



The First 1000 days

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Introduction

The first 1,000 days of life - from conception to one's second birthday - are a once-in-a-lifetime chance to lay the groundwork for maximum health, growth, and neurodevelopment throughout one's life (Cusick and Georgieff, 2013). Recent research has cast doubt on the long-held notion of a baby's 'ignorance,' claiming that babies do, in fact, possess an intrinsic aptitude from the time they are born. Questions like whether Newborns become 'bored,' whether they can recognize faces, and if they can distinguish between items are now more known. Independent observers observed and analysed such things as eye movements in video recordings of newborn in controlled conditions to discover which visuals babies tend to favour. Experiments like this imply that within a few days after birth, newborns can recognize distinct faces. The necessity of providing newborns with novelty and stimulation in their environs is confirmed by the 'habituation' process (Gopnik, Meltzoff, and Kuhl, 1999 and Brierley, 1994). 'The brain thrives on diversity and excitement,' Brierley said. Monotony in the environment, as well as objects that only accomplish one thing, are quickly dismissed by the brain' (1994). Several comparable studies have been conducted to determine the degrees of comprehension that newborns and young children possess during their first three years of life. The multifaceted capability of newborns has been discovered via studies of the bond between a newborn baby and his or her mother. Bruner's 'cognitive growth' hypothesis proposed in 1960 that environmental and experience elements influenced a child's development (Smith, 2002). According to Wilson (2002), brain research has nothing to give parents since the factors influencing children's outcomes are complicated and cannot be reduced to scientific explanations. Wilson claims that addressing a child's health and welfare issues, for example, would be more successful if a multifaceted strategy were used, which included eradicating poverty and

scrutinizing public policies regarding young children and families. When children's desire for connection to a parent or carer are addressed, they can grow into confident, self-assured individuals. Attachment Theory, first proposed by John Bowlby (Bowlby, 1951; 1953) and later expanded in terms of patterns of Attachment by Mary Ainsworth (Ainsworth et al, 1978) in relation to the baby's use of his or her mother (or carer) as a secure base from which the baby can explore the world, is one theory that helps us understand this aspect. Bowlby believed that a warm, personal relationship between the newborn and young infant and his or her mother, in which both find fulfilment and happiness, is necessary for good (mental) growth (Bowlby, 1951). Bowlby went on to describe attachment behaviour as "predictable conduct involving closeness to an attachment figure and whose evolutionary role is to shield the newborn from harm" (Bretherton, 1992). Mary Ainsworth's addition to this and Bowlby's theory was to show how, after a baby has grown attached to a primary caregiver, such as the mother or, in out-of-home environments, a key person, the mobile newborn utilizes the attachment figure as a stable foundation (Bretherton, 1992).



1 - Nutrition

The fundamental building blocks for brain development, healthy growth, and a robust immune system are provided by good nutrition during pregnancy and the first years of a child's life. Furthermore, a rising body of scientific evidence suggests that the foundations for lifetime health, including obesity and chronic disease predispositions, are predominantly established during this 1,000-day period (EFCNI, 2018). Nutrition is, in a way, the energy that propels a child's early growth. The brain grows faster than at any other period in a person's life during the first 1,000 days, and a child needs the proper nutrients at the right time to fuel their brain's rapid development. Pregnancy, infancy, and toddlerhood are the three most important periods in the first 1,000 days.

Before and throughout pregnancy, nutrition is one of the most influential non-genetic elements in foetal development.

Women with a preconception healthy Body Mass Index (BMI) acquire an acceptable amount of weight throughout pregnancy, but women with a BMI below 19.1 have a fivefold increased risk of giving birth to a baby with a low birth weight.

Undernutrition in the mother is linked to foetal growth limitation and poor perinatal outcomes (Pem, 2012). Intrauterine growth restriction, which affects brain development, is caused by an insufficient intake of healthy nutrition and a mother's low nutritional condition throughout pregnancy. Low maternal weight before conception is linked to a higher risk of low birth weight, symmetrical growth restriction, and miscarriage. Low birth weight babies are also more likely to be stunted by the age of two (Pem, 2012). A pregnant woman needs more calories to nourish and sustain not only her growing child, but also her support system, which includes the placenta, breast tissue, and fat stores. Protein, vitamins, and minerals are also required for the foetus's growth and development. Without vitamin and mineral supplements, most healthy women who eat a well-balanced diet can fulfil the bulk of their nutritional requirements throughout pregnancy. Despite their best efforts, many women find it challenging to fulfil increasing dietary guidelines during pregnancy, particularly for iron and folic acid. It is thus suggested that all women trying to become pregnant take a multivitamin/mineral supplement containing folic acid as a preventative step. (Insel et al, 2004)

