

Hello students, welcome to the program Bachelor of Arts third year.

Subject Psychology semester 6 the course title is Developmental psychology.

I am Mukta Karamadi Associate professor at Dhempe College of Arts and Science.

I'll be presenting on the topic the Newborn from the first unit Introduction to human development.

The outline of this presentation is.

Assessing the newborn, Consequences of preterm and low birth weight, Nurturing low birth weight and preterm infants.

At the end of this module you will be able to describe the measures of neonatal health and responsiveness.

Also will be able to explain the outcomes for children if they are born preterm or with a low birth weight.

So let's begin.

Almost immediately after birth, a newborn is taken to be weighed, cleaned up, and tested for signs of developmental problems that might require urgent medical attention.

There are various measures which have been developed to assess the newborns' health.

The most popular one is Apgar scale. And this scale is used to assess the health of the new born within first five minutes after birth.

This scale evaluates an infant's heart rate, respiratory effort, muscle tone, body color, and reflex irritability.

A physician or a nurse does the evaluation and gives the newborn a score of zero or one or two on each of these five health signs.

For example, if the heart rate is absent, then a score of zero is given, and if it is irregular and slow,

then a score of one is given. And if the heartbeat is fast and regular, then a score of two is assigned to the newborn.

A total score of 7 or 10 indicates that the newborn's condition is good.

A score of five indicates developmental difficulties.

And a score of three or below signals an emergency and indicates that the baby may not survive.

Such infants are placed in intensive neonatal care unit under medical care and supervision.

The Apgar scale is especially good at assessing the newborn's ability to respond to the stress of delivery and the new environment.

It also identifies high risk infants who need revival.

Another measure is Brazelton Neonatal Behavioral Assessment Scale. Shortly known as NBAS.

This scale assesses the newborn's neurological development and reflexes, reactions to people and objects.

And this particular assessment is typically performed within 24 to 36 hours after birth.

It is also used as a sensitive index of neurological competence up to one month after birth for typical infants.

And this scale is used as a measure in many studies of infant development.

Another scale is Neonatal Intensive Care Unit Network Neurobehavioral Scale, commonly known as NNNS.

This particular scale or assessment tool is an offspring of NBAS.

And it provides assessment of the newborn's behavior, neurological and stress responses and regulatory capacities.

The NBAS was developed to assess normal full term infants, whereas NNNS was developed to assess the at risk infants.

It is especially useful for evaluating preterm infants and substance exposed infants.

That is, the babies born to the drug addicted mothers.

Please note that all these measures of neonatal assessment have helped in increasing the survival rate of newborn infants.

There are some conditions which may pose threat to the infant and its survival.

These conditions are preterm birth and low birth weight.

Preterm infants are those born before the completion of 37 weeks of gestation.

Low birth weight infants weigh less than five and half pounds at birth and very low birth weight newborns weigh under three and half pounds and extremely low birth weight newborns weigh under two pounds.

Small for date infants are those whose birth weight is below normal when the length of the pregnancy is considered.

These babies may be full term babies or may be preterm babies.

Now let us look at the consequences of preterm birth and low birth weight.

Although most preterm and low birth weight infants are healthy, as a group they have more health and developmental problems than the normal birth weight infants.

Low birth weight infants often have difficulty coordinating their breathing and heart rate, hence their life itself is uncertain.

So, infant mortality rate is very high for these infants.

Every developmental milestone like, smiling, holding a bottle, walking, talking and so on and so forth is later for these babies when compared to the normal birth weight infants.

And low birth weight can lead to many negative outcomes which include Neurological problems

and Cognitive difficulties, Learning disability, Attention deficit hyperactivity disorder, Behavioral problems and breathing problems such as Asthma.

And these infants require additional care and support and medical attention.

There are two methods which are increasingly used in the intensive neonatal care unit.

They are kangaroo care and massage therapy.

Kangaroo care involves skin to skin contact between the mother and the baby.

And the baby wearing only a diaper is held upright against the parent's bare chest.

And this kangaroo care is practiced for two to three hours per day.

And studies have revealed that kangaroo care can help to stabilize infants heartbeat, body temperature breathing as well as it helps to gain weight and decrease the pain responses in the infants.

Another method is massage therapy, which involves 15 minute moderate pressure massages given to the infant two to three times a day.

This massage therapy reduces stress behaviors in infants, such as crying, grimacing, abnormal crying, sleep disturbances, etc.

It also facilitates weight gain, improves orientation and reduces excitability and agitation.

We have come to the end of this presentation for further reading, you can refer to these books.

The Developing Person through the Lifespan by K.S. Berger

Lifespan Development by J. W. Santrock and

Child Development by L. E. Berk.

Thank you.