally healthy children, and by extension, the future of India. We include the visions of various stakeholders in maternal, neonatal, and child health with respect to what their respective organizations have planned for the future.

Indian Academy of Pediatrics

Multiple strategies are going to be employed for increasing awareness of parents, the community, pre-service and in-service health care providers, allied professional bodies and the government about NC-ECD. The aforementioned IAP-Nurture will span three years (2021-2023), and aims at enhancing NC-ECD for all children under 3 years. The IAP platform will be used with involvement of social media and print to sensitize and disseminate information to the community regarding the importance of NC-ECD for the physical, cognitive and psychological well-being of a child. An ongoing nationwide mixed-method study will generate quantitative and qualitative data related to the awareness, perceptions and challenges of pediatricians in incorporating nurturing care in office practice. A stakeholder meeting sensitizing all partners and allied agencies has been held for implementing a universal ECD program in the country, and one of the outcomes is this position paper. A taskforce formulated recommendations for including ECD in the medical undergraduate and pediatric post graduate curriculum [70]. A WHO sponsored supplementary issue of *Indian Pediatrics* on ECD will be published this year and disseminated among members. Training workshops will be conducted across the country for capacity building of pediatricians to impart knowledge and skills to caregivers in office practice by multiple modalities. The concept of holistic well child visits throughout the first three years will be popularized. The impact of these workshops on pediatricians, parents and children will be evaluated. Training videos will be uploaded on the IAP website.

Federation of Obstetric and Gynecological Societies of India

The aim is to improve practices related to NC- ECD by preparing training modules, sensitizing, and conducting capacity building workshops for obstetricians (in collaboration with IAP, WHO and other partners), and imparting knowledge and skills to parents regarding ECD-directed child rearing practices. Other initiatives include a nationwide survey of the knowledge, attitude and practices of its members pertaining to pre-conceptual care and counselling (PCC), antenatal care, and ECD, as well as a certificate course on ECD. A community connect e-conclave will be held on social media for mass education and awareness. Fact sheets, an advocacy statement, training videos, resource material from the training work-shops, and other educational material will be uploaded on the society's website. FOGSI will continue its advocacy with policy makers to implement a universal ECD program with all allied professional bodies, so that no child is left behind.

National Neonatology Forum

The society recognizes that the neonatal period and early infancy form critical periods in the continuum of ECD. It has been involved in standardization of care in neonatal intensive care units (NICU) across India, providing technical inputs to the India Newborn Action Plan (2014), Facility Based Newborn Care (FNBC) training and mentoring visits, Kangaroo mother care (KMC) work-shops, and establishment of sick newborn care units (SCNU). NNF will continue to support and train health care providers for early initiation of breast feeding and the provision of exclusive breast feeding for all infants. It will continue its advocacy with policy makers for the establish-ment of more human milk banks. FBNC training and mentoring activities will continue for hospitalized low birth weight and preterm infants. This involves the training and monitoring of health care providers in evidence-based practices. The family is supported in the providing KMC and family participatory care, which enable them to become responsive care givers. Other aspects of nurturing care will be taken care of during follow-up visits. NNF will also support implementing the national initiative for providing postnatal home-based visits by community health workers to impart ECD-directed parental interventions that cover health, nutrition, hygiene, sanitation, age-appropriate early stimulation, and responsive care.

WHO India

As is apparent from mapping the landscape of laws, policies and programs in India, several initiatives and

opportunities support NC-ECD. WHO strongly advocates harmonizing these into a comprehensive, rights-based, child-centric, equitable and inclusive approach delivered through diverse service delivery channels, and coordinated across multiple sectors. WHO suggestions to strengthen services and achieve the national vision to build human potential are outlined below:

- Establish an empowered inter-sectoral council at national, sub-national and local administrative levels to govern the programs for NC for ECD.
- Ensure sustained and predictable financing for child related expenditure in the age group 0-3 and 4-8 years; track per child expenditure, particularly in the states with poor maternal and child health indices.
- Improve services delivered by all sectors (mainly health) by integrating responsive caregiving and perinatal maternal mental health and setting standards to ensure quality of services.
- Invest in sustained capacity building of pre- and in-service workforce.
- Implement a comprehensive communication strategy to create demand for services and strengthen NC practices at the family level; harmonise key messages across sectors
- Include ECD monitoring indicators into the SDG India Index and national information systems, and commission joint multisectoral reviews of the implementation, including coverage and quality.
- Design and implement scalable innovations, capitalize on digital platforms and solutions, document experiences, create learning networks and identify research priorities.

UNICEF India

All children from conception to the first three years of life, especially the most disadvantaged, should achieve their full developmental potential. UNICEF focuses on two outcomes to accomplish this: *i*) Strengthening service delivery systems to ensure that all young children have equitable access to essential quality health, nutrition, protection, and early learning services that address their survival, growth, and developmental needs; and *ii*) Supporting parents, caregivers, and families and encouraging them to provide their children with nurturing care and responsive parenting. UNICEF India is working with the union and state governments to support the delivery of health, nutrition, water, sanitation and hygiene (WASH) strategy, early learning, early screening/intervention, special needs, and parental/family support to promote holistic ECD. The focus areas of intervention include:

- Supporting multi-sectoral programs/interventions for ECD, including India's newborn action plan, The Prime Minister's Overarching Scheme for Holistic Nutrition (POSHAN) Abhiyaan, Rashtriya Bal Swasthya Karyakram (RBSK), Home Based Care for Young Child (HBYC) , early learning, Swachh Bharat Mission, and interventions that promote maternal health, nutrition, infant and young child feeding, and prevention and treatment of childhood illnesses.
- Strengthening systems to support the delivery of essential services prioritized capacity building, strengthening monitoring systems, and evidence generation.
- Supporting family and community engagement and empowerment to stimulate demand for inclusive, quality services and ensure nurturing care for children at home.
- Strengthening and expanding partnerships with ECD networks and allied agencies to increase demand for services.
- Supporting responsive parenting in health, nutrition, early stimulation, positive discipline, protection from stress, fathers' engagement, and gender equity.
- Using advocacy and communications to support programmatic goals.

CONCLUSIONS

It is imperative that we promote and support ECD, if we want to attain the vision of developing and transforming human potential from 'todays survivor' to 'tomorrow's future.' Investing in ECD has a positive impact on child health and a nation's gross domestic product [71]. All the stakeholders involved in the well-being of the mother and child need to work in tandem. This can be achieved by synergy among different sectors and their corresponding ministries (health, nutrition, education, women and child welfare, and child protection services); different levels (family, community, health care provider and the government); and different organizations (public, private, and NGOs).

By virtue of their profession, pediatricians have a unique role in sensitizing and influencing parents, the public, and policy makers. IAP takes the position to be a part of the process to galvanize all the aforementioned strategic actions and facilitate collaboration among all partners and stakeholders. By including preventive and promotive health services to existing well-child visits in office practice, not only do we decrease childhood mortality and morbidity, but we also can act as a bridge between the parent and the child that results in enhancement of ECD. Nurturing care by the family, village, supported by the society, the healthcare workers and the government will ultimately ensure optimal ECD.

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SBM reviewed literature of all the sections of the paper and drafted the manuscript, with the help of DM and SHD. DS, AN and ST reviewed and provided literature on the magnitude of burden. DA, AT and ML reviewed and provided literature on existing policies and programs. NC, JU, KB, JT and RKP reviewed and provided literature on existing recommendations. DS, SR, AG, RM, VVS, AdW, LdA wrote the roadmap for their respective organizations. PG, SR, GVB and RR did the critical appraisal of the paper. All authors have approved the final manuscript.

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