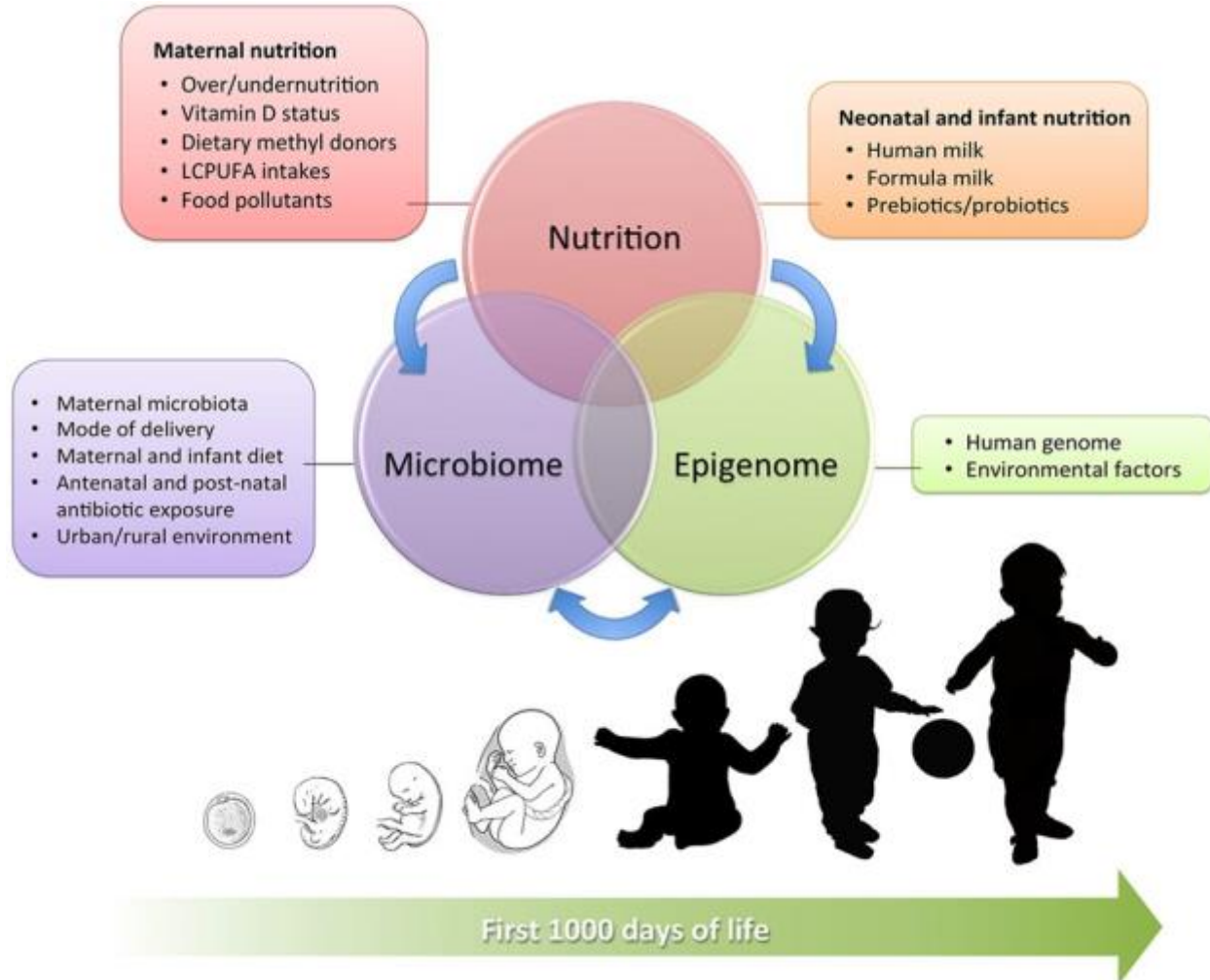
The mental health of a woman before, during, and after pregnancy has an influence on her baby. The child is more likely to be nervous if the mother is worried or anxious when she is pregnant. Maternal mental health is linked to socioeconomic status as well as a lack of emotional and social support. One in every six women suffers from mental illness during or after pregnancy. Depressed mothers may be less receptive to their baby's attempts to communicate with them, which impacts how

