Why should I teach my students about promoting healthy brain development in children birth to age three?

There is increasing evidence that the stimulation and experiences young children receive in the first six years of life are the most important in fostering healthy brain development. Young children benefit when parents and caregivers are provided with information about healthy brain development. Many parents feel unprepared, unsupported and unsure about their abilities, when their new baby arrives home. Introducing information about child growth and development, particularly early brain development, to young adults before they become parents will benefit their future children.

What information could help me teach about promoting healthy early child growth and development?

Healthy brain development starts at the time of conception, even before a woman may know that she is pregnant. The general health and nutrition of a pregnant woman are very important for the healthy brain development of her foetus. When a baby is born, s/he has over one billion brain cells (called neurons) already in place. At birth, the brain is able to perform basic functions such as breathing and crying, but it is not fully developed. In order for the brain cells to perform more complex functions, they must form connections, or synapses, with other brain cells. These synapses are the building blocks of the brain. For connections to form, young children need to experience the world through their senses by seeing, hearing, smelling, tasting and touching.

Since the brain develops best through positive experiences, young children need to be provided with positive and constructive stimulation. Brain development is necessary for learning (intellectual development), getting along with others (social development), feeling good about themselves and others (emotional development) as well as health outcomes (physical development). Growth and development, in the first six years of a child’s life, occurs through the everyday experiences that parents and caregivers provide.
In essence, young children need to feel loved, eat healthy food, play in an age-appropriate way and be protected from harm. In 2003, Peel Public Health conducted a survey about the needs of parents and caregivers. We found that they could benefit from practical information on early brain development as well as every day tips on how to foster it. As a result, The Great Beginnings: Build your child’s brain. Build your child’s future resource was developed. It provides everyday tips on ways to love, feed, play with and protect young children. Great Beginnings is the basis for Lesson Five, and it has been included in this curriculum for your reference.

Love:

When children feel loved, they are able to form secure attachments with parents and caregivers. This allows them to trust the people and world around them. For example, when babies cry, and are responded to right away, they learn that they are important and that they can trust their parents and caregivers to provide them with comfort. This provides babies with the confidence to explore the world and learn about it. Therefore, establishing a caring and nurturing environment for young children assists greatly with their early growth and development.

Feed:

Young children need to have healthy nutrition for overall physical growth and development. Breastfeeding provides babies with all the nutrients needed for healthy brain development in the first six months. The longer a child is breastfed, the more profound the effect of his/her brain development. Breastfeeding also provides comfort and a chance for mother and baby to bond. As a child grows, eating provides the experiences children need to learn physical skills (such as holding a spoon) and social skills (such as sharing in conversation during meals) that will be necessary as s/he gets older. In fact, eating even prepares children for going to school: The same skills that are learned when picking up bite-sized foods help children hold a pencil and learn to print.

Play:

More than any other single activity, play provides the experiences necessary for connections to form in the brain. Parents and caregivers need to be aware that play results in social and intellectual learning for young children. Benefits of play for children include problem-solving, motor skill development, learning about taking turns and getting along with others. It is also important that parents be aware that playing with their children helps to build the strong attachments necessary for healthy growth and development.
Protect:

Young children need to be nurtured in an environment that is safe for exploring and learning about the world. This includes feeling safe to talk about their concerns at home with parents, protection from physical injury (such as using car seats to protect young children from harm) as well as freedom from violence. There is clear evidence that exposure to violence and stress in the home can negatively affect brain development\(^4,\)\(^5\). Children exposed to family violence are more likely to be bullies or be bullied\(^6\). They are also at greater risk of growing up to be abusive to others, to be abused, or both\(^7\).

In summary, many adults become parents without any prior preparation and therefore, they often rely on past experiences to decide how they will parent their children. While past experiences should be considered, parents and children benefit when parenting practices are based on proven research that encourages healthy brain development. In particular, since the first six years of a child's life will shape the rest of it, it is critical that students learn how to support growth and development of children before they decide to become parents.

What are the most important messages students should take away from this lesson?

- The first six years of life are the most important in fostering healthy brain development.

- The brain is incomplete at birth. Brain development continues after birth, through everyday experiences, especially during the first six years of life.

- Since the brain develops best through positive experiences, young children need to be provided with positive and constructive stimulation.

- Healthy brain development is necessary for all areas of development, including physical, emotional, social and intellectual.

- Parents and caregivers can foster healthy brain development by showing love, providing healthy food, playing in an age-appropriate manner and providing a safe environment for young children.
• Learning about early childhood development allows parents and caregivers to have realistic expectations of children and interact with them in a way that promotes healthy growth and brain development.

References:


3 Ibid.


