

# Early Childhood Development (ECD)

## Newborn Responsive Caregiving



Early Childhood Parenting Readiness Education Program ECD PREP  
Department of Obstetrics and Gynaecology  
Aga Khan University

# Contributors:

## **Research and Text:**

Dr. Shelina Bhamani

Sara Fahim

Kiran Aslam

## **Illustration, Design and Urdu Translation:**

Maria Riaz

## **Acknowledgements:**

Dr Lumaan Sheikh

ECD PREP Team

Internal & External Review Team

Partners in Implementation

Aga Khan Health Services Pakistan and Afghanistan

---

This handout is funded under the F4HE project given to the Aga Khan University via Aga Khan Foundation with kind support from Global Affairs Canada

# Contents:

## Module 1: Breast Feeding



## Module 2: Infant Cues and Behaviour



## Module 3: Play



## Module 4: Maternal Postpartum Health



## Module 5: Neonatal Development



## Module 6: Responsive Interactions and Attachment



# **Module1:**

# **Breast Feeding**



# Exclusive Breastfeeding

Exclusive breastfeeding means infant receives breastmilk only and no other breast milk substitutes or any kind of liquid or solid from birth till six months of age.



# Importance of Skin-to-Skin Contact

- Skin to skin is beneficial for a baby's brain development.
- It supports infants' heart rate and breathing regulation.
- It helps baby to adapt the outer environment
- Fathers can also provide skin to skin



# Breastfeeding Positions



Cradle



Cross-Cradle



Side-lying



Football



Laid back

**Note: After feeding ensure that your baby is burped**

# Breastfeeding Problems

- Sore or cracked nipples
- Breast heaviness
- Low milk supply



# Foods for Breastfeeding Mothers



Well balanced diet



Cumin



Lotus seeds



Porridge



Milk



Popcorn



Water 2-4 litres

# Hydration in Breastfed Babies

- Drink a large glass of water before breastfeeding your child.



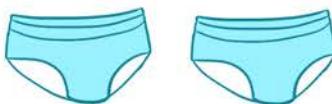
- Count on wet diapers or clean unused cloth which should be equal to five or above.

Newborn wet diapers  
What to expect:

Day 1



Day 2



Day 3



Day 4



Day 5



And so on...

# Breastfeeding Vs Formula Feeding



- Helps mother-child bond
- Boosts immunity
- Promotes growth and neurological development
- Better teeth and jaw development
- Cost-effective



- Expensive, over-priced
- Higher risk of diarrhoea and infection
- Risk of obesity and diabetes
- Gastric issues

# **Module 2:**

# **Infant Cues and Behaviour**



# What are Infant Cues?

Infant cues refer to the various behavioral and physiological signals that newborns use to communicate their needs and feelings to caregivers.

These cues can include facial expressions, body movements, sounds, and changes in breathing patterns.



# Types of Infant Cues

## Engagement Cues

Engagement cues refer to behaviors or actions that indicate a baby's willingness or desire to interact with caregivers and participate in social activities.

These cues can include eye contact, smiling, nodding, and maintaining an open and relaxed body posture.



# Examples of Engagement Cues



Smiling



Looking at the caregiver



Eyes wide and bright



Soothing arm and leg movements



Making sounds

# Disengagement Cues

Disengagement cues are behaviors or actions that indicate a baby's lack of interest or willingness to engage with others or participate in social activities.

These cues can include avoiding eye contact, turning away from the person, crossing arms or legs, or displaying a tense or defensive body posture.



# Examples of Disengagement Cues



Crying



Looking away



Back arching



Yawning



Facial grimaces  
(frowning, eye tightening, upper lip raising)

# What are Infant Behaviors?



A variety of observable actions and responses that develop during the first year of life.