newborns bond with their mothers. The first three years of a child's life are critical for brain development as well as social and emotional development. Failure to form a deep and trustworthy relationship with at least one primary caregiver can have a negative impact on a child's development and behaviour (The First 1000 Days: Foundations for life, 2011). The encouragement of breastfeeding is an essential public health policy. Current standards indicate that newborns consume solely breast milk for the first 6 months of their lives, then switch to mixed feeding until they are 2 years old or older to promote optimal growth, development, and well-being (WHO and UNICEF 2014). Breastmilk is the greatest superfood when it comes to brain development. Breastmilk provides a range of nutrients, growth factors, and hormones that are essential for a child's brain development in the early years. Breastmilk has an unrivalled influence on brain development since it is a living substance with unique components that cannot be duplicated in baby formula. Scientists were able to see that children who were exclusively breastfed for at least 3 months (no food or liquids other than breastmilk) had increased white matter development in several brain regions associated with executive functioning, planning, social-emotional functioning, and language, using neuroimaging technology. The quality of the nourishment that babies get, as well as the experiences and relationships they have with carers, form their brains (1000 days, 2019). Nursing strengthens a baby's sensory and emotional circuitry, which is vital for both cognitive and socio-emotional development, because the physical act of breastfeeding includes a lot of mother-child connection and love (1000 days, 2019).



2 - Under and Over nutrition in the first 1000 days

The importance of nutrition in the first 1000 days



Care and Education

The pandemic has been described as a "global trauma" that threatens lives and well-being in all communities, particularly children (Woods, 2020). Smelser (2004), citing Freud, cautions that childhood traumas are "all the more significant since they occur during periods of incomplete development and are thus prone to have traumatic repercussions." In an early childhood environment, a child's primary relationship is with their 'key person.' The important person position was severely disturbed during Covid, which had a negative influence on the child's emotional stability (Walton and Darkes-Sutcliffe, 2021). Developing a bond with a new caregiver for a baby who is adjusting to nonparental care arrangements may be quite difficult (R. Bowlby 2007; Datler et al. 2012; Klein et al. 2010). The capacity of the caregiver to comprehend, sensitivity, and respond to the infant's needs is critical to the infant's well-being as well as the mother who committed the task (Cumberland 2012).



3 - ENABLING ADULT

Enabling adults are receptive, listening into and interpreting learners' communication through actions, words, and behaviours, and reacting sensitively to enhance comprehension, according to the Welsh government (2021). They boost students' confidence in speaking with others by appreciating their attempts to convey their thoughts, feelings, ideas, and views. They demonstrate a knowledge that learning to communicate is a unique process for each person, and that students acquire and develop abilities at varying speeds. The adult's involvement is critical to all learners' success, but it is more important at this time. The facilitating

adult is the one who sets the tone for learning by establishing emotionally safe situations in which students may begin to express and manage their emotions and behaviours in healthy ways. Pikler thought that comprehensive childcare professional training, with a concentration on attentively observing and monitoring the child's growth, was essential (Falk, 2008). With staff turnover and shift changes, Pikler noticed contrasts between care in the home and care in the day-care environment, observing that children began to fight for adult attention. Dr. Katherine Bussey and Diti Hill, 2016 in Australia and New Zealand, identified rising concerns about the quality of non-family institutional care and the subsequent interest in the Pikler approach and Magda

Gerber's Resources for Infant Educators (RIE) approach. Since 2009, RIE courses have been conducted in New Zealand and Australia (Bussey & Hill, 2017), and Pikler training has been available in Australia since 2017. The notion that the quality of care is reflected in the possibilities for engagement provided to individuals who require care is now widely acknowledged (Gutknecht, 2010; 2015). In the Pikler method, children are given plenty of opportunities to engage. In every contact, spending time with the child and cooperating with him or her is a top focus. This is not, however, done so that the child may become self-directed as quickly as possible. Cooperation is cultivated and nurtured from the start: when the practitioner puts the child's shirt on, they describe what they do. Begin by carefully collecting the sleeve, demonstrating the arm hole to the child, and waiting for the child to place their arm inside the garment. By naming the child's activities and so cementing the process, the child's self-actualization can be aided. The practitioner reacts to the kid's musical discourse or initiates a peekaboo game when the child begins to hum or vocalise. The changing table is viewed as an educational place due to the vital significance of relationship-building opportunities (Gutknecht and Bader, 2021).

