TRANS-DISCIPLINARY MODEL: ACTIVITIES FOR INFANT FROM BIRTH TO 3 MONTHS

"Guide to facilitate Early stimulation for children with Developmental delay"

Developed & Published by NIEPMD

NATIONAL INSTITUTE FOR EMPOWERMENT OF PERSONS WITH MULTIPLE DISABILITIES (DIVYANGJAN)

(Dept. of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice & Empowerment ,Govt. of India)

TRANS-DISCIPLINARY MODEL: ACTIVITIES FOR INFANTS FROM BIRTH TO 3 MONTHS

(Guide to facilitate Early stimulation for children with Developmental delay)

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Joint Secretary

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MESSAGE

I am extremely happy to note that the National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD) is publishing a book titled *"Trans-Disciplinary Model: Activities for Infants from Birth to Three months."*

The Cross Disability Early Intervention centre (CDEIC) under NIEPMD works toward promoting the development of children with various cross disabilities. The CDEIC aims to create awareness and provide early intervention for children with Cross Disabilities through a Trans-disciplinarymodel.

In this regard, early developmental support plays a vital role in enhancing overall growth and preventing secondary complications. To promote this type of awareness and intervention, parents need to understandthe significance of reflexes and their role in a child's early development.

This book outlines key reflexes observed from birth to three months of age, including their stimuli, responses, and integration activities. It supports parents in learning activities related to these reflexes using low-cost, easily available materials, enabling them to carry out intervention.

The book will serve as a valuable resource for parents, students, rehabilitation professionals, and caregivers.

I congratulate the author for compiling the activities in a practical way.

(RAJEEV SHARMA)

Dated: 23rd June, 2025
Place New Delhi

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Chapter :1

INTRODUCTION

Early intervention is a word that, in general, describes a wide range of experiences and supports given to children, parents, and families during the developmentally crucial stages of pregnancy, infancy, and early childhood (Dunst, 1996). Early intervention is the intentional timing and arrangement of planned programming to change a child's expected or projected trajectory of development (Siegal, 1972).

Early intervention services are specialized programs for young children who may experience developmental delays. In order to recognize and address children's needs in the five developmental domains of physical, cognitive, communicative, social or emotional development, sensory, and adaptive development, these services must be holistic in character. A developmentally delayed child can make progress in all areas of development, including motor, verbal, social, cognitive, and self-help skills, by receiving intervention at a young age, according to research.

Critical Period and Early Intervention

The sensitive times in a kid's development known as "critical periods" are when the child is most receptive to and susceptible to learning experiences. Because of this, it is thought that early intervention must make the most of this time to benefit the child. This booklet describes in detail the early stages of development, or from birth to three months of age, and facilitates them through a variety of provided activities. These exercises or treatment plans are organized according to the stages of normal growth. Identification of each child's unique characteristics is necessary during the trans-disciplinary model's implementation, but it's also critical to identify and utilize every possibility that exists within each child.

Due to unfavourable genetic, prenatal, perinatal, neonatal, or environmental variables that could later result in the development of an illness or developmental aberration, the kid is deemed to be "at risk". When it is started as soon as feasible, early intervention can be corrective, especially during the key time of development when it aids a kid in reaching his or her greatest potential.

It would aid children who are likely to experience developmental delays in the future in overcoming obstacles. In light of this, this activity book concentrates on the trans-disciplinary model in a child's development of abilities at a very early level, which is believed to be crucial in development, at roughly 0 to 3 months of age.

Chapter :2

TRANSDISCIPLINARY MODEL IN EARLY INTERVENTION

In order to satisfy the varied needs of children with disabilities and their families, Trans-disciplinary models of practice seek to deliver more family-centred, coordinated, and integrated services (Carpenter, 2005). Many early intervention programs use some variation of the Trans-disciplinary Approach (TA), which has been acknowledged as a recommended practice for early intervention (Bruder, 2000; Guralnick, 2001). It involves a group of specialists who collaborate and share the duties of assessing, organizing, and putting into practice services for kids and their families. Families are valuable team members who participate in all facets of intervention, particularly in the critical 0–3-month period of development.

A team strategy that repeatedly crosses disciplinary boundaries is known as a Trans-disciplinary paradigm. The professionals involved empower one another through "role release" to take on the position of case manager and handle client management on their own. Role release enables specific team members to implement an intervention strategy for the child and family that is sanctioned and supported by team members from other disciplines. In this situation, the therapist understands that the kid needs attention for several developmental domains, including communication, cognition, motor, sensory integration, education, and medical difficulties. It would be difficult for the carer if the therapy was not delivered in an integrated way, and it might not have the intended effect. Any therapy technique or intervention plan developed for a Multiple Disability is ineffective.

One therapist must serve as the child's case manager, assessing the child's requirements and implementing an intervention that incorporates all of the therapeutic objectives. As each member of the team is handling the client for the assessment and subsequent therapy, the team supervises and trains one another. The case manager asks the team members for advice and further recommendations as needed. It would be simpler and more efficient for the therapists to grasp the fundamental needs of the kid and to train one another to carry out therapy in a holistically developing fashion rather than placing the

responsibility of understanding, synthesizing, and implementing the many services on the parent.

❖ **Objectives of Trans-Disciplinary in Early Intervention**

- • To promote the child's typical growth
- • To enhance the growth of both gross and fine motor abilities, which need full-body movement.
- To develop sensory skills, which cover a very broad range of reactionary actions that follow conscious learning from the five senses.
- To improve the Intellectual and Cognitive ability development
- To enhance social, emotional, and communication skills
- To offer the family assistance and support.
- To maximize the child's involvement and help to society.

❖ **Who Benefits of the Trans-disciplinary Model in Early Intervention**

(a) Efficiency of service

(b) Service cost-effectiveness

(c) Less participation within the family

(d) Parents will be less perplexed about the child's early developmental deficits.

(e) More comprehensible intervention plans and holistic service delivery

(f) Facilitating professional growth that improves therapists' knowledge and abilities

(g) Maximize the child's involvement and benefit to society at later ages

Child development is made up of interconnected dimensions. This means that a child's growth cannot be divided into health, nutrition, education, social, emotional, and changeable components. In a child's life, everything is interconnected and developing at the same time. Progress in one area has an impact on progress in others. Similarly, if something goes wrong in any of those areas, it has an effect on all of them. The Trans-disciplinary approach emphasizes the importance of children's physical, emotional, and psychological well-being, especially in their early years of life, with a well-trained expert in these areas. As a result, it should be prioritized beginning with birth, as this guidebook concentrates on. It helps children develop their entire talents and strengths throughout their lives.

However Early Intervention Services are special services for infants and toddlers at risk for developmental delays. These services are designed to identify and meet children's needs in five major developmental areas holistically. These areas include physical, cognitive, communication, social or emotional, sensory and adaptive development. Impact in these major developmental areas in children illustrates the complexity of the disabling process, and the need for all team members to share and work towards a common but holistic goal in a trans-disciplinary way is important. The benefits of intervention are maximized by a trans-disciplinary approach, which aims at enabling children with disabilities to function in society to the fullest physical, mental, social, and vocational usefulness of which they are capable.

Early Intervention activities for children with disabilities (0-3months) in the 0 to 3 months cover holistic developmental aspects in a trans-disciplinary way such as motor, sensory, language, cognitive, self-help, and social skills. And the activities described under each age group for these skills are designed to be imparted in a Play way method to stimulate the overall developmental functioning of the children.

Chapter :3

DEVELOPMENTAL MILESTONE (BIRTH TO 3 MONTHS)

❖ **Development: Birth to 1 Month:**

- Newborn child sleeps up to 15 or 16 hours a day.
- A newborn child is born with many survival reflexes. As they mature, these newborn reflexes are replaced with more purposeful ones.
- A suck-swallow reflex that helps to feed.
- A palmar grasp which allows the child to squeeze the finger that is placed in the infant's palm.
- The newborn child has weak neck strength and can't support their head while upright.
- Newborns can see up to 8 to 12 inches away and like to look at human faces and also to look at high-contrast objects.
- Newborn child is able to recognize familiar voices and communicates through crying.

❖ **Development: 1st month to 2nd month:**

- 2-month-old infant sleeps for 15-16 hours a day.
- 2-month-old infant can hold their head a little steadier.
- Many of the reflexes are still around, such as the sucking reflex. Sucking is also one of the best ways infants comfort themselves.
- Try to bat objects when placed in front of them.
- Infant vision is still developing and they can see objects up to 18 inches away.
- Infant begin to follow things with their eyes.
- Newborn babies like listening to mothers talk or sing .
- Newborn crying might include more grunts, gurgling or coos.
- Newborn baby can turn their head towards sounds.
- Newborns may be lucky to get a smile.

❖ **Development: 2-3 Months**

- Newborn neck strength should be improving. By now when holding them upright, should see very little or no head wobbling.

- Newborn upper body strength has improved. They should be able to lift their head and chest with their arms while lying on their stomach.
- 3-month-old infant can stretch their legs out and kick when lying on their stomach or back.
- Newborns can push down with their legs when feet are placed on a firm surface.
- Newborn hands can open and shut, come together and they can swipe at a dangling object.
- Newborns can briefly grab a toy or a rattle that may quickly land in their mouth.
- Infant's hearing and vision continue to improve, they turn their heads and also smile at the sound of their mother's voice.
- Newborn may start using hands and eyes in coordination.
- Infants may roll from their stomach to their backs.
- Newborn communication is changing can hear more cooing or making vowel sounds such as 'oh' or 'ah'.

