



The First 1000 Days

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The First 1000 days and why they are important



The period of conception to the age of two is known as the first 1000 days and this is the earliest stage of development. The focus on the first 1000 days has grown in recent years as there has been huge masses of evidence to show the significance of the experiences a child has and the environment the child is in during this period (Moore et al, 2017, p. 5). The first 1000 days are a critical period because during this time babies have an increased vulnerability and the foundations of

children's development and health are placed, these are their social, physical, emotional, cognitive and behavioural development (House of Commons, Health and Social Care Committee, 2019).

The most vital time for development is the first 1000 days, this starts from conception. These days are also the most vulnerable times for a child. During this period a child can be diagnosed with a developmental need like an educational need, if special provision is not made when they start compulsory education, or a disability diagnosis can be made too. As babies do not have the language skills at this point, it is possible that it can take longer for some people to have their needs identified (HM Government, 2021).

The perceptions of learning and development are linked. Development is a holistic concept, it includes changes and growth in an individual's social, physical and mental wellbeing and functioning. Learning means certain processes for developing skills and knowledge. Learning and development are both universal processes. However, they take place in particular in cultural and social contexts which include early years education and childcare setting. The variations in a child's learning and development are formed by cultural principles. By supporting the development of a child means their family and community that take on the main day to day responsibilities of the child are also supported and respected (Page, Clare and Nutbrown, 2013).



Pregnancy and Mother's effect on development



The life of the unborn baby is set up from a healthy pregnancy. When a baby is in the womb, they are susceptible to the environment the mother is surrounded by. Whatever the mother can hear so can their baby, what the mother consumes they consume as well. If a mother is distressed this can

have an effect on the baby. For a healthy development for the baby the physical and mental wellbeing of the mother is vital (HM Government, 2021).

For women and their families, pregnancy and childbirth are both life changing events. Throughout these events maternity staff have the chance to support women and their families making sure they have a positive and personalised experience whilst receiving clinically safe care. There needs to be maintainable services to help families in preparation for parenthood. This will ensure the children have the best start they can in life. They will also help with their physical, emotional and social needs. There is an opportunity for women throughout pregnancy to up take a healthy lifestyle and enlarge their family's health and wellbeing throughout their lifetime (Welsh Government, 2019).

A large range of emotions can be brought up when being pregnant and these can include being stressed or feeling anxious, but this is normal. Pregnancy is a major change and stress is a normal reaction when going through it. Sometimes too much stress can be overpowering and could result in health problems for both baby and mother. However, stress can be used in a positive way and can be used to push someone to face new challenges (Pregnancy, Birth & Baby, 2020).



Nutrition



Nutrition of a mother prenatal and the nutrition of a child within the first 1000 days (two years of life) are the most vital factor of the neurodevelopment of a child and their mental health throughout life. If a child or adult suffers from health risks such as diabetes, hypertension or obesity, it may have been inflicted from this period of their life. If key nutrients are not given to a child throughout this crucial period of their life it can increase the chances of lifelong deficits in the function of the brain. Every care giver for children can promote healthy diets for infants and children within the first 1000 days. If public policies are prioritised that make sure that adequate nutrients are given to children to ensure they have an early base for the best neurodevelopment, this is a major factor in having long-term health (Schwarzenberg and Georgieff, p. 1).

Within the first 1000 days, nutrition is crucial, it has a role of shaping the long-term health and overall development of an individual. The nutritional deficiencies during the period of the first 1000 days, can change the developmental traces of an individuals which can cause a delay or an impairment in immunological, physical or cognitive development. This type of delay or impairment can sometimes be irreversible and can end up with poor achievements and schoolwork and the risk of developing diseases later on in life can be increased (Mayneris-Perxachs and Swann, 2019).

