Let us learn about development through childhood

The foundation of growth takes place during the pre natal and infant stages of life. Studies have shown that 80% of brain cells are formed by the age of 3 years. At this stage a rapid physical growth is also seen. Physical growth means an increase in height and weight. By measuring growth parameters (height and weight) we can determine whether the child is growing adequately. Muscle strength and mobility are developed with physical growth. Mental and social skills are developed through interactions with the environment. This is known as a child's psycho-social development.

Understanding the psycho-social development of a child helps identify the needs, importance of fulfilling the needs and ways of fulfilling them. This knowledge will help you in the future.

In the previous classes we learnt how to lead a healthy life through balancing different needs in different situations. In this lesson let us learn the stages in childhood and how their needs could be provided.

Stages in childhood

1. Prenatal stage	-	the period inside the mother's womb
2. Neonatal stage	-	the first 4 weeks after birth
3. Infant stage	-	from the first to the twelfth month
4. Early childhood	-	from 1 year to 5 years
5. Late childhood	-	from 6 years to 10 years

Points to know before becoming a mother.

- 1. Although the Sri Lankan law permits a girl to get married once she completes 18 years, it is important to ascertain whether she has adequate physical and mental maturity. She should be mentally and socially stable. The family should be financially stable to bring up a child.
- 2. It is important to prevent marriages between blood relatives, (e.g: first cousins or close relatives) as this could lead to some genetic disorders in the off spring, (e.g: Thalassaemia). This is an important factor to be considered when considering marriage and pregnancy. Bad effects can be prevented by a well planned marriage.
- 3. Folic acid is very important for a woman who is planning on becoming pregnant after marriage. Sufficient folic acid levels in her body before and during pregnancy helps to prevent the baby developing brain and spinal cord abnormalities. Therefore a woman who is planning a pregnancy should begin taking folic acid supplements weeks before she gets pregnant. (Folic acid is present in green leaves found plenty in Sri Lanka)
- 4. It is important for every girl who has completed 15 years, to get the rubella vaccination to prevent getting German measles. (If a female has not received this rubella or MMR vaccine before, it is advised to get the vaccination at least three months before getting pregnant.)
- 5. A woman hoping to get pregnant after marriage, should plan it properly. Medical advice can be sought from health services, attending family health clinics and maternity clinics with proper planning. A girl can have an uncomplicated pregnancy and safe motherhood with proper planning.

Prenatal stage (In mother's womb)

Prenatal stage is the period from the moment the sperm unites with the ovum until the birth.

The period during pregnancy and the moment of child birth are the happiest moments in the life of parents. Every pregnancy should be well-planned and prepared. A pregnant mother should be in very good physical and mental state. This is essential for the healthy growth of the new born baby. During the pre natal stage the mother should be aware of the progress of her pregnancy.



Figure 2.1

Following are a few steps that can be taken during this period.

- 1. Once becoming aware of the pregnancy, proper medical advice must be obtained. In this regard valuable assistance can be obtained from the public health midwife.
- 2. Special attention should be paid to the food the mother eats, as it will affect the growth of the baby. The expected healthy birth weight of a baby is between 2.5 kg to 3.5 kg. This weight gain is through the necessary nutrients that are obtained from the mother. So during this period if the mother does not take a balanced diet, nutritional deficiencies will affect the growth of the embryo. The child will have a low birth weight, be born prematurely, have suboptimal mental functions or be prone to infections.
- 3. A pregnant mother should have a good mental state as it will affect the development of the baby's brain. The mother should be free of physical and mental stress. Other members of the family should share the house hold work and make her comfortable. She should be happy and relaxed.

Activity

The foundation for the future of the pre natal baby depends on the balanced diet taken by the mother, as well as the mother being in a good mental and social state as well as being free of diseases. Considering these points, design a leaflet with instructions, which can be distributed at the maternity clinic in your area.

Neonatal stage (from birth to one month)

Neonatal stage is the period from birth to 28 days. In this period the child is exposed to the new environment.

During this period the mother too faces rapid physical and mental changes. The baby is exposed to the new environment through the mother. The nutrients needed for the baby's physical growth are supplied through breast milk. Activities induldge in by the mother affect the baby's phycho-social development. Therefore a good mental and physical state in the mother is important for good psycho-social development of the baby.



Figure 2.2

Physical and psycho-social needs in neonatal stage.

Table 2	2.1

Physical needs	Psycho-social needs
 Nutritional needs Breast feeding the baby whenever the need arises. This helps the growth and immunity of the baby. Growth Adequate amount of sleep and rest is important for the growth of the baby. Protection Protect from cold and heat. Protect from physical injuries such as falls, cuts etc. To protect from infections avoid crowded places, maintain good hygiene and keep the baby in a well ventilated room 	 Love While breast feeding hugging and cuddling the baby. Stimulation for mental development Petting, talking and singing lullabies to the baby (though the baby does not understand) Keeping the baby in a well-lit room Respond to the gestures made by the baby Keep objects that will make sounds to stimulate the baby

For extra knowledge

Breast milk is the most important form of nutrition that can be given to a baby during the first six months of life. Its importance is given below.

- 1. All the necessary nutrients and required amount of water for the first six months can be obtained from mother's milk
- 2. The milk secreted in the first few days after birth is of a thick yellowish consistancy known as colostrum. It is secreted in very small amounts and contains substances that will help to protect the baby from infections and helps the proper functioning of the digestive system.
- 3. Mother's milk is the safest and cleanest food that can be given to a baby.
- 4. It is always at the correct temperature.
- 5. It is available at any time the baby requires.