While in our care, all children require and deserve to have their emotional needs fulfilled. Our responsibility is to nurture, enable, and cherish children, while also acknowledging that each child is unique and comes to us with a variety of experiences and needs, some of which we may be unaware of. Children benefit from professional relationships because they can, become a strong person. Feel comfortable and secure, allowing them to play and learn in a calm and enjoyable manner (Early years matter, 2020). New Zealand's Te Whariki states parents and whanau have confidence in their ECE service to create a setting that fosters respectful relationships, encouragement, warmth, and acceptance. Children get opportunities to try out their ideas and enhance their working theories through responsive and reciprocal connections with people, places, and things. As a result, shared aims, efforts, and accomplishments are highly regarded (The Ministry of Education, New Zealand, 2017)

The early years tradition of parental collaboration has long existed at the grass-roots level (see, for example, Tizard et al 1981; Pugh and De'Ath 1989) and has lately been validated as a substantial contributor to children's welfare and school results (Desforges with Abouchaar 2003). Close and respectful interactions with parents and the wider family have been considered as vital to young children's development since the revolution in child and family policy in 1997, and the arrival of the Curriculum Guidance for the Foundation Stage in 2000. The advantages of fostering shared perspectives and efforts between caregivers and educators have been extensively documented, and parents are regarded as "experts" in their own children, while practitioners are experts in children's development and learning in general (Whalley et al 2007).



4 - Maslow's Hierarchy of Needs is a 1943 psychological theory by Abraham Maslow that asserts that humans have varying degrees of needs. The needs are divided into categories. Basic human requirements (food, water, and clothes) are at the bottom of the pyramid, while self-actualization is at the summit. Each intermediate level is built on top of the one before it. To put it another way, a child's basic human needs must be satisfied before their safety and security requirements can be met. Once fundamental human needs are addressed, then relationship needs can be met, then relationship needs can be met, then accomplishment needs can be met, and eventually the desire for self-actualization may be met once all other needs have been met (Kraussel, 2018).

Enabling Environment



Children learn and grow best in settings that allow them to have experiences that are tailored to their own needs (Early Education, 2012). Learners' real experiences should be centred on the environment, both indoors and out. Exploration of the environment is a crucial motivator for development throughout this phase of learning. Learners build a feeling of belonging and respect for the world around them as

they explore their surroundings, the local community, and beyond. Practitioners should consider not just the physical locations but also the emotional environment that supports learners in reaching their full potential when developing their curriculum. These enabling settings will enable a wide range of experiences for learners, allowing them to express themselves physically, artistically, and imaginatively, as well as follow their passions, whether alone or with others (Welsh Government, 2021). 'Young children require more than a soothing and pleasant environment,' as Marion Dowling phrased it so beautifully (2014). In the infant and toddler rooms, practitioners and setting managers should strive for the best quality, especially because research reveals that this is not always the case. According to Gooch and Powell's research (2013) infant room, practitioners "thought they had little influence over this component of the environment or were unable to specify how space should be used in line with their understandings and perceptions of the babies' needs." When it comes to environmental equipment, quality trumps quantity. The learning and value are enhanced in a setting where practitioners connect carefully with children and make the most use of the materials. Open-ended supplies, such as lengths of fabric, cardboard boxes, and cardboard tubes, allow for the most inventive and social play as children collaborate to create game concepts. These do not have to be expensive (and in some cases are even free), but they do allow practitioners to adapt, foresee, and respond to the babies' daily, changing needs.