Chapter :4

REFLEXES

INTRODUCTION

A reflex is an involuntary moment and nearly instantaneous movement in response to stimuli. The presence and strength of a reflex are important signs of nervous system development and function. Infant reflexes disappear as the child grows older although some remain through adulthood.

Primitive reflexes are reflex action organized in the central nervous system that is exhibited by normal infants. These reflexes are suppressed by the development of the frontal lobes as a child transition normally into the child's development.

❖ REFLEXES FROM BIRTH TO 3 MONTHS:

1. INNATE PRIMARY REACTIONS

Innate Primary Reactions are Primitive reflexes found in a newborn that involves total patterns of Flexion and Extension.

- Rooting reflex
- Sucking reflex
- Grasp reflex
- Reflex Steeping
- Placing reaction

1.Rooting Reflex (Figure: 4.1.1 Rooting Reflex)

Age Range:

- Onset of rooting reflex is by 28 weeks of gestation.
- Integration by 3 months.

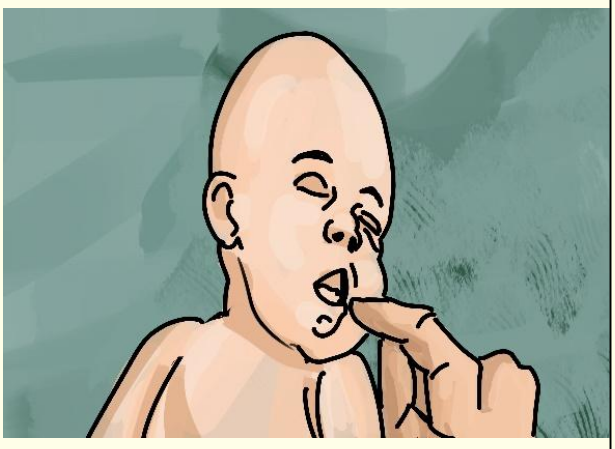


Figure 4.1.1 Rooting Reflex

Test Position:

- Any position.

Stimulus:

- Touch or stroke outward on corner lips or on the cheek.

Response:

- Sucking, swallowing motions.
- Lower lip, tongue, and head more toward stimulus.

Functional significance:

Persistence can interfere with sucking and the absence of this reflex is seen in neurologically impaired infants.

Interferes with:

- Oral-motor development.
- Development of mid-line control of the head.
- Optical righting, visual tracking and social interaction.

2.Sucking Reflex (Figure 4.1.2. Sucking Reflex)

Figure 4.1.2. Sucking Reflex

Age range:

- Onset of sucking reflex –begins at 28 weeks of gestation.
- Integration by 2 to 4 months.

Position:

- Any position.

Stimulus:

- Stimulation to lips, gums or front of the mouth.

Response:

- Sucking, swallowing motions.
- Lower lip, tongue, and head more toward stimulus.

Functional significant:

- Persistence of this reflex may inhibit voluntary sucking.

Two stages of the sucking reflex:

Expression: activated when the nipple is placed between the lips and touches the palate, instinctively press between the tongue and palate to draw the milk.

Milking:

Tongue moves from the areola to the nipple, coaxing milk from the mother to be swallowed by the child.

Age of Disappearance:

Replaced by voluntary sucking after 4th month.

Reflex Integration Activities for Rooting and Sucking Reflex:

Step 1: Child in a comfortable position you can apply 3 strokes applied from ear to mouth and another 3 strokes from nose to mouth consecutively (Figure 4.1.2.1integration Step 1).

Figure 4.1.2.1integration (Step 1)

Step2:

The stimuli can be repeated at regular intervals. A child with retained rooting reflex has twitching movement when strokes are applied. (Figure 4.1.2.2 integration Step 2)

Figure 4.1.2.2 integration (Step 2)

Instruction:

Child has to keep the mouth static during exercise.

3.Grasp Reflex (Figure 4.1.3 Grasp Reflex)

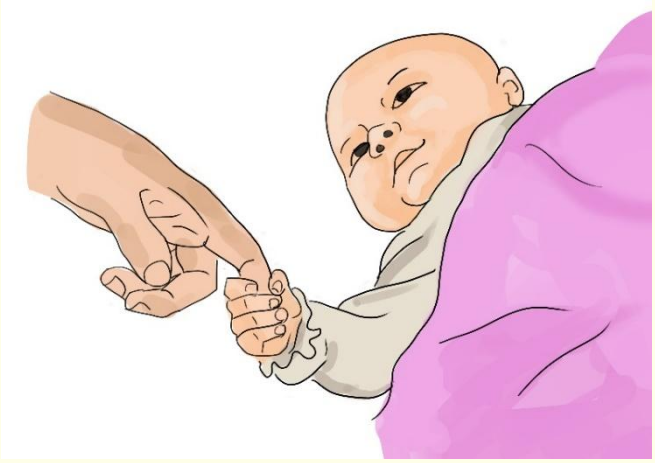


Figure 4.1.3 Grasp Reflex

Age range:

- Onset of palmar grasp from 10 weeks' gestation to 2to 4months.
- Integration by 4-6 months.

Position:

- Any- Comfortable position.

Stimulus:

- Pressure in the palm of the hand or ulnar side.

Response:

- Flexing of fingers, grasping of the stimulus object.

Functional significance:

Following the development of grasp, the infant begins to reach for objects and utilizes a crude palmar grasp to hold them.

Interferes with:

- Ability to grasp and release objects voluntarily.
- Weight bearing on open hand for propping, crawling, and protective response.

☆ Integration activities for grasp reflex

1.Squeeze ball activity (Figure 4.1.3.1 Squeeze ball activity)

The child squeezes a small ball, such as a Stress ball, several times in a row or to stroke the palm of the hand with a light brush until the reflex is Suppressed.

- Place a light-emitting ball child can easily identify that object. Reach for the object and grasp that ball.

Figure 4.1.3.1 Squeeze ball activity

- Make a sound and encourage the child to try to reach and grasp the ball and firstly give assistance and then gradually decrease the assistance.

2.Thumbs in and thumbs out (Figure 4.1.3.2Thumbs in and out activity)

Put the thumb inside the Palm and squeeze hard hold.

Starting Position:

- Seat the child comfortably in a stab
- le sitting position with feet flat on the ground.

Thumbs In:

- Gently take the child's hand and guide them to place their **thumb inside the palm**.
- Wrap the other fingers over the thumb to make a **fist**.

Gently **squeeze the fist** and hold it for a few seconds (about 5 seconds).

Thumbs Out:

- Slowly help the child to put the thumb out on the fingers and make a fist.

Repeat:

- Repeat the process several times (e.g., 5–10 repetitions), based on the child's comfort and ability.
- You can alternate hands or do both simultaneously if appropriate.

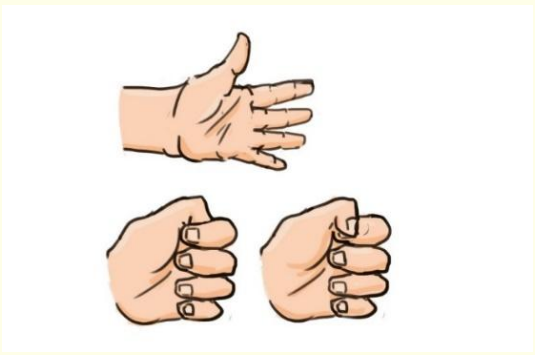


Figure 4.1.3.2 Thumbs in and out activity

3.Birds and ducks (Figure 4.1.3.3 Birds and ducks)

- Touch over the index finger to the thumb finger.
- Touch over the index finger and middle finger to the thumb finger.
  - Whenever showing this exercise show like a bird.
  - Make a noise like a bird and touch the fingers like playing action.

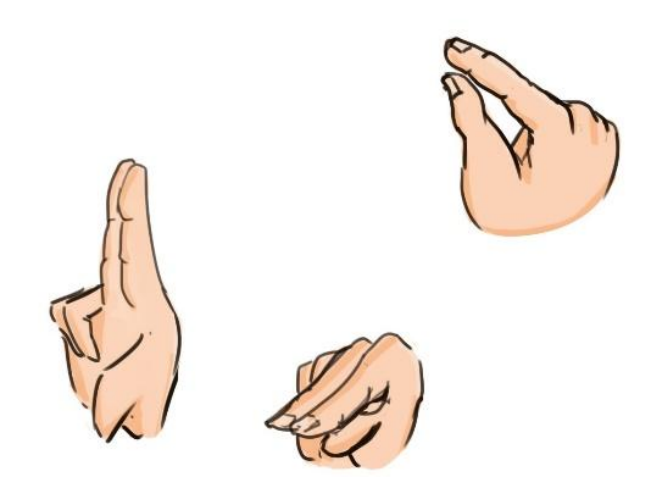


Figure 4.1.3.3 Birds and ducks

4. Reflex Stepping (Figure 4.1.4 Reflex Stepping)

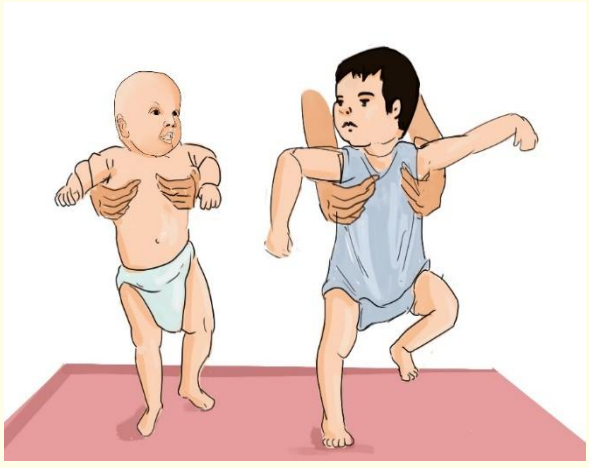


Figure 4.1.4 Reflex Stepping

Age range:

- Onset of stepping reflex from 35 weeks of gestation to 3 months.
- Integration by 2 to 4 months.