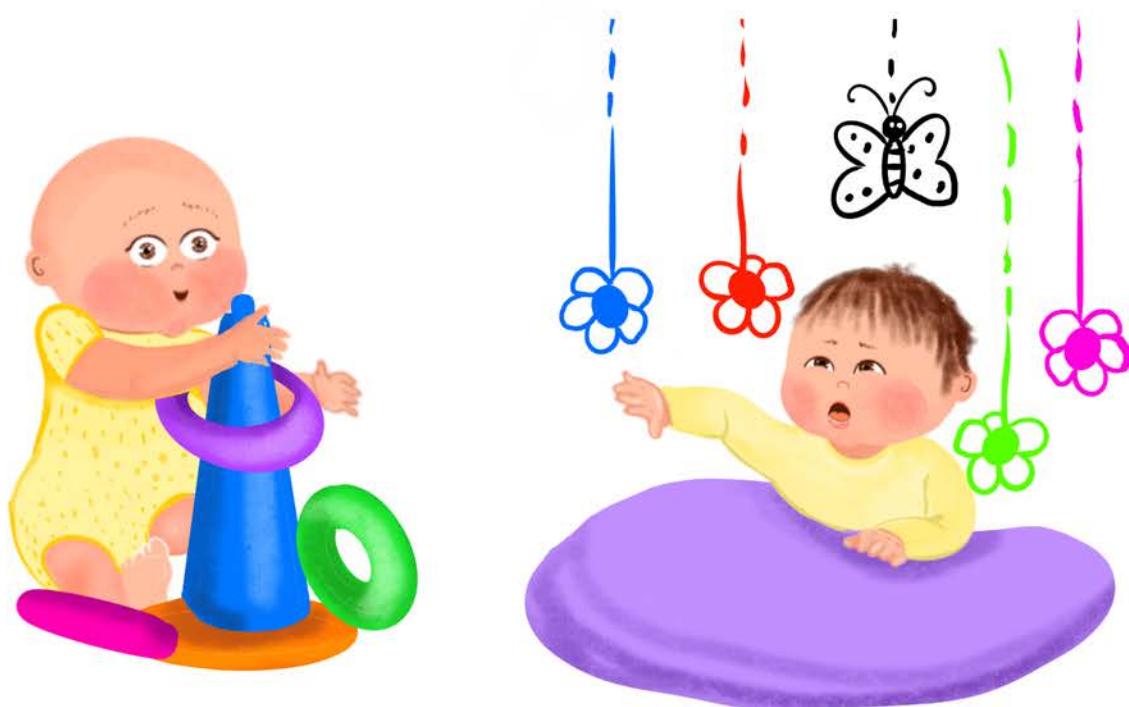
# Crying

Crying is a primary means of communication for infants, and can indicate hunger, discomfort, or other needs.