Having a stable and responsive relationship with their caregivers and being within a protected and nurturing environment a child's development is built on by their nutrition during the period of the first 1000 days. When any of these vital supports are not met it can have a negative effect on a child's social, physical, cognitive and emotional development, this may result in losing opportunities which every child is intitled to (Think Babies, n.d)



Neurological Development



The brain continuously develops throughout life and the quickest period of brain development and growth is the time it is as its highest plasticity is in the third and last trimester of pregnancy and up to the age of 2. By the time of 5 months from conception, the human brain is a bi-lobed structure, and it looks similar to a coffee bean. By full term, 9 months since conception, it is gyri and sulci indicative of significant complexity, this looks a lot more like the adult brain, a walnut shape. Rapid developing areas of the brain at birth as the hippocampus and the auditory and visual cortices. There is a big growth of the language processing areas in the first year post-natal as well as development of prefrontal cortex which controls higher processing which is flexibility, attention and inhibition. Rapid tests of neuronal proliferation, myelination, differentiation (complexity) and synaptogenesis (connectivity) characterise the first 1000 days. This is the time where the best opportunities are

given to ensure the best nutrition to promote normal development and it is also the time where the brain is the most vulnerable to any nutrient deficit (Cusick and Georgieff, 2013).

The first 1000 days of life are important as the foundations of neurodevelopment are placed and a satisfactory amount of nutrients and to achieve this, a supply of nutrients are vital, mainly iodine, folic acid, chlorine and iron as well as others. An essential for human development is chlorine and chlorine is produced by humans in small amounts through the hepatic phosphatidylethanolamine N-methyltransferase (PEMT) pathway. Neonate and the fetus have a predominately high chlorine demand and take part in normal development (Derbyshire and Obeid, 2020).

The process of a healthy normal neurodevelopment is complex, and it involves structural and cellular changes within the brain which then proceed in a precise arrangement. If there is a change in a part of the brain that is too slow or too quick, it can end with a failure of a crucial pathway connection to different parts of the brain. Throughout the first 1000 days is the most active period of neurological development, there is a quick change that happens from the first development of a structure recognised as the brain. During this period important primary structure are formed which support the fundamental behaviours and gives a framework for structures that will form later on (Schwarzenberg and Georgieff, 2018, p. 2).



Enabling Adults



The development of children is shaped considerably by the relationship they share with their main caregiver during infancy. A secure attachment is encouraged by a consistently responsive and a developing relationship and will be allows the development of relationships in the future of the child's life and at the same time delivering a secure groundwork for learning (Moore et al. 2017, p. 15).

A considerably large research displays the advantages of having a good attendance at good quality early childhood education and care, also known as ECEC, and for having positive learning and behavioural outcomes. It has also discovered that the quality of opportunities and experiences that young children have in early childhood education are dependent on the dispositions, skills and understanding of their early childhood educators. The amount children learn and how they feel about learning is reliant on the quality of interaction they have with peers and educators which shows in research (Melhuish et al. 2016, p.1).

Nutbrown (1996, quoted in Page, Clare and nutbrown 2013, p. 4) believed, throughout their lives, young children make numerous relationships and connections. It is vital that children have opportunities to make connections with close adults. All children will be included by respectful educators and not just children who are easier to work with, respecting every individual child and accepted them as they are. This means respecting their family, their language and culture, their abilities, their name and their needs.

By evolving respectful relationships and practices helps with living and working together within a setting and this can be difficult at times. However, whether it is difficult or not, making an effort to invest in building relationships between parents, children and practitioners will pay dividends as this community is one of the most important things for a child throughout their early education and care (Page, Claire and Nutbrown, 2013).

Enabling Environments



Having an enabling environment in the first 1000 days is a vital factor for a child development. To have an enabling environment it has to be a varied space where there are a minimised about of risks and all children are protected from any harm. The environment should be welcoming, warm and nurturing. There should be a variety of resources available that are familiar to children and babies, but it is just as important for them to do activities new to them. There should always be activities available to do indoor and outdoor and there should always be room for indoor and outdoor play. Exploring and risk-taking should also be encouraged for development (Early Years Alliance, n.d).

There should be a variety of activities that all have a different purpose. They need to give children inspiration for imagination and the acting out role play, to encourage exploration of personal relationships and their feelings, trying to figure out problems, reflection and also quiet/carpet time. There should be consideration for having an area for construction, a selection of books and toys, a home corner, art, music and time for storytelling. The environment should be suitable for the

children within it. There should be consideration that every individual child has a feeling of belonging and they feel valued and welcomed (Early Years Alliance n.d).

