

# UNPACKING Care:

## Protecting Early Childhood.

ECED Brief - 1



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THE WORLD BANK



Care®



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# Unpacking Care: Protecting Early Childhood.

This document aims to provide an understanding of children’s need for care along the entire childhood continuum, but more particularly for children below three years of age. It focuses on the critical importance of protective, consistent and responsive care, and discusses strategies to enhance care and promote early learning opportunities for children by synthesizing existing empirical evidence in this area. The document has been prepared with a view to inform policy development, planning and advocacy for young children in India.

## Reaching the child before 3 years

Early childhood, the foundation of all human learnings, spans from conception to eight years. As ‘learning begins at birth’, the environment, and within it the experiences, which foster the overall development of the child through care and early interactions in these earliest years of life, are referred to as Early Childhood Care and Education (ECCE).

“ The care that children receive has powerful effects on their survival, growth and development. Care refers to the behaviours and practices of caregivers (mothers, siblings, fathers and child care providers) to provide food, health care, stimulation and emotional support necessary for children’s healthy survival, growth and development. Not only the practices themselves, but also the way they are performed – in terms of affection and responsiveness to the child that are critical to a child’s survival, growth and development (21). ”

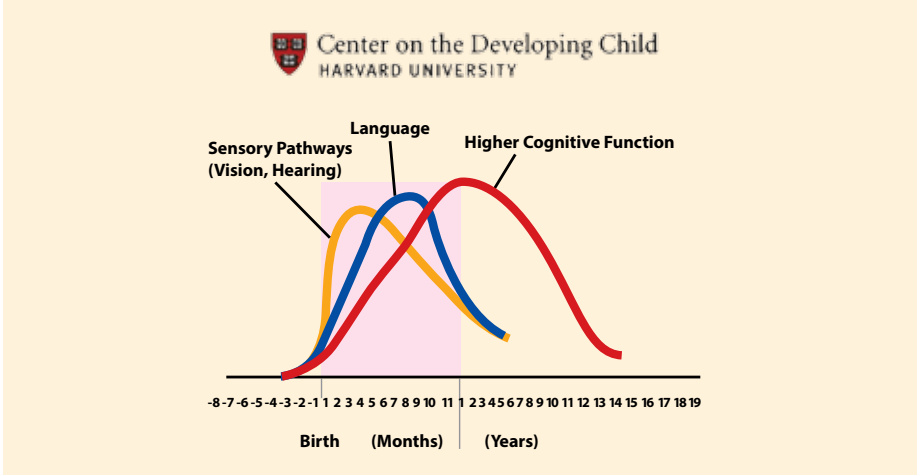


Early years are central in every child's life due to rapid brain development. A newborn's brain is already 25 percent of the weight of the adult brain. In the first three years of child's life, the brain grows to almost 80 percent of the adult size and within six years to about 90 percent. Thus establishing this period to be vital for formation of neural

area is dependent on establishment of the sensory pathways and language acquisition. It further provides evidence towards the criticality of infant-caregiver interactions. On the other hand, the above discussion also states that children have a predisposition towards learning from birth. Research in neuroscience

## Human Brain Development

Neural Connections for Different Functions Develop Sequentially



pathways for future development (11). The above graph demonstrates the sequence in which different areas of the brain develop. The sensory pathways develop first, based on the physical interactions with significant caregivers. This is followed by development in the language area, which is dependent on verbal interactions with adults. Finally, it is important to note that the development in the cognitive

demonstrates that conditions in early childhood years, affect and set trajectories for health, behaviour and learning throughout life. They process a myriad of visual, auditory, sensory and social-emotional experiences in their interactions with the caregivers. Therefore, early stimulation has an important role to play in the establishment of multiple sensing pathways. This further affects several

## 5 important facts on early childhood - (1)

1

700 Neural connections are formed every second through the interaction of genes and a baby's environment and experiences;

2

Differences in the size of vocabulary begin to emerge as early as 18 months based on level of parent education;

3

90 - 100% chances of developmental delays occurs when children experience risk factors;