Position:

- Supported in upright position with some weight bearing on feet.

Stimulus:

- Lean client forward: Pressure of feet on supporting surface.

Response:

- Rhythmic and alternating steeping movement.

Functional significance:

- With daily practice of a reflex, an infant may walk alone at 10 months.

Interferes with:

- Standing and walking.
- Balance reaction and weight shifting in standing.
- Development of smooth, coordinated reciprocal movement of lower extremities.

5. Placing Reaction (Figure 4.1.5 Placing Reflex)

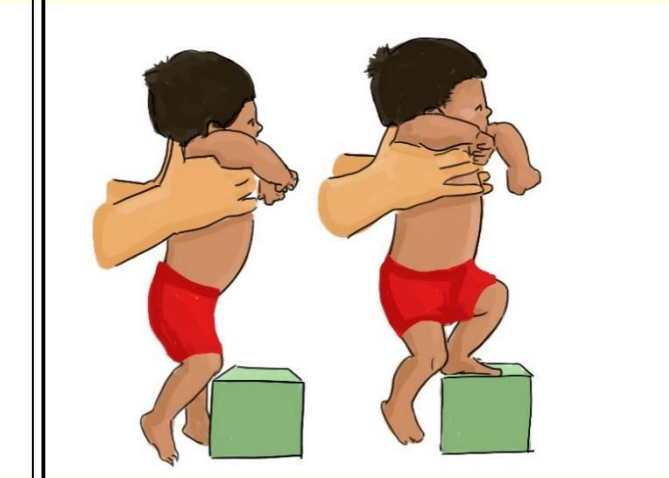


Figure 4.1.5 Placing Reflex

Age range:

- Onset of placing reflex is by birth to 2 months.
- Integrated by 6 months.

Position:

- Hold the child in an upright position in front of a table or other object.

Stimulus:

- Child is suspended with bare feet just above a surface and is moved forward.

Response:

- Child makes stepping motions as if trying to walk.

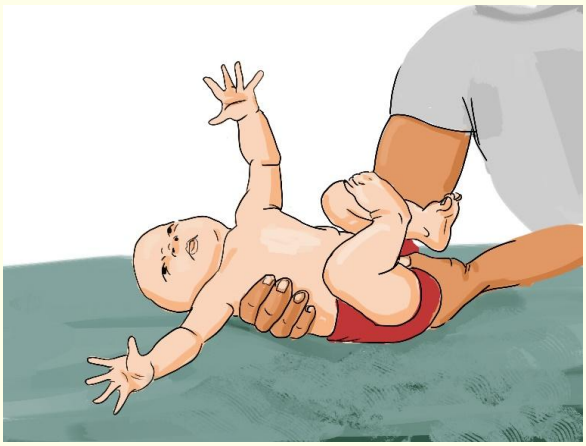
Functional significance:

- Reflex is readily demonstrable in the new born and persistence failure of elicit at the stage is thought to indicate neurological abnormalities.

2. AUTOMATIC MOVEMENT REFLEXES:

It is as a group of reflexes observed in infants and young children which are not strictly righting reflexes, but which are reactions produced by changes in the position of the head.

1.Moro Reflex (Figure 4.2.1 Moro Reflex)



Figur e 4.2.1 Moro Reflex

Age Range:

- Onset of Moro reflex begins at 28 weeks of gestation.
- Integration by 5-6 months.

Position:

- Semi-reclining or supine

Stimulus:

Dropping the head backward from a semi-Sitting position.

Response:

- Extension or flexion and abduction of arms and spreading of fingers.

Functional signification:

- Asymmetrical during this reaction may indicate a brain lesion or injury or peripheral.

Interferes with:

- Balance reaction in sitting.
- Protective response in sitting.
- Eye-hand co-ordination, visual tracking.

☆ **Integration activities for Moro reflex:** (Figure 4.2.1.1& Figure 4.2.1.2 integration activities)

1. The Popcorn:

- Have the child lay down, supine on the floor, with arms and legs extended.

- Encourage the child to bring chin to chest and curl up by supporting knees with their hands. Hold for 3 seconds. (hold body like a kernel)
- Then, with control over their movements, have the child bring their body back to its original position. (pop the kernel like popcorn)
- Repeat 5 times.

Figure 4.2.1.1 integration activities

Figure 4.2.1.2 integration activities

2. The Popcorn activity on the therapy ball:

- Have the child sit, balanced, on a therapy ball.
- Then, have the child lean back and stretch their arms out while simultaneously dropping their head as far as possible.
- Lastly, with control, have the child bring their arms and legs back together into a flexed position, as far as the child can manage.

3.SPINAL LEVEL REFLEXES:

Spinal level reflexes are Phasic or movement reflexes that coordinate muscles of the extremities in the patterns of either total flexion or extension.

1. Flexor Withdrawal (Figure 4.3.1 Flexor withdrawal)

Age Range: Birth to 2 months

Position:

- Supine or sitting with head in mid position, leg extended.

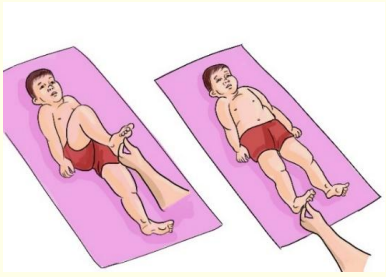


Figure 4.3.1 Flexor withdrawal

Stimulus:

- Stimulus to sole of the foot.

Response:

- Uncontrolled flexion of the stimulus.

2. Extensor Thrust (Figure 4.3.2 Extensor Thrust)

Figure 4.3.2 Extensor Thrust

Age Range:

- Birth to 2 months.

Position:

- Supine or sitting with head in mid position. One leg is in extension and the other leg is fully flexed.

Stimulus:

- Pressure on the ball of the foot of the flexed leg.

Response:

- Uncontrolled extension of the stimulated leg.

3.Crossed Extension (Figure 4.3.3 Crossed Extension)

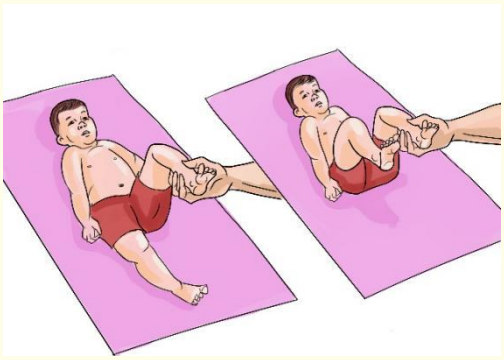


Figure 4.3.3 Crossed Extension

Age Range:

- Birth to 2 months.

Position:

- Supine with head in mid-position. one legis extended and the other leg is fully flexed.

Stimulus:

- Passively flexed the Extended leg.

Response:

- Extension of the opposite leg, with internal rotation and abduction.

4.BRAINSTEM REFLEXES:

Brain stem reflexes are "static" postural reflexes and effect changes in the distribution of muscle tone throughout the body, either in response to a change of the position of head and body in space (by stimulation of the labyrinths), or in the head related to the body (by stimulation of proprioceptors of the neck muscles).

1.Asymmetric Tonic Neck Reflex (ATNR)- (Figure 4.4.1 ATNR)

Figure 4.4.1 ATNR

Age Range

- Onset of asymmetric tonic reflex birth to 2 months.
- Integration by 4 months.

Position

- Supine or sitting with arms and legs extended.

Stimulus:

- Passively or actively turn head 90 degrees to one side.

Response:

- Increase of extensor tone of limbs on the face side and the flexor tone of limbs on the skull side. (Bow and Arrow position)

Functional significations:

- Persistence of this reflex may indicate CNS damage.

Interferes with:

- Feeding.
- Visual tracking.
- Midline hand use.
- Rolling.
- Bilateral hand use.
- Development of crawling.
- Can lead to skeletal deformity (scoliosis, hip subluxation/subluxation).

☆ Integration activities for ATNR (Figure 4.4.1.1 Integration of ATNR)

1. Lizard activity:

Step 1:

- Make the child lie on the floor on the stomach. Legs are straight, arms bent, fingers are together thumbs pointed inward.

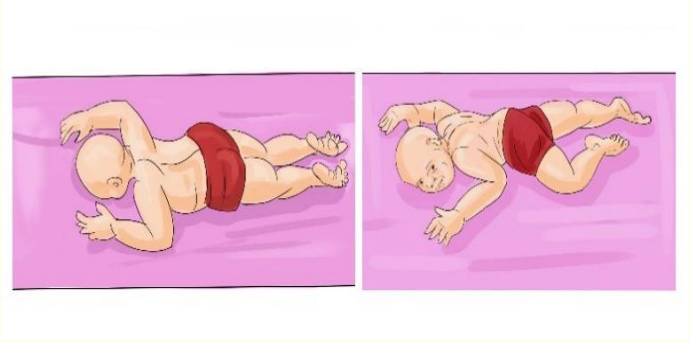


Figure 4.4.1.1 Integration of ATNR

Step2:

- Turn the baby's head to left. As the head is turning, slide the left elbow down towards the waist and bent the left knee up towards the waist. Hold for 3 seconds.
- Return to the starting position.
- Repeat the exercise on the right side.

2.Fish activity: (Figure 4.4.1.2 Fish activity)

Step 1:

- Make the child lie on the floor on the stomach. Legs are straight, arm bent, fingers are together thumbs pointed inwards.

Step 2:

- Lift the baby's head 4 -5 inches until it is level with the spine. Hold for 3-5 seconds.