Indoor environment

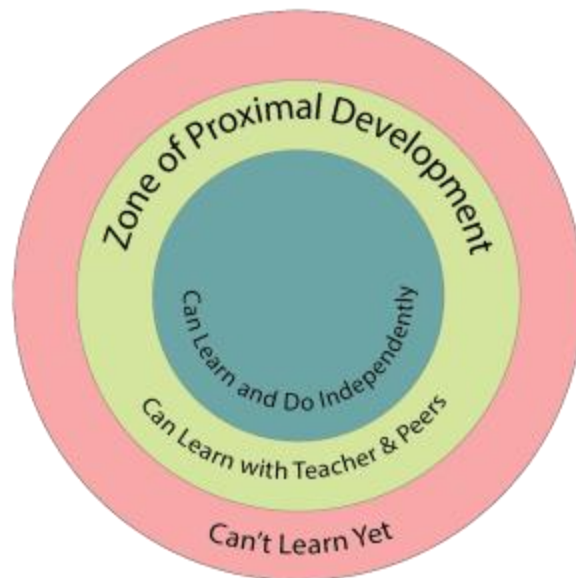
Indoor rich environments have an instantaneous influence on children's learning and development. Does it really mean to live in a multicultural setting? It provides a comfortable, exciting, and enticing indoor environment for the infant or children that use it. For some children, it becomes a second home where they eat and sleep on occasion. A suitable environment for a young newborn will be drastically different from a good setting for a four- or five-year-old, even though certain features will be identical. Children's surroundings should be appealing to them and make them feel safe, secure, and happy to be there, as well as places where they can play and learn peacefully (Early years matter, 2022).

Outdoor environment

Children benefit much from learning outside. They are free to go around without the restrictions that come with being inside. They may inhale fresh air and use all their senses to appreciate the colours, sounds, and sense of scale and space. Outside time increases self-esteem and allows for large-scale play, problem-solving, and creativity in the company of other children. The amount of time spent exercising has been increased. Taking calculated risks is also a novel concept. When children are outside, they use five times more vocabulary than when they are inside, thus it is not essential to spend a lot of money on supplies. They will be interested in old tyres, logs, and boxes, which may be utilised in several ways. A den can be made from a sheet. Flowerpots and hanging baskets, as well as a 'wild area,' allow access to the natural world. When paired with calm surroundings for reflection, the outdoors stimulates active learning and can help youngsters learn more successfully (Early years matters, 2022).



5 - Enabling environment



6 - Vygotsky defined the Zone of Proximal Development as the space between the learner's present or real level of development and the next level that can be reached through the application of mediating symbolic and environmental aids, as well as skilled adult or peer facilitation. The premise is that people learn best when they collaborate with others, and it is via such collaborations with more experienced people that learners acquire and absorb new concepts, psychological tools, and abilities (Vygotsky's Zone of Proximal Development, 2010). Whereas Piaget realised that a child's environment interacts with them, and this is a central theme in his theory. He felt that a child could not learn unless he or she was continuously engaging with their surroundings, making errors, and learning from them (Eddy, 2010).

Enabling experiences

Enabling experiences should encourage learners' independence by providing challenges and opportunities for achievement throughout the learning process. They should be founded in real-life, realistic circumstances and give possibilities for deep-level participation and continuous active learning. Learners' personal choices might be included in experiences, as well as local or current interests. They should promote holistic child development by assisting learners in making connections throughout the curriculum and across areas of learning and experience, allowing them to graduate to the learning

descriptions at progression step 1. Practitioners may use the descriptions of learning to guide their planning and ensure that the curriculum is broad enough to support child growth (Welsh Government, 2021). Independence is a valuable life skill that should be cultivated from a young age. The word is frequently interpreted to encompass a wide range of abilities, ranging from assisting children in separating from their family to improving clothing skills and teaching them to think for themselves. All facets of independence are critical for children to learn to be self-reliant. The desire for independence begins at a young age. Young newborns make quick selections about what they want to play with, eat, and who they want to be with. Toddlers thrive in a healthy setting where they can accomplish increased things for themselves (Dowling, 2013). Practitioners, on the other hand, recognise that children will only be sufficiently confident to begin dealing with the world on their own if they come from a secure, supportive, and loving environment. When a child is overprotected or forced into meeting developmental milestones too soon, several barriers to their increasing independence arise (Dowling, 2013). When children are nurtured and encouraged to think for themselves, it becomes evident that they are extremely capable. This, however, does not happen by chance. Children's ability to utilise the world for themselves, make choices and judgments, and begin to establish their own beliefs and perspectives are some of the most significant characteristics of autonomous learning. These qualities must be taught to young children and then encouraged to be practised (Dowling, 2013). Toddlers and young children are capable of more nuanced reasoning, problem-solving, and reciprocal connection development than previously thought. Educators must work with infants and toddlers throughout time to help them develop the beginnings of self-regulation, self-direction, and responsibility, which are essential behaviours for subsequent success (Ebbeck, Warrier, and Goh, 2017).



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