4

Adults with 7 to 8 serious adverse experiences in childhood are 3 times more likely to have cardiovascular diseases as an adult;

5

Long term rigorous studies on investment in ECCE report a range of returns between \$4 - \$9 for every dollar invested on the program.

functions of language, intelligence and behaviour in later stages of life (8). For example, the degree of exposure to reading, talking, and conversation in early years has been found to have significant effects on child's vocabulary in later development (17). Moreover, individuals who acquire second language very early in life, find it easier to learn third and fourth language later (8). This affirms the importance of quality of interactions and opportunities that a child receives in the early years of life, which has a long-term effect on brain function, cognition, psychosocial functioning and socio-emotional development.

## Defining Care

The term 'education' is more easily understood by the community but the concept of care is more complex. Care and its components are still considered as meeting only the physical needs of a child in terms of nutrition (food) and health. As a result, one ends up neglecting equally essential psychological and socio-emotional needs of the child. Keeping in mind that a lot of research already focuses on health and nutrition, the emphasis of the current document lies primarily in exploring various constituents of 'care'. In essence, there has been

a slight shift in understanding the definition and determinants of care. Care, an all-encompassing term includes a consistent caregiver, who ensures protection for the child by responding caringly to the needs of the child through appropriate stimulation, supportive and warm interaction and ensuring healthy and safe environment (4).

Care can be said to comprise of three components-

- a) **Presence:** The component of presence implies consistent availability of a significant caregiver in a predictable manner.
- b) **Relationship:** Relationship refers to a secure attachment between a child and a caregiver, characterized by trust and confidence. Some of the research indicates that when infants do not have the opportunity to form a secure relationship with at least one adult, their development can deteriorate rapidly resulting in depression, smaller size of brain and lack of enthusiasm to learn.
- c) **The caregiving activities:** The last component, 'caregiving activities' involves routine activities such as feeding, bathing, grooming, toileting, putting to sleep and comforting. Recent research strengthens the belief that care is

an essential component of child development, affecting human relationships and plays an important role in development of a child to mature into a human being (11).

## Who is the Caregiver?

This brief interaction may feel like a routine caregiving practice but within this, lies the potential for Neha's future growth and development.

It has been established beyond doubt that a stable emotional bond with a special adult is indispensable for a child's development. During such pleasurable interactions, the limbic system in the brain is activated. In this context, the term parenting is used to define the focused and differentiated relationship that the young child has with the adults who is (are) most emotionally invested and consistently available to him or her (17). The primary caregiver may be a birth or adoptive parent, a grandparent or a relative. What matters most is the quality of relationship; this is evident when the significant adult is not interchangeable with others who fulfil the role.

In addition, a stable nurturing relationship with a special adult is essential for survival and growth of a

child. A child's growth, in all aspects of health and personhood, depends on the capacity of caregivers, in whose care the child rests. While research has traditionally focused on mothers, the evidence from studies on fathers and their young infants is also very compelling. Father's involvement has been seen to be positively correlated with children's overall social competence, social initiative, social maturity, and capacity for relatedness with others (15). This calls for the need for stronger advocacy towards encouraging more active parenting behaviours from fathers, by making them understand their own role and its importance in the life of their child. In effect, children who receive high quality of care in family environment

“Neha's mother is breast-feeding her 4-month-old baby; Neha sucks vigorously and then pauses to look up to her mother's face. Her mother looks down at Neha lovingly into her eyes and Neha looks back. She strokes Neha's cheeks lightly with a finger and asks what you are looking at. Neha smiles at her mother, gurgles with delight, throws up her hands and then goes back to feeding again.”





reflect higher levels of cooperation, cognition and language skills (12). Such findings have raised questions regarding the nature and the time period of employment benefits for mothers and fathers. Given the important role that parents play in the lives of young children, it is essential to develop policies that enable them to provide adequate care for their young children.