Step 3:

- Lift the baby's chest off the ground until rests on the fore arm. Hold

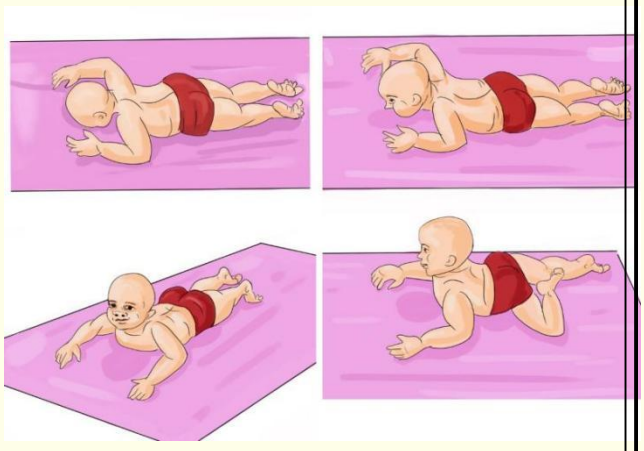


Figure 4.4.1.2 Fish activity

for 3-5 seconds. keep fingers together, thumbs pointed inwards.

Step4:

- Keeping one leg straight, lift the other hip slightly, and bent the knee. Hold for 3-5 seconds.
- Return to starting position.
- Do 1-4 to the other leg.

2.Symmetrical Tonic Neck Reflex (STNR):1

Age Range:

- Birth to 4- 6 months.

Position:

- Child in quadruped position or over examiner's knee.

Stimulus:

- Flexion of head.

Response:

- Arms are flexed or flexor tone dominates: Legs are extended or extensor tone dominates.

3.Symmetrical Tonic Neck Reflex (STNR):2

Age Range:

- Birth to 4- 6 months.

Position:

- Child in quadruped position or over examiner's knee.

Stimulus:

- Extension of head.

Response:

- Arms are Extended or extensor tone dominates: legs are flexed or flexor tone dominates.

Exercise to integrate:

Cat and Camel Exercise (Figure 4.4.3.1 & Figure 4.4.3.2)

Figure 4.4.3.1STLR

Figure 4.4.3.2STLR

4.Tonic Labyrinthine Reflex: Prone (TLR) (Figure 4.4.5.1TLR)

Figure 4.4.5.1 TLR

Age Range:

- Birth to 4 months.

Position

- Prone with head in mid-position.

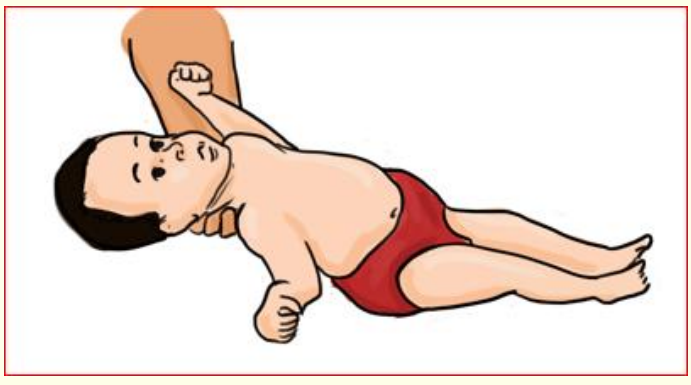
Stimulus:

- Test position is the stimulus.

Response:

- Flexion of the extremities or increase in flexor tone.

5.Tonic Labyrinthine Reflex: Supine (TLR) (Figure 4.4.5.1TLR)



Age Range:

- Birth to 4 months.

Position

- Prone with head in mid-position.

Stimulus:

- Test position is the stimulus.

Response:

- Flexion of the extremities or increase in Extensor tone.

Functional significance of TLR

- Helps with the development of neck and head control, increases muscle tone, and improves posture and balance.
- Develops proprioception and balance sense.
- Coordinate between the upper and lower part of the body.

Interference with:

- Interference with child development of more advanced motor skills.

☆ Integration exercise

1.Reach to the moon exercise. (Figure 4.4.5.2 & Figure 4.4.5.3)

- Make the baby lying on his tummy with the elbow's underneath, keep the leg straight, apart.
- Takes the right thumb 4 inches away from the nose at the eye level.
- Pivot of the side, then stretch the arm all the way out by looking at the thumb and bring back to the original point and pivot back to the midline.
- Repeat the same procedure with the left hand.
- Repeat the same in the right then left manner 3 min.
- While performing this exercise in children, incorporate attractive objects in the pivot motion, so that the visual stimuli enhance visual perception and thus improves attention and concentration.

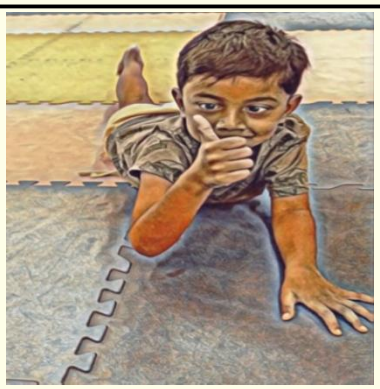


Figure 4.4.5.2

Figure 4.4.5.3

2.The Airplane Exercise.

- Make the baby lay down on his tummy, with the arms stretch out to the side, legs straight and up.
- Make the baby hold in same position 30 sec reputation three times.
- The knee should not be bent and toe should be above the floor.
- Hands are raised up and head to be hold up.

Figure 4.4.5.4

3.Head raise. (Figure 4.4.5.5 & Figure 4.4.5.6)

- Lying on the stomach -shoulders should touch the ground fore head n the ground -lift the head up and hold it for five second then go back to starting position.
- Repeat the same procedure in supine position (by lying on back).
- This time the back of the head touches the ground.
- Raise the chin up, hold it for 5 sec and relax.
- Make sure that the chin touches the chest.
- Repeat this exercise.

Figure 4.4.5.7

Figure 4.4.5.8

6.Positive Supportive Reaction (Figure 4.4.6 Positive Supportive Reaction)

Figure 4.4.6 Positive Supportive Reaction

Age Range:

- Birth to 6 months.

Position

- Standing.

Stimulus:

- Firmly contact the ball of the foot to the floor; or footboard of the bed and dorsiflexion of the foot.

Response:

- Rigid extension of lower extremities due to co-contraction of flexors and extensors of knee and hip joint.

Chapter :5

Activity 1: Birth to1 Month activities

Skill 1: Sucking and Swallowing

Material: Mother feeding is advisable, optional paladai", less optional to a feeding bottle.

Position: The Mother should hold the baby in a comfortable position on their lap for feeding.

Procedure: This activity is to improve feeding skills in a newborn. The first sucking skill of the newborn is reflexive. If any lag in this skill, the child needs to be stimulated in this skill.

☆ **Brest feeding**: (Figure 5.1.1 Brest feeding)

Touch the lip of the baby with the nipple and hold the mouth of the baby using the index finger on the upper lip and middle finger on the lower lip so the mother can control the opening and closure of the lip, the mother can do mild massage to the child's cheek to encourage swallowing.

Figure 5.1.1 Brest feeding

☆ **Feeding with Paladai**:(Figure 5.1.2 Feeding with paladai)

Figure 5.1.2 Feeding with paladai

Paladai have a beak-like part and insert the end into the mouth by pressing the tongue down and pouring the milk inside the mouth.

Feeding with bottle:

- Touch the lip of the child and hold the mouth by using the index finger on the upper lip and middle finger on the lower lip when using the feeding bottle nipple so the mother can control to opening and closing of the mouth when using her fingers. At the end change position of the hand and do a massage over the cheek, and neck to encourage swallowing.

Figure 5.1.2 Feeding bottle

Duration: Follow the instruction whenever feeding the child

Response: The child can hold and close the mouth to suck the nipple and also learn to suck, swallowing easily. Follow this stimulus regularly when feeding the child.

Areas covered

Cognitive: The Child learns the skill and proceeds further (identify their feed).

Sensory: To overcome sensory issues in feeding and encourage to move to the next level of feeding at the end of one month.

Socio and Emotional: The Infant begins to learn comfort and feel the sense of the mother's touch.

Nutrition: The infant's well-being begins when the infant receives feeding properly.

SKILL 2: Swaddling

Step 1: Lay out a blanket. (Figure 5.2.1)

- Spread the blanket on the bed.
- Size maybe 40 inches X 40 inches (100cm X 100cm).

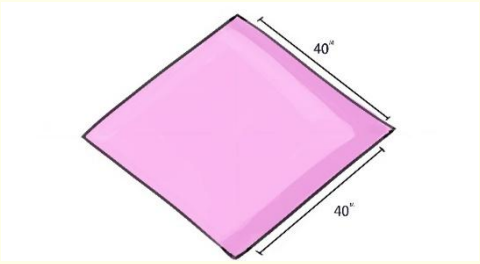


Figure 5.2 .1 (step 1}

Step 2: Fold down the top corner of the blanket. (Figure 5.2.2)

- Folded corner must be on the top corner of the blanket. It helps to guide the mother to the placement of the infant.
- Now it resembles a cartoon drawing of a gem or Superman symbol with 3 corners and a flat area.

Figure 5.2.2 (step 2)

Step 3: Place the infant facing up on the blanket. (Figure 5.2.3)

- The infant on the blanket is now on their back and keeps the head above the folded edge.
- Make sure that the face should not be covered by the blanket after the swaddle.