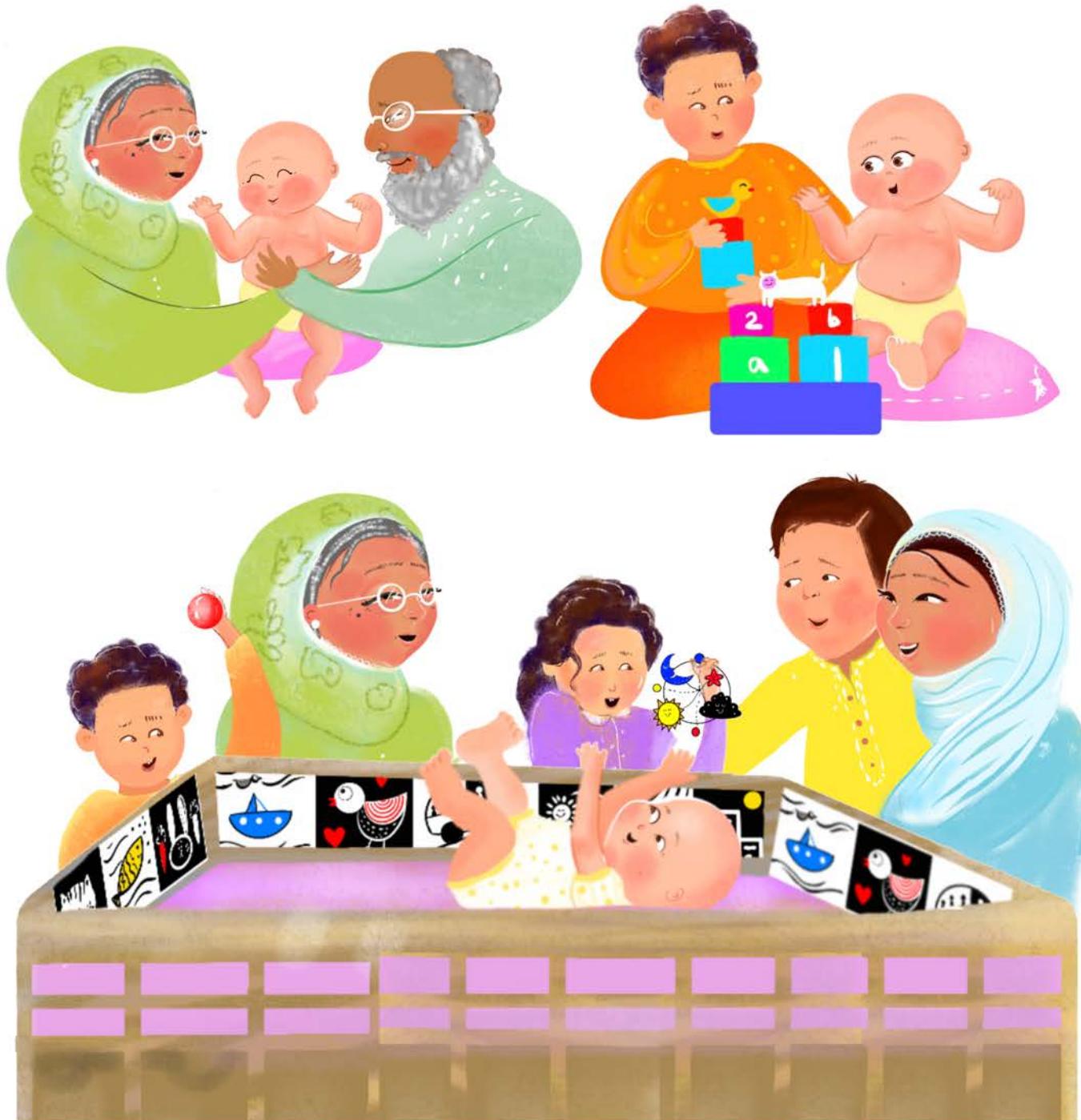
# Exploration

As infants develop motor skills, they begin to explore their environment and interact with objects and people around them.