Current research however brings in yet another perspective. With the exception of the earliest days of life, care of young children is not necessarily required to be limited to only one person or caregiver. There are assertions from various researches indicating that children who have multiple yet consistent and secure attachments are less at risk than children who have one secure primary attachment, possibly since they get varied exposure and experiences within an emotionally secure environment

## Relationship between a Child and the Caregiver

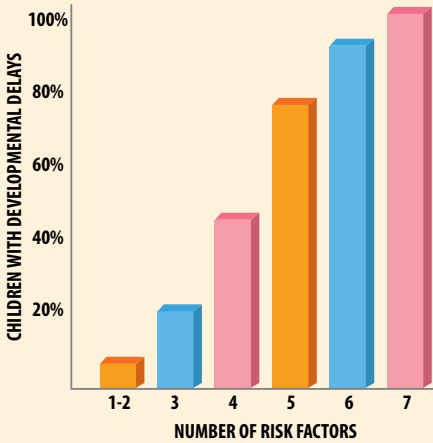
The research demonstrates that the quality of the relationship between the child and the caregiver plays a pivotal role in determining the view a child

develops of the world around (22). An enriching relationship helps the child develop a sense of trust and attachment towards the caregiver. This has a great deal of significance for forming relationships in later life. For example, the promptness and warmth with which mothers respond to an infant's crying is closely associated with formation of secure attachments. As the quality of caregiver and child relationship influences child's development to a great extent, it becomes important for caregivers to develop the ability to respond to children's cues sensitively. This, in turn, also requires ensuring that parents have appropriate support and information (20). The ability to be responsive necessitates not only having time but also good physical and mental health. When caregivers are under stress from having too many responsibilities, psychological stress and poverty, they may be unable to respond appropriately to children. Children living in acute poverty are likely to be worst affected and lose the opportunity towards complete development.

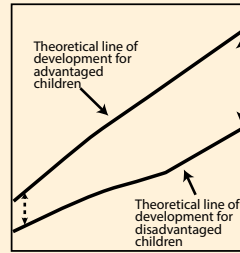
## Impact of inadequate care

Inadequate, disrupted, and negligent care in the early years influences brain development adversely and makes a





## Children who start behind, stay behind



Outcomes gap that policies and programmes must attempt to fill\*

Investment in ECD-  
A POWERFUL  
EQUALIZER

Birth – Mother's health & nourishment  
0-5 years – Infants health & nourishment – Cognitive stimulation  
5-8 years – Quality & level of preschool experience  
8-10 years – Quality & level of primary education

Source: NO WOLVES ALONG THE WAY: TOWARDS A NATIONAL ECD MODEL FOR KYRGYZSTAN, McLean Hugh, Rakhat Orozova, Unicef (2009)

child more vulnerable to risks in later life. The inadequate care may lead to developmental delay and greater vulnerability to risks in later life.

a) **Developmental Delays:** Given that some critical periods for development of competencies such as language skills are embedded in the first few years of life, significant adversity impairs development in the early years of life and the more adverse the conditions that the child faces, the greater are the chances of a developmental delay.

Children exposed to 6 or 7 risk factors face a 90-100% likelihood of having delays in their cognitive, language or emotional development (1).

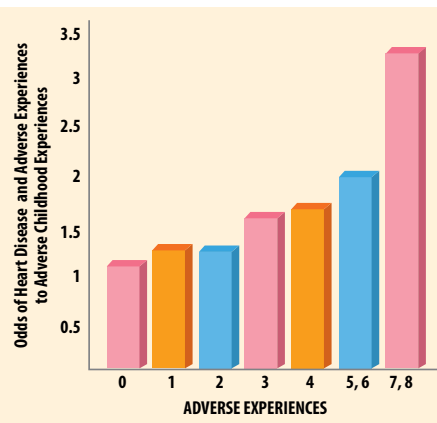
Deprivation in these years has been shown to result in diminishing the

ability to discriminate phonemes in languages to which children are exposed (8).

### b) **Cumulative effects of Risk Factors:**

Risk factors such as poverty, caregiver's mental illness, child ill treatment, single parent, and low maternal education have a cumulative impact.