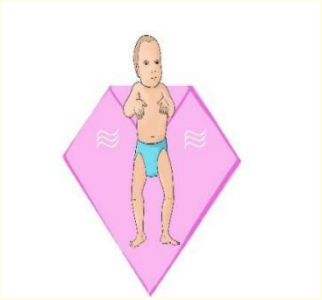


Figure 5.2.3 (Step 3)

Step 4: Keep the infant's left arm at their side. (Figure 5.2.4)

- The infant's left arm is carefully kept straight and placed on it long side of the left side of the body and gently held.
- Alternate holding the arm across the chest like they're in the womb. But they can wriggle free if their arms are bent.

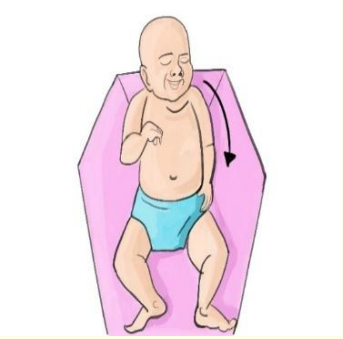


Figure 5.2.4 (step 4)

Step 5: Pull the warp around the infant to the right side. (Figure 5.2.5)

- Pull the corner of the blanket to the infant's left side across the child and tuck it under their back on their right side just below their right armpit.
- Blankets should be tucked snugly enough to hold their infant's left arm in place at the side.

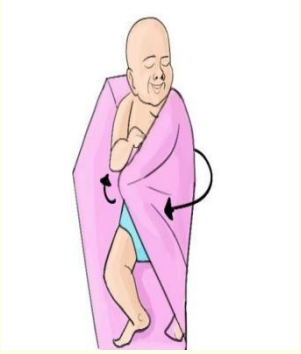


Figure 5.2.5 (Step 5)

Step 6: Move the infant's right arm into position.

- Place the right arm at the side and hold the place just like the left arm.
- The arm also can be on the chest but remember that it will make it easier for the infant to break free of the swaddle

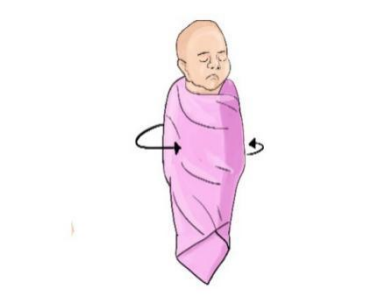


Figure 5.2.6 Step 6

Step 7: Tuck the other side of the blanket. (Figure 5.2.7 Step 7)

- Take the corner of the blanket on the infant's right and pull it across their body.
- Tuck it underneath the baby's body on the left side.
- Now the upper body is gently, firmly wrapped.
- Make sure the mother can see 2 to 3 fingers between babies.

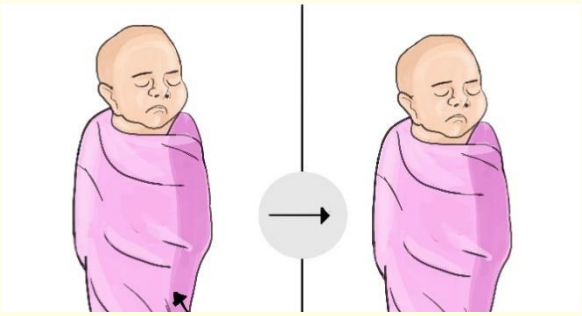


Figure 5.2.7 Step 7

Step 8: Close the bottom of the swaddle. (Figure 5.2.8 Step 8)

- Loosely fold up and twist the bottom of the blanket.
- Tuck it underneath the infant's legs on one side or the other (or) fold the corner of the blanket over the infant's feet before pulling the other side of the blanket across the infant's body.
- Leave plenty of space for the infant's legs to move within the swaddle, this will also prevent overheating.

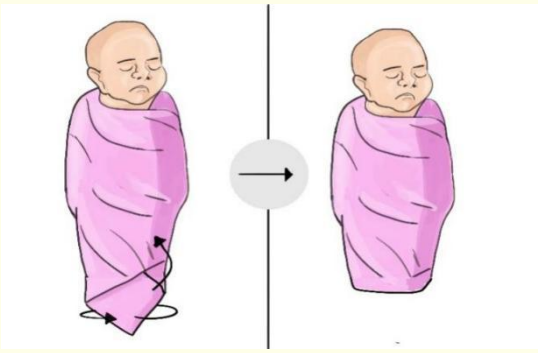


Figure 5.2.8 Step 8

SKILL 3: Sound Awareness and Localization

Material:

Mother is the best material for any type of rattles.

Position:

The position can be on the lap or on the shoulder of the infant facing the mother.

Procedure:

This skill can be executed by the mother talking to the baby (or) singing a song (lullaby (or) showing some rattle.

Activity 1: **Mother** - When the child is awake mother can talk gently and softly with the identification of the child and represent the family members or can also sing a song like rhymes or lullaby (Figure 5.3.1 Activity 1).

Figure 5.3.1 Activity 1

Activity 2: **Toys** - Otherwise, rattles can be used when a child is awake and in a play mood.

Figure 5.3.2 Activity 2

Duration: The duration and selection of the material are based on the infant's wakefulness and mood of child.

Response: The infant starts to show attention to the particular sound and also starts to identify the variations. It is the very beginning stage of sound awareness and is localized for the particular sound (Figure 5.3.2 Activity 2).

Areas covered:

Hearing : Tendency of hearing sense and discriminate of sound will increase.

Vision : Improvement of early vision by turning toward the sound.

Cognitive : Infant is learning the variation of sound and turns toward the sound.

Socialization : The infant will be well adapted to the particular sound at the end of one month.

SKILL 4: Visual Recognition

Material: Family members or black and white patterns or color full toy.

Position: The Infant can be positioned according to the mood of play by facing toward the mother.

Procedure: Visual recognition starts only from seeing the mother's face and can improved by following methods.

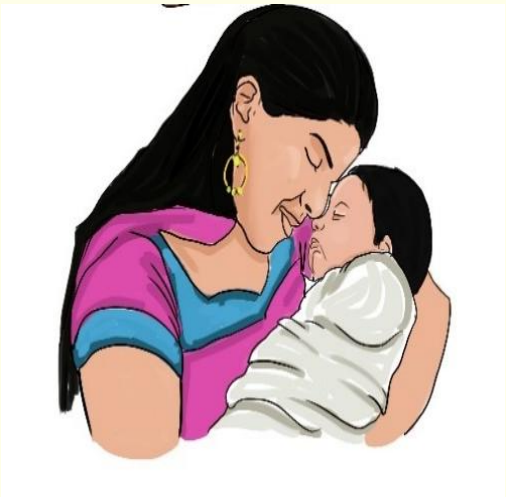


Figure 5.4.1 Activity 1

Activity 1: MOTHER

Parent always spends more time with an infant for all kinds of activities and also infant can feel much better with the Parent. Parent need to spend more time with the infant and communicate whenever the infant is awake (Figure 5.4. 1Activity 1)

Activity 2: TOYS

A color toy or a rattle can be used for the same activity and do not track the toy while showing toys at this early stage.

Duration: Whenever the child is awake.

Response:

First, the infant must be attracted by the mother or toy and then the infant will start to recognize and respond whenever the child is in contact with the mother or toy

Areas covered:

Visual : Improves visual recognition.

Cognitive : Beginning of mind mapping, the infant begins to memory frequently appearing pictures in their mind.

Hearing : Sound is also captured by the infant.

Socialization: Improve socialization towards mother and development of infant-mother bond.

SKILL 5: Vocalization (Figure 5.5 vocalization)

Material: Mother and family members.

Position: The infant can be positioned comfortably by facing the parent whenever the skill is trained.

Procedure: In this early-stage vocalization begins with coo and ahh. The infant starts to mimic the parents and family members.

Figure 5.53 Vocalization

Activity:

- Mother has to position the infant comfortably as facing each other.
- Mother has to talk single syllable (mmm ...Ahhh…coo...) and call the infant with identity and also can sing a song.
- Sibling or family member can participate in this activity .

Duration: Daytime can be selected when the child is more active.

Response: The infant begins to mimic the sounds produced by the mother (parents). And also respond to cooo and ahh sounds in this early stage.

Areas COVERED

Visual : Visual attention improves.

Cognitive : The infant learns to capture the sounds and reproduce whenever the mother talk to them.

Hearing : Sound is also captured by the child.

Socialization: The infant responds towards the mother by making sound.

SKILL 6: Snuggling (Figure 5.6 Snuggling)

Material: Mother

Position: The infant can be held close to the mother but there should not be any irritation to the infant.

Procedure: The mother can execute this skill better when she taking care of their child at the early stage.

Figure 5.6 Snuggling

Activity:

- The mother holds the infant close to her so that the child can feel the warmth and touch feel of the mother. Infants can be wrapped with a thin towel.
- Mother has to talk or sing a song to give a pleasant feel.

Duration: It is the best activity whenever the infant has mood disturbance and feels sleepy and it also can be on play time too.

Response: The infant begins to feel the warmth of the mother and the mother's touch. Able to differentiate the touch and feel between the mother from others (Figure 5.6 Snuggling).

AREA COVERED

Cognitive : The infant begins to differentiate between the mother and strangers.

Socialization **:** Improves bonding with mother.

Sensory : Begins touch sense.

SKILL 7: Vestibular Stimuli (figure 5. 7.1 Activity 1)

Material: A traditional swing (thottil) made of cloth or mother saree and spring

Figure 5. 7.1 Activity 1

Position: The infant can be held in a traditional swing like saree or can be on the shoulder of the mother at this early stage.

Procedure: The Vestibular is a sense to have further development in case of milestone development important.

Activity 1:

Mother can hold the infant in the swing and sway the swing forward and backward with a song. Spring can be used on the top of the swing to facilitate up-and-down movement.