- 6. Breast feeding strengthens the bond between the mother and the baby.
- 7. It helps to protect baby from diseases.
- 8. It helps to prevent obesity in the future.
- 9. It helps to increase the baby's mental development.
- 10. It helps develop resistance against allergies.

Infant stage (from 1 month to 12 months)

The period from one month to twelve months is considered as the infant stage. During this stage a baby shows rapid physical and mental development while adapting to the social environment.

During this stage it is vital for the mother to take a well-balanced diet as it affects the baby directly. The diet should be rich in vitamin D and calcium. The mother's



Figure 2.3

mental state affects the baby, it is important for the mother to be happy.

Mother should spend more time with the baby. Therefore the other members of the family should share the work. This helps the mother's physical and mental relaxation.

Physical and psycho-social needs in infant stage

Table 2.2

Physical needs	Psychological needs
1. Nutrition	1. Love and affection
 During the first six months whenever the baby needs milk, breastfeed the baby. On completion of six months complementary food should be introduced. 	• It is important to create an environment in and around the house filled with love and peace.
• If the baby's growth is less or if mother goes to work before first 6 months, complementary food can be started at 4 months.	• Parents including other members of the family should express love towards the baby.
• Avoid giving salt and sugar in the first year of life.	
• By the end of the first year the baby should be accustomed to family food.	
2. Growth	2. Stimulation for the
• To monitor growth it is important to measure the weight every month and height at least three monthly and mark on the given growth chart.	mental developmentProviding the child with colourful toys.
• If there is a change in pattern of growth (increase or decrease) get advise from a doctor.	• Showing colourful pic tures to the child.
3. Protection	• Talking, storytelling and singing frequently to the
• Follow the immunization programme accordingly.	baby.Creating an environment
• Pay regular attention to the baby to protect from injuries.	filled with different sounds which soothes the ear.
• To protect from infections avoid crowded places and maintain good hygiene.	

Early childhood (from 1 year to 5 years)

The period from 1 year to 5 years of a child's life is called the early childhood. During this period the child begins to walk and gains experience by exploring the environment.



Figure 2.4

Physical and psycho-social needs in early childhood. Table 2.3				
Physical needs.	Psycho-social needs			
1. Nutrition	1. Show love and kindness.			
• Five meals a day - apart from the three main meals two snacks.	2. Stimulation for the mental development.			
• Since the child is developing fast, more nutritious food should be given.	• Provide opportunities to explore the environment.			
2.Growth	• Allow the child to exhibit his/her			
• Check the weight and height every three months and record it in the growth chart.	 abilities. Help the child to understand his/ her limitations and help to control emo- tions. Teach good habits. Let the child express his/her views and ideas. Provide opportunities to develop motor abilities. Promote and develop-interpersonal relationshing. 			
3. Protection				
• Follow the immunization pro- gramme in order to protect the child.				
• Keep the child away from unhy- gienic environment to protect from infections.				
• Since the child is more active pay regular attention to protect from injuries.				
• Pay constant attention to the child.	relationships.			
• Follow basic personal health habits.				

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Activity

Make a chart showing the different vaccines a child should be given from birth to 15 years.

Late childhood (from 6 years to 10 years)

The period from 6 years to 10 years of a child's life is called late childhood. During this period the child starts formal education.

In this period the child is very inquisitive, hence should provide opportunities to explore the environment. As a result the child builds selfconfidence.



Physical and psycho-social needs in late childhood

Table 2.4

Physical needs	Psycho-Social needs
 Nutrition Provide a well-balanced diet. 	1. Show love and kindness. At every opportunity talk with them
 Growth Once in 4 months check the height and the weight and check whether BMI and height are within the accepted range and if necessary take action. Protection Provide the child with necessary knowledge and guidance to identify and prevent injuries and train them in different skills. Make the child aware about people and situations that can cause harm to them and how to avoid these. Educate them to be cooperative and work with others. Be aware of different intimidations that they could face from the people they work with. 	 Stimulation for mental development. Guiding with personal hygiene and good health habits. Provide opportunities and skills to build good inter relationships with parents, relations and friends. Provide the opportunity and skills to gain experience through activities. Build self-esteem through praise. Motivate to engage in different types of hobbies and creative work. Encourage to develop psycho-social skills through group events.



Assume you are a pre school teacher, and develop three activities (on cards) you would do to stimulate the mental development of your children

Summary

The period from birth to 10 years of life is called childhood. This is sub divided to neonatal stage, infant stage, early childhood and late childhood. Pre natal stage is very important for the growth and development of the child. Every pregnancy should be well-planned and a pregnant woman should always be in a very good mental and physical state. It takes about 280 days for the baby to be born after conception.

The first 28 days is known as the neonatal stage, while 1- 12 months is known as the infant stage. The period from 1st to 5th year is early childhood and 6 to 10 years is known as late childhood. Providing the necessary physical and psycho-social needs during the different periods of childhood is important. The child will then be properly moulded, achieve optimum physical growth and mental development. A generation of healthy, intelligent, self-confident, skilful and creative children with good self-esteem will be a gift to the future world.

Exercises;

- 1. What are the main stages in childhood?
- 2. Write two stimuli that are important during infant stage for the mental development.
- 3. Write two physical needs, which are important in early childhood and late childhood.
- 4. Name five activities that you can do within the school to develop the personality of a child during the late childhood stage.