The graph shows that adults who recall having 7 or 8 serious adverse



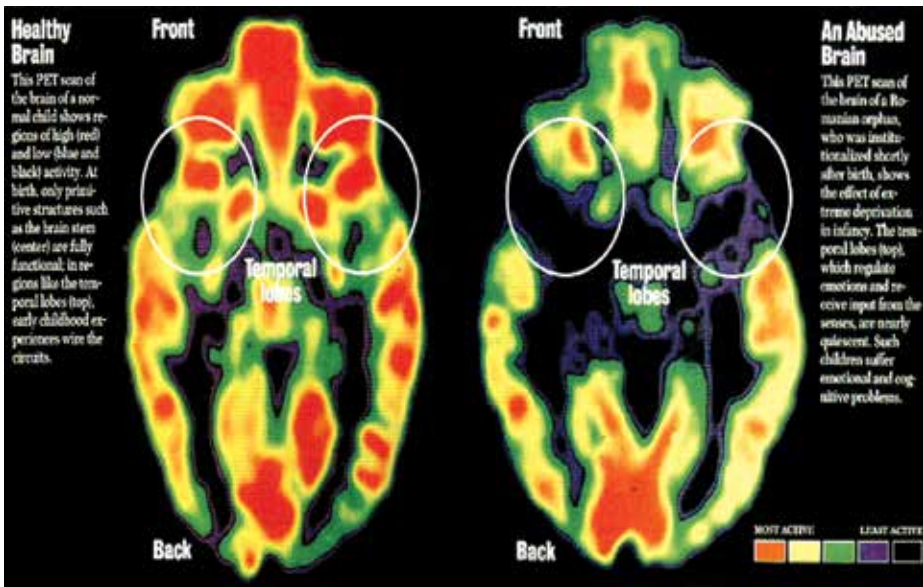
experiences in childhood, are 3 times more likely to have cardiovascular disease as an adult. It is also important to note that children below 3 years are most vulnerable to maltreatment compared to other children (1).

Longitudinal research has demonstrated across several countries that lack of care and development in the early years can also have serious latent effects and can lead to increased incidence of alcohol or drug addiction, juvenile delinquency and higher crime rates, as well as social maladjustment in family and work life. A growing body of evidence also links significant adversity in childhood to increased risk of a range of adult health problems- including diabetes, hypertension, stroke, obesity, and some forms of cancer.

- c) **The effect of stress on hormones and the structure of brain:** All young children have the ability to deal with stressful situations for short periods of time, when they are supported by caregivers, like visiting the doctor's clinic for immunization. A nurturing relationship with a stable caregiver acts as a buffer and helps the baby to deal with difficult circumstances.

However, prolonged exposure to stressful situations, in the absence of a responsive caregiver seriously jeopardizes young children's physical and mental health and is referred to as "toxic stress". As per the lancet series, maternal depression is also a significant factor which impacts the quality of care (10). Stress hormones such as cortisol and adrenalin are produced in human beings to cope with difficult situations. Research studies reveal that when cortisol levels remain high for an extended period of time, it influences the neural connections being formed and affects both learning and memory (18). It has been observed that the young children growing up in poverty exhibit high levels of cortisol. Similarly babies who have been ill treated or neglected have abnormal patterns of cortisol production, which may last even after the child is placed in a safe environment.

The above Positron Emission Tomography (PET) scans graphics of the temporal lobes in a healthy and abused brain. There is clear indication of differences in the brain architecture of children who were neglected or abused. Sensitive, warm and responsive caregiver attention has been associated with lower levels of cortisol. The relationships children have with their



Sources: <http://goo.gl/Nk8un>

caregivers play an important role in regulating stress hormone production during the early years of life. Thus, sensitive and responsive caregiving from a parent or a childcare provider can serve as a powerful buffer against stress hormone exposure, even in children who might otherwise be highly vulnerable to stress-system activation (18).