Activity 2:

Mother/ father can hold the infant on their shoulder and facilitate swaying the infant from forward, backward, or sideward with songs (lullaby) (Figure 5.7.2 Activity 2).

Figure 5.7.2 Activity 2

Duration: Whenever a baby has mood disturbance and feels sleepy can be the best time.

Response: The baby will feel a relaxed state and fall asleep, this skill will help to improve their developmental milestone to the next level in balance and motor.

AREA COVERED:

Motor : Helps in developing gross motor and balance.

Sensory : A state of dampened hyperarousal can be overcome.

SKILL 8: Grasp (Figure 5.8 Grasp)

Material: Mother finger or a thin cylindrical rattle.

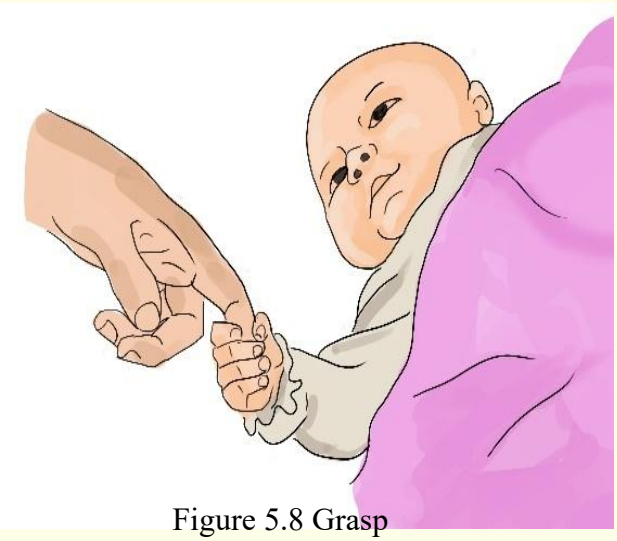


Figure 5.8 Grasp

Position: Supine lying position by facing the mother.

Procedure: This is one of the primitive reflexes. It's the first grasp to develop.

Activity: Mother has to place her finger over the palm of baby (or) rattles with cylindrical holder can also be used for the same.

Duration: Whenever the baby in a play mood.

Response: The baby will immediately bring the fingers together to hold the mother's finger or rattle as a reflex action at an early stage.

AREA COVERED

Motor : It helps to develop fine motor development.

Cognitive: Learning the skill holding.

Sensory : The sense of touch develops here.

SKILL 9: Limb Movements (Figure5.9 Limb Movement)

Material: No specific material then the mother, can use coconut oil for mild massage.

Position: Supine lying position by facing the mother.

Procedure: Encouraging limb movement will help in the child's motor development.

ACTIVITY:

Mother can do mild movements for all four limbs. All the joint movement can be encouraged. Can also massage with a small quantity of oil if it's before bath time .

Duration: Whenever the baby is awake. Oil can be used before the bath.

Response: The movements will help the child to have active effective limb movements and enhance further motor development.

Figure5.9 Limb Movement

AREA COVERED

Motor : Helps to develop gross motor skill.

Sensory : Improves proprioception sense and tactile sense.

SKILL 10: ENVIRONMENTAL AWARENESS (Figure 5.9 Environmental Awareness)

Material: The mother has to carry the baby.

Position: Supine lying position and also can carry and move inside the room

Procedure: Make know the baby about the environment around him.

Activity: The mother has to represent the things in the home like a fan, light, clock, etc to the child and the mother can also carry the baby inside the home to know different environments inside the home in its early stage to avoid taking outside.

Figure 5.9 Environmental Awareness

Duration: whenever the child is active.

Response: Baby will begin to observe the environment where they are. Begins to show interest in the preferred environment.

AREA COVERED:

Cognitive : Now baby begins to prefer where they want to be.

Sensory : Sense like vision and hearing are added here.

Motor : when the baby wants to observe the environment starts to turn the Neck.

Communication: Baby is happy cooing will be there**.**

SKILL 11: Head Control (Figure 5.11 Head control)

Material: Mother lap is a comfortable place and can use colored and sound-making toys

Position: The infant can be positioned comfortably on the lap of the mother in the prone position.

Procedure: This is the very beginning stage of gross motor development which is the foremost development for all gross motor development.

Figure 5.11 Head control

Activity:

The mother can hold the child's tummy over her lap and can encourage the child to raise her head to see the colorful toy shown in front of the child. The mother can interest the child accordingly.

Duration: Whenever the baby is in play mood(avoid immediately after feeding).

Response: The child tries to leave the head and see the toy shown.

AREA COVERED:

Motor : Head control activity.

Sensory : Vision and hearing are also concentrated.

Cognitive: The baby follows the comment given by the mother

Chapter :6

Activity 2: 1 Month to 2 Months activities

SKILL1: SUCKING AND SWALLOWING

Figure 6.1 Skill 1

Materials: Mother feeding is advisable, paladai feeding is optional and less optional than a feeding bottle.

Position: Hold the child in a comfortable position on the mother's lap, let the child suck the nipple make sure the child's lips are fully closed while swallowing.

Paladai feeding: The paladai is a cup-like utensil with a narrow tip that has been used traditionally to feed babies in India. When the mother cannot breastfeed. It is used to hold expressed breast milk or other types of liquid . (Figure 6.1.2 Paladai feeding).

Figure 6.1.2 Paladai feeding

Figure 6.1.3 Bottle feeding

Position: The baby is held reclining while being feed

Bottle feeding: Feeding bottle nip has to touch the baby's lip, then hold the bottle by using index and middle finger (Figure 6.1.3 Bottle feeding).

Duration: Every two hours once need to feed the baby

Response: The child can hold and close the mouth to suck the nipple and also getting improve in sucking, and swallowing easily. Follow this stimulus regularly when feeding the child.

Areas covered

Cognitive: The child learns the skill and proceeds further (identify their feeder).

Sensory:

- To overcome sensory issues in feeding and encourage them to move to the next level of feeding at the end of one month.
- Baby can initiate olfaction skill (Smell) Mother, milk & environment.

Socio-Emotional: The infant begins to learn comfort and feel the sense of the mother's touch.

Nutrition: The infant's well-being begins when the infant receives feeding properly.

SKILL 2: SWADDLING ADVANCED

Step:1(Figure 6.2.1 Step 1)

Always place your baby on their back to sleep:

Babies who sleep on their sides or stomachs are at greater risk of developing SIDS(sudden infant death syndrome).

Figure 6.2.1 Step 1

Step :2 (Figure 6.2.2 Step 2)

Figure 6.2.2 Step 2

Stop swaddling your baby by 2 months of age:

Once your baby is old enough to roll over on their own, it's time to stop swaddling them.

Step: 3 (Figure 6.2.3 Step 3)

Avoid swaddling too tightly: If you swaddle the baby too tightly, especially if the baby is very young, they may have trouble filling their lungs with air. The swaddle should be tight enough to hold their arms in place. But u should still be able to fit 2-3 fingers between their chest and blanket.

Figure 6.2.3 Step 3

Step:4 (Figure 6.2.4 Step 4)

Dress your baby lightly and choose a light blanket to prevent overheating: Overheating can also put your baby at risk of developing SIDS. Unwrap your baby if u see signs of overheating such as rapid breathing Damp hair or sweating Flushed skin a heat rash.

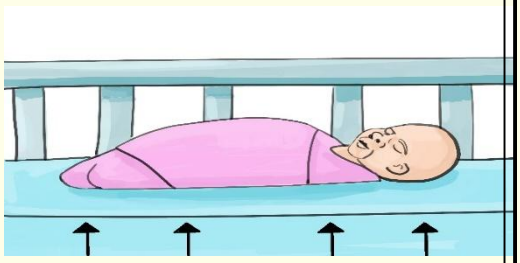


Figure 6.2.4 Step 4

Step:5 Use a firm mattress in the baby's crib to prevent suffocation:

SKILL 3: SOUND AWARENESS/AROUSAL

Material: Mother voice/ loud sound making toys & bright color toys (avoid for the child having seizure disorder).

Position: Make them supine lying in a calm environment.

Procedure: This activity is to check the baby's level of awareness.

Figure 6.3 .1 Activity 1

Activity 3.1:

We have to make unexpected loud sounds away from the child's visual field by mother's voice/ toys/ clap your hands in calm environment (Figure 6.3 .1 Activity 1)

Activity 3.2:

Call their name while the baby crying or pick them from the floor

Figure 6.3.2 Activity 2

Duration:3-5 attempts in various distances a pitch

Response: Baby has to be startled or quiet/stop crying, if the level of arousal is good enough to respond to the unexpected sounds and when he/she hears mother's voice (Figure 6.3.2 Activity 2).

AREA COVERED

Gross Motor: Slowly child can turn their head towards the sound.

Hearing: Recognition of the mother's voice among strangers.

Cognitive: The child can able to discriminate various domestic sounds from the environment.

Socio-Emotional: Child care learns his/her name

SKILL 4: VISUAL RECOGNITION

Materials: Familiar faces/ black and white pattern toys

Position: Supine position on the mat or mother's lap

Procedure: Generally, starts from mother face/ face time.