The development and health of a child can be influenced by their personal characteristics like gender, personality and genetics. Their life chances, development and future health are significantly influenced by their family around them, especially their parents, the community they are living in and the society they are a part of. The interaction of these characteristics happens in multiple ways most often complex. Protective factors are characteristics that help promote a child's development and health and risk factors are characteristics that put the child's development and health at risk. These two different factors tend to be 'two sides to the same coin'. An example of this is, if parental mental health is poor, it can have an effect on the child's healthy development. On the other hand, if parental mental health is good there can be protection against any other negative outcomes for the child. For example, poor academic skills or behavioural problems (Parliament, 2019).

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Lillie (2017) believed, all general learning is formed from sensory information. To have fine motor skills later on in life, touch perception is crucial. Having a precise awareness of what we can hear and see allows children to listen and take in instructions, speaking clearly and understanding what they see. Having the ability to precisely feel where their body is within a space and the way it moves throughout that space defines their balance, endurance and postural core strength. The basis of academic learning is formed by all their senses working together

Poverty



There is a large amount of evidence which shows there is big connection between poverty during the period of the first 1000 days and adverse health and wellbeing outcomes later on in life. Research shows, children with developmental delay from high income families are more likely to catch up to other children their age later on in life. However, children from a family with a low income are not likely to do so (Moore et al. 2017, p. 12).

There is an array of indirect and direct impact on baby's development and wellbeing while living in poverty. There is research that shows that babies brain development is affected by poverty. This is caused by having a condensed opportunity for positive stimulation and a enlarged exposure to stress and the stress can become overpowering for their parents living in poverty to be able to give their child a nurturing and sensitive environment they need to be able to thrive (Moore et al. 2017, p.12).

Examples of social stresses are poor housing, low paid and unstable work and poverty. These act against the capability for parents to be able to give their children a health, nurturing, secure environment to live in during the early years of their life. There are other risks that sometimes come with poverty too such as smoking in pregnant, the low breastfeeding and obesity rates all negatively affect the child's health, and these are all more likely to happen within more poor households (House of Commons, Health and Social Care Committee, 2019).

By evolving respectful relationships and practices helps with living and working together within a setting and this can be difficult at times. However, whether it is difficult or not, making an effort to invest in building relationships between parents, children and practitioners will pay dividends as this community is one of the most important things for a child throughout their early education and care (Page, Claire and Nutbrown, 2013).

Pikler Approach

Emmi Pikler was a physician from Hungary. She studied, observed and practiced the art of being surrounded by young children and infants. Pikler was an intelligent phenomenological observer and a thorough researcher who passed her observations into a continually developing practice. Between the years 1930 to 1940 Pikler spent her time in Budapest as a family paediatrician. Her dedication to young children steered her into supporting parents personally. For the first 10 days after a baby was born, she arranged home visits every day, this followed by weekly visits throughout the first few months after birth. For the first 100 children Pikler got guidance in child rearing and gained confidence that her understanding was correct (Weber, 2010, p.19).

The importance of needing healthy attachments for a child's overall well-being and their emotional and physical development was recognised by Emmi Pikler. She believed opportunities for building trusting relationships came strongly from caregiving moments like bathing, feeding and changing. These parts of caregiving play a big part in the daily routine of an infant and during these moments they will learn a lot about themselves, how their carer perceives them and their relationship. Hence why it is vital that the infant feels safe and secure during these moments and ensuring they are being acknowledged as an individual and appreciated as a partner in their relationship. The emotional and physical well-being of the infant will be influenced by how they experience these caregiving moments (Pikler UK Association, n.d).

The child enters the world by bonding with their parents and caregivers. In the Pikler institute in Budapest a new-born baby will spend long periods of time intimately with the people who care for them and their needs. By spending quality time with the babies doing intimate activities such as dress, bathing, and feeding, the baby is giving gentle invitations to reach into earthly life a little bit further. Children crave undivided, full attention. A child can feel isolated with divided attention and can become confused. They begin to get comfortable with the adults in their life and look forward to spending time with them (Weber, 2010, p. 19).

Within the first 1000 days safety and security, nutrition and good health are all equally important for early development. It is also particularly important for nurturing interactions with their responsive caregiver for multiple characteristics of the baby's development. There is something called "serve and return interactions" which it is believed all babies need these with their caregiver. These interactions mean, if a baby is communicating with the adult for something then the adult should respond appropriately. This type of response can be naming or looking at something that the baby might be pointing to, responding to them when they are trying to speak to comforting them when they are crying. These are all sensitive responses to their interactions to help build and develop a healthy brain (Parent-Infant Foundation, 2022).

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