In addition, India's challenging social structure adds to the complexities in delivering adequate care to infants and toddlers. The country has one of the highest rates of child malnutrition in the world, with nearly one-half of all children less than 3 years of age being either underweight or stunted (NFHS-III, 2005-06). This stands to

be a primary cause of infant mortality rate, largely due to low dietary intakes, infectious, water borne illnesses, lack of appropriate sanitation, care and inequitable distribution of food within the household. Research studies reflect that the underweight children in the first two years of life have lower cognitive test scores, delayed enrolment, higher absenteeism and more class repetition compared to healthy children. Social cruelties like female foeticide restrain the very right of a child to survive and develop fully.

Ensuring that babies have good health, strong families and positive early learning experiences, lays the foundation for success throughout their lives and healthy brain development

(22). It can be concluded that essential formative experiences for a child, in any given culture, do not come only from the wealth or special toys or equipments but from the quality of caregiving available to the child in terms of parents' and caregiver's time, skills, attitude and active commitment. If given the right type and amount of emotional, language and cognitive experiences, particularly within a warm and responsive social context, children from all walks of life gain in their intellectual and socio-emotional competence (9).

## Child Care in India

Indian culture has always cherished the first five years of a child's life as years of lalayat or indulgence, with an emphasis on indulging the child with care and affection through traditional childrearing practices, such as singing lullabies, infant massages and interactive games.

India, as of today, has undergone several changes in terms of social structures (Family restructuring, increased class divide) and systems (increase in maternal employment, inadequate levels of women literacy, mental health issues) influencing the quality of childcare and development available to young children. In the

present times, the developmentally appropriate practices are gradually fading away due to changes in family structures and pressures of modern life. Much of the infant-toddler care today tends to be custodial, with priority given to safe and comfortable environment over caregiver interaction, stimulation and early learning opportunities.

The uniqueness of an Indian setting lies in the different types of childcare basically comprising of care by kith and kin. Even today, the social support through friends, neighbourhood and family is strong and is often the main source of childcare. In a recent study (21), it was observed that many dual earners depended on their family, that is the grandparents for child care.

Care by a sibling is a very common form of childcare. However, a cause of concern as it denies the older child educational opportunities and childhood itself. Among the urban middle class latch-key children are common feature as child care facilities like before and after school do not exist. Many a times, parents are forced to allow children to be on their own in the home with neighbours. Within the home setting, child care may also be done by employing 'Maid' or Ayah' who may look after the child along with

domestic chores (3).

Aided with such cultural distinctiveness, child care programmes in India need to be launched and regulated for better availability and accessibility, which would further support the contention in defining better care for children in India.

## What can we do to protect early childhood?

To reach children below three years, it is important to first reach the parents who are the primary caregivers. Some of the methods that have been tried and tested are discussed below.

### a) Parent Education programs:

There is an urgent need to educate parents regarding the needs of young children and appropriate responsive



care. Young children are born with great potential and parents need to become aware of the significant brain development that occurs during this period.

Below we identify some systems through which parent education can be delivered to various populations.

- The Integrated child Development Services(ICDS), program is an important pathway to reach out to parents across the country;
- Parent education classes can be offered in collaboration with paediatric and obstetrician's clinics;
- Child development classes can be offered in high schools and colleges to reach out to adolescents and young adults.

### b) Home visits and home based programmes:

Home visits provide an excellent opportunity to reach out to pregnant women and new mothers. Home based programs have been piloted in India on a small scale and evaluations have found these to be effective, though expensive, particularly in rural areas where exposure levels are relatively lower (13). Home based programmes require periodic home visits where a social worker or trained volunteer makes parents aware of the needs

of the child and models planned interactions with the child which are developmentally appropriate.

The focus of such practices, which are conducted in a participatory mode, is early stimulation. A recent study (19) indicated that teaching caregivers appropriate complementary feeding and responsive play strategies through homevisits increased children's dietary intake, growth and development more when compared with just homevisit complementary feeding, education alone or routine care. The ICDS programme has the component of home visits by Anganwadi workers(AWWs), which can address this aspect very effectively if the AWWs are appropriately trained. Further, it is also important to highlight the convergence of interdepartment messages like ASHA, which shares the same message with caregivers. Small and large-scale convergence efforts have been attempted across the country, and there are models of success in various states that have attempted convergence of nutrition, health and women's empowerment (23).