(Figure 6.4 .1 Activity 1

Activity 4.1:

One-to-one interactions with different facial expressions given by the mother as long as possible each day (Figure 6.4 .1 Activity 1)

Activity 4.2:

Show them black and white pattern toys or balls 8 -10 inches away from the child's face, and then they can try to focus the toys (Figure 6.4.2 Activity 2**).**

Figure 6.4.2 Activity 2

Duration: Whenever the baby is awake and comfortable with the mother

Response: The child starts to get excited/ smile once they make eye contact to recognize the mother's face and listen to the mother's voice,

Area covered:

- **Vision:** Improves focusing & sustained on to black & white toys.
- **Cognitive:** Eye contact imitated through toys & voice face.
- **Socio-Emotional:** The child can also recognize their mother's face & which enhances their bond

SKILL 5: SOCIO-EMOTIONAL

Material: Parents/ caregiver/ relatives

Position: Hold the child face to face/ hug

Figure 6.5 Skill 5

Procedure: Psychological and social domain starts with parents

Activity 1: Introduce all family core members and caregiver, and try to play the "little piggy game" Generally touch the baby's toes and fingers or hold (Figure 6.5 Skill 5).

Response:

1. Exhibits social smile in response to familiar faces

2. They can feel them being loved and cared

Area covered:

- **Tactile:** To feel comfort maternal warmth
- **Psychological:** Early bond & trust rapport improves.
- **Social:** Able to explore & adapt the bond from core members of the family.

SKILL 6: ENVIRONMENTAL AWARENESS

Materials: Various sound sources from home (vessels, music, doors, and domestic animals).

Position: Supine or prone lying**.**

Procedure: Early exposure to various sounds and environments (texture)**.**

Figure 6.6.1 Activity 1

Activity 1: Make vessel sounds, and switches, and try to open and shut the doors voluntarily.... Or play the music or TV (Figure 6.6.1 Activity 1).

Activity 2: Let them touch soft and hard materials (soft feathers/ wooden blocks), and let them be exposed to different textures of clothes with precaution (eco-friendly), and include some hot and cold environment (Figure 6.6.2 Activity 2).

Figure 6.6.2 Activity 2

Duration: Whenever the baby is awake and as long as they enjoy the activities/ environment.

Response: They can feel the world around them and they can start to learn about life.

Area covered:

- **Motor:** The child initiates the body movement.
- **Hearing:** The child can have started to recognize domestic sounds
- **Vision:** Recognize moving objects in front of their eyes.
- **Tactile:** Feel & explore tactile sense through touch

SKILL 7: GRASPING AND REACHING (Figure 6.7 Skill 7)

Materials: Mother finger/cylindrical rattles.

Position: Supine lying or prone lying.

Procedure: Start from familiar person finger generally mother.

Activity 1: Mother has to place her index finger over the palm of the baby/ keep color-full and sound-making toys in front of the baby.

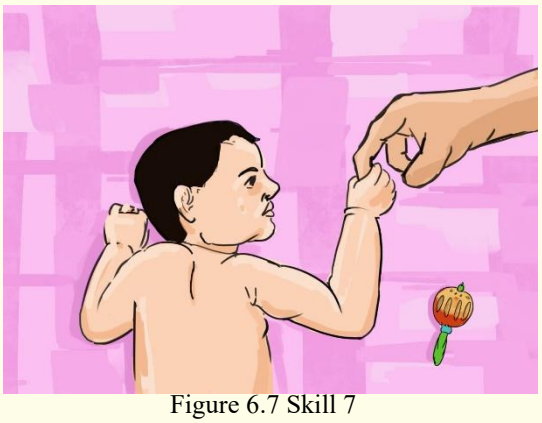


Figure 6.7 Skill 7

Duration: Let them hold the finger or rattle brief amount of time.

Response: Baby will immediately bring the fingers together to hold the mother's finger, repeat the activities to open the shut their palm, and try to reach the toy that kept in front of them

Activity 2: Make them lie on their back or tummy. Show them any sound producing with bright colors toys/ running toys in front of their eyesight, then wait for their response to reach the toy

AREA COVERED

Gross Motor: Initiate one hand reaching for toys or fingers.

Fine motor: Improve palmar grasp.

Vision: Focusing on people's faces and toys

Socio-Emotional: Through play rapport & bond will create between mother & child.

SKILL 8: VOCALIZATION

Material: Parent's time and attention

Position: Supine lying on the mat or mother's lap

Procedure: Babies begin to make some vowel sounds (ah-ah or ooh-ooh) or coos and gurgles

Figure 6.8 skill 8

Activity: Baby Talk

As the mother is spending more time with baby for all activities. Whenever baby is awake mother have to communicate in high pitch with adult words/ babble/ rhythms (Figure 6.8 skill 8).

Duration: Whenever child is awake.

Response:

1. Baby can be exchanging smiles and oohs/ aahs or listening to our conversation
2. Some baby can be mimicking our expressions
3. This activity is setting the stage for the baby's first word

AREA COVERED

Vision: Able to discriminate a few expressions given by family members.

Communication: Pre-linguistic skills initiated

Cognitive: Attach meaning to the cry.

SKILL 9: TURNING SIDE TO SIDE/MOVEMENT

Materials: Any sounds making toy and mother

Position: Supine lying on a comfortable mattress

Procedure: The child begins to show smooth and wriggling movements

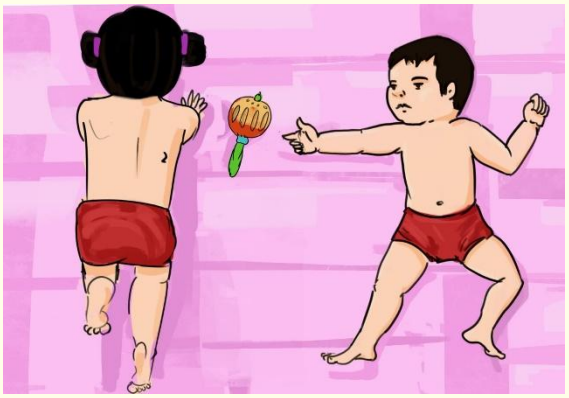


Figure 6.9.1Activity 1

Activity 1: Show the toy in front of the baby's face 18 inches away. They can maintain the head in midline for a brief amount of time or slowly they can move the head right to left. (Figure 6.9.1Activity 1).

Activity 2:

When patting the toes baby begins to show slight anti-gravity movements and reciprocal kicking, so tie the attractive sound-making anklets with bells on the child's hands and legs to encourage the kicking (Figure 6.9.2 Activity 2).

Figure 6.9.2 Activity 2

Activity 3:

Do gentle massage from fingers to hand and toes to leg. Slowly try to roll the child from supine to prone, then prone to supine. Gradually try to gentle massage all over their limbs and trunk. It will make them learn rolling position (Figure 6.9.3 Activity 3).

Figure 6.9.3 Activity 3

Response:

1. The mother has to position the baby comfortably facing each other.
2. The mother has to talk single syllables (mmm ...Ahhh…coo...) and call the baby and do gentle massage then do movement.
3. As the baby begins to learn the movements produced by the mother (parents). By using kicking and rolling in this early stage.

Duration: Best time to select the playtime of the child.

AREA COVERED

Visual: Fixing on the object by rolling

Cognitive: Infants learn to roll through toys

Hearing: improve sound recognition

Motor: Imitate first express motor and milestone of rolling.

SKILL 10: NECK CONTROL

Material: Mother is best, at this early stage (parent).

Position: Prone lying on the mother lap or pillow or wedge

Procedure: At the early stage only, the mother can execute this skill better as the mother is taking care of baby.

Figure 6.10 .1 Activity 1

Activity 1:

Mother have to place the baby on her lap, baby head and upper body has to be slightly out of mother lap, make any sounds by toys or ask someone to sit in front of baby (Figure 6.10 .1 Activity 1).

Activity 2: Place one pillow in a horizontal another one in a longitudinal position, then make the child lie down on the pillow. Put some sounds making toys in front of the child (Figure 6.10 .1 Activity 2).

Figure 6.10.2 Activity 2

Duration: Whenever the baby is awake and active or play time too.

Response: The baby begins to lift the head in 45 degrees for brief amount of time Sometimes baby can lift the head and upper body by using their elbow support.

AREA COVERED

Vision: Fixing & following on object improves

Proprioception: Sense of body image and movement improvement.

Motor: Antigravity muscle of upper trunk will improve.

Chapter :7

Activities 3: 2 months to 3 Months

SKILL 1: FEEDING SKILL

Materials: Mother feeding is advisable, with optional paladai", less optional to a feeding bottle.

Position: Supine lying in the mother's lap is the most comfortable position

Procedure: This activity is to improve feeding in a newborn, it's a reflex as newborns spontaneously have this reflex, if any lag in this skill and to stimulate this skill.

Figure 7.1 Feeding Skill

Activity:

Touch the lip of the baby with the nipple and hold the mouth of the baby using the mother's index finger above the lip and middle finger below the lip. The mother can control the opening and closure of the lip after changing the hand to check and give a mild massage to the baby's cheek to encourage swallowing (Figure 7.1 Feeding Skill).

- The Supine Position in the Mother's Lap is the most comfortable position
- Bottle feeding is supine lying in the comfortable mat.

Areas Covered:

Cognitive: Baby learns the skill and proceeds further (identify their feed).

Sensory: To overcome sensory issues in feeding as month goes, move to next level feeding.

Socio and Emotional: As baby begin to learn comfort and feel over mother's touch.

Nutrition: If baby starts feeding properly then baby well-being begins here.

SKILL 2: TRACKING AND FIXATION

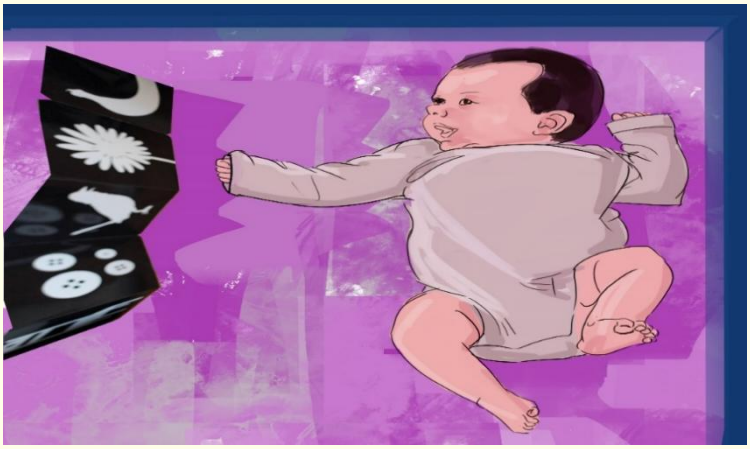


Figure 7.2 Tracking and Fixation

Materials: Customised Visual Chart, Floor mat.

Position: The baby is to be placed or held in a comfortable position on the floor or mother's lap.

Procedure: This activity is to help the baby in tracking objects and fixing the eye on the object for some time.

Activity:

- Make sure that the baby is in a lying position with comfortable mats.
- Place the chart in front of the baby. The charts should be black and white in colour.
- Bring the Chart from one side and show the Chart to the baby.
- Once the baby notices the Chart, give time for the baby to fixate at the chart and then move it sideways, up and down (Figure 7.2 Tracking and Fixation).

Area covered:

Cognitive: Attention, tracking and fixation

Sensory: Vision and Visual stimulation

SKILL 3: LISTENING TO SPEECH AND VOCALIZATION

(object permanency)

Figure 7.3 Listening to speech and vocalization

Materials: Torch, Transparent plastic balls (colourful).

Position: The body has to be held in a comfortable position on the mother's lap or floor Mat

Procedure: Any toy the baby is familiar with, child's face towel or scarf.

Activity:

- Play with the baby by holding hands and clapping.
- Talk to the baby while playing. This will help the baby to listen to speech and respond accordingly.
- After some time take a toy that the baby likes the most and ask the baby "Whose toy is this?
- Once the baby responds by cooing or babbling, take the toy and place the baby's face towel on it.
- Place the toy at a distance from where the baby can reach for it. Now ask the baby "where is the toy?".
- Encourage the baby if the baby picks the towel or points at it (Figure 7.3 Listening to speech and vocalization).

Area covered:

Cognitive: Object permanence

Social: Interaction and play

Communication: Responds to sound and vocalizes

SKILL 4: FOCUSED ATTENTION

Materials: A colourful sound-making hanging toy with a stand

Position: Lay the baby on the back and the mother or sibling must sit or stand at the baby's side.

Procedure: This activity is to help the baby to improve focused attention

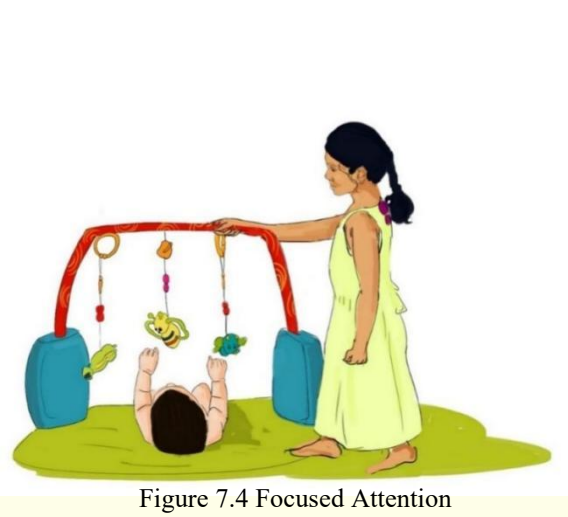


Figure 7.4 Focused Attention

Activity:

- When the baby is in a good mood, look at the baby's face and talk in different volume of sound.
- When the baby starts to giggle bring a colourful sound making a hanging toy from the opposite and showing it to the baby at a distance from top.
- The baby has to turn to the sound of the toy, look at the top and see the toy for some time (Figure 7.4 Focused Attention).

Area covered:

Cognitive: Improve focused attention,

Auditory : Sound Discrimination

Social: Interaction and play

communication: Responds to speech and vocalizes

SKILL 5: VESTIBULAR SENSE

Materials: A traditional swing like saree can be used and sometime mother can also do the rocking movement

Position: Baby can be held in traditional swing or can be on the hand, shoulder and lap of the mother is early stage of stimulation.

Figure 7.5 Vestibular Sense

Procedure: Vestibular is an important sense to develop further developmental mile stones of the baby.

Activity:

Mother can put the baby into a traditional swing using saree and sway the swing Front and Back or Up and Down. Mother can also use her hand, shoulder and lap as swing and sway the child front and back or Up and Down (Figure 7.5 Vestibular Sense).

Area covered:

Cognitive : Improve focused attention,

Auditory : Sound discrimination

Social : Interaction and play

Motor : Neck Control.

SKILL 6: REACH, GRASP AND HOLD

Materials: 2-3 cylindrical toys

Position: The baby has to be held in a comfortable position on the mother's lap or on the floor.

Procedure: This activity helps the baby to reach the objects, grasp them, and hold on to them for some time

Activity:

- While the baby is calm and playful talk to the baby and show three cylindrical toys and place them at the eye level of the baby at a distance.
- Encourage the child to take one toy or reach for it. If the baby is reluctant hold the baby's hand and reach for the toys.
- The baby reaches for the toy ask the baby to grasp it or help the baby to grasp it. After picking the toy encourage the baby to hold it in the hand for some time (Figure 7.6 Reach, grasp and Hold).

Figure 7.6 Reach, grasp and Hold

Area covered:

Motor : Gross and fine motor muscles developed

Cognitive : Developing ability to follow commands,

Auditory : Listening to speech and responding

Social : Interaction and play

SKILL 7: LIMB MOVEMENT

Materials: Any sounds making toy and mother

Position: Supine lying on a comfortable mattress

Procedure: This activity helps the Child begin to show smooth and wriggly movements.

Activity:

- Slowly try to roll the child to the side-lying, baby begins lateral head righting and follows into rolling with head lifted into a prone, and demonstrates an integration of major muscle groups. When we pat the toes baby begins to show slight anti-gravity movements and reciprocal kicking. Show the toy in front of baby's face in 18 inches away They can maintain the head in the midline for brief amount of time or slowly they can move head right to left (Figure 7.7 Limb Movement).

Figure 7.7 Limb Movement).

Area covered:

Motor : Gross and fine motor muscles developed

Cognitive : Developed ability to follow commands,

Auditory : Listening to speech and responding

Social : Interaction and play

Visual : Fixation, Eye to eye Contact.

SKILL 8: EXPLORING NEW ENVIRONMENT

Materials: Various sound sources from home (Family member, vessels, music, doors, domestic animal)

Position: Supine or Prone lying with comfortable mat.

Procedure: Early exposure to various sounds and environment.

Figure 7.8 Exploring New Environment

Activity:

- Make vessel sounds, and switches, and try to open and shut the doors voluntarily.... Or play the music or TV. Let the child touch soft and hard materials and expose the different textures clothes with precaution (ecofriendly)and include some hot and cold environment (Figure 7.8 Exploring New Environment).

Area covered:

Motor: Gross and fine motor muscles developed.

Hearing: Improves recognition of sound.

Vision: improves fixing and following on object.

Tactile: Feel and explore tactile sense through touch.

Cognitive: Develops ability to follow commands.

SKILL 9: TURNOVER

Materials: Soft pillow or towel and a mat.

Position: Initially the baby has to lying on their back.

Procedure: This activity is to help the baby turn over and lying on its stomach.

Activity:

- Place the baby on the mat. Raise the baby's shoulders on the left side by placing a soft rolled towel under the shoulder. Kneel beside baby's right side. Reach across the baby's body and place one hand on the left shoulder and one hand on the left knee.

Position the baby's arm on the side. Gently pull the baby towards the mother, so that the baby rolls to the right, from the back to the stomach.

- Place a soft pad of towel on the floor just below the baby's chin till the baby steadies the head so that the chin will not rub hard on the floor. Return baby to the back.
- Now kneel at left side. Repeat activity from the left side to make the baby turn to the right. Gently pull the right shoulder and right knee this time. Gradually provide less assistance so that the baby turns over by own.
- During the entire activity say the steps followed to the baby through baby talk (Figure 7.9 Turnover).

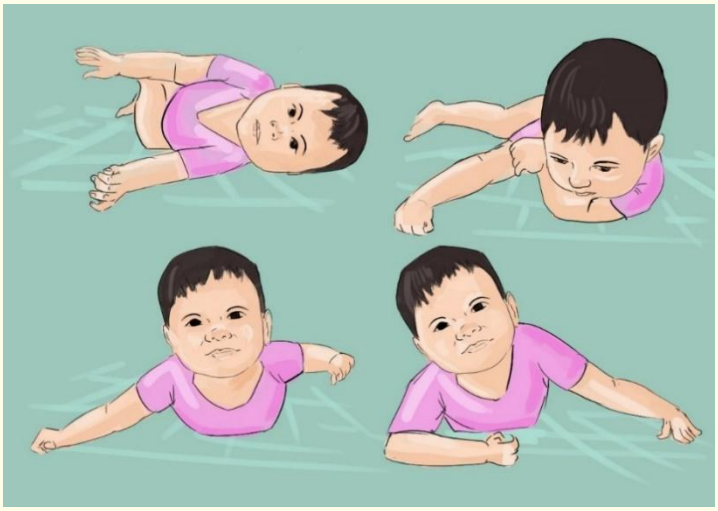


Figure 7. 9 Turnover

Area covered:

- **Motor** : Gross and fine motor muscles develops
- **Auditory** : Listening to speech and responding.
- **Social** : Interaction and play

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