**c) Parental Leave:**

Research on caregiving clearly suggests that the availability of the

mother is essential for the infant, at least for the first six months, when children are most vulnerable.

Available maternity rights have been revised, especially for the women government employees who are entitled for 2 years of child care leave till child turn 18 years. Further, providing flexible working hours and part-time employment opportunities for women also adds to the benefits. Cash transfers have also been found to be an effective support. The father being an important figure in the child's life, entitlements such as paternity rights should be revised. This would be extremely helpful for not only the child but also provide effective support to the new mother.

**d) Regulated Day-Care programs:**

Day Care is an important alternative for families where both parents work. The effect of childcare varies considerably based on the quality of care the child receives in a centre. Quality is determined by the program's ability to provide opportunities for establishing nurturing relationship with caregivers and its ability to provide a safe environment with rich cognitive and linguistic opportunities. It is important for national and state governments to set standards and

regulate the quality of care in ECE (Early Childhood and Education) programs.

There is a need to-

- Ensure quality care for children from all socio-economic background
- Establish mechanisms for monitoring quality and provide licensure.

These can be centre based or family based day care centres. It is important to ensure that these are accessible to young parents in different contexts, such as urban and rural areas. These need to be effective and affordable and provide not only custodial care but also early stimulation through a trained caregiver. The ICDS programme is now contemplating extending at least 10 per cent of the Anganwadi centres into crèches in response to this need (16).

e) **Individual Counselling:**

Paediatricians, obstetricians and general physicians need to be sensitized and made aware of the latest research, so that they can disseminate critical information on child development to prospective parents as part of the postnatal care. Visual Charts illustrating the developmental needs of a child at

various sub-stages can serve as a useful method of communication.

## Are we investing enough?

Given the proven impact of holistic early childhood care and education for young children, not only at an immediate level but also long term, investment in young children in the first three years of life has been found to have the highest rate of returns (5).

Three of the most rigorous long-term studies found a range of returns between \$4 and \$9 for every dollar invested in early learning programs for low-income children. Program participants followed into adulthood benefited from increased earnings while the public saw returns in the form of reduced special education, welfare, crime costs, and increased tax revenues from program participants later in life (1).

The benefits of care are cumulative over the life course (7). The children who receive quality care and education in early childhood years make more effective use of primary, secondary and tertiary education and demonstrate greater social competence. Prevention and early intervention therefore becomes more cost-effective. According



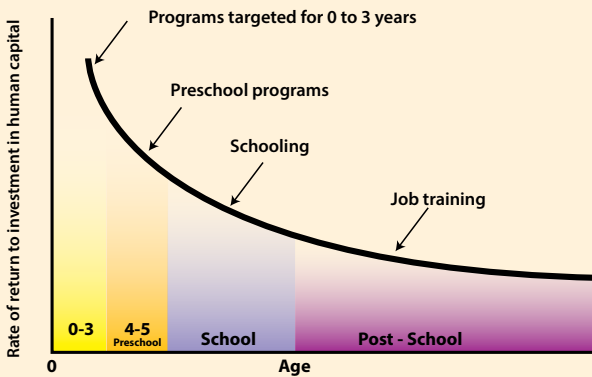
to Dr. Lawrence J. Schweinhart, President of the High Scope Educational Research Foundation, the economic return from public investment in high quality early childhood programs can be as high as 16 times the original investment. The findings from longitudinal studies in United States have been supported by research in other countries such as Turkey and Mauritius, suggesting that this may be

true for other regions.

Early childhood care and education, of appropriate quality, together becomes imperative to compensate for any home deprivations and ensures that the demographic advantage of India, i.e. its youth become a much needed asset to the country as it moves towards becoming a strong, knowledge based economy.

### Rates of Return to Human Capital Investment at Different Ages

(Source: Heckman, 2007)



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