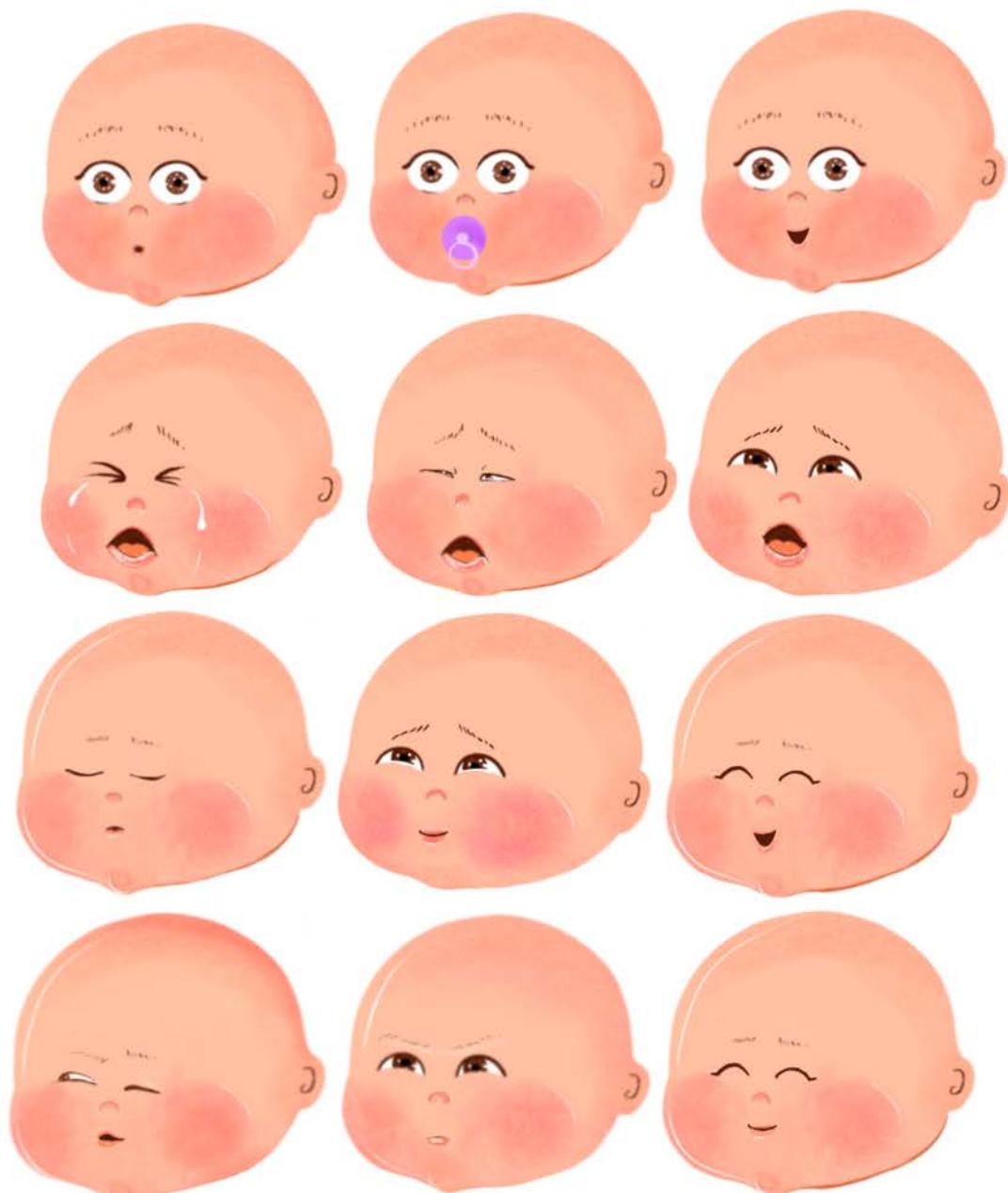
# Self/Social Regulation

Infants are social beings from an early age and engage in interactions with caregivers and other familiar adults.



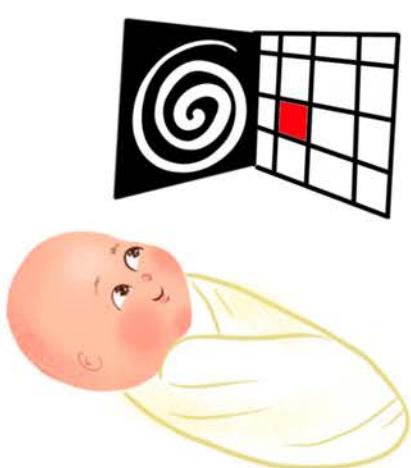
# Feelings and Emotions

Infants begin to display a range of emotions, such as happiness, fear, and anger, and develop the ability to recognize and respond to the emotions of others.



# Verbal and Nonverbal Communication

Although infants do not yet can speak, they begin to develop receptive language skills and can understand some words and gestures.



# Module 3: Play



# Power of Play



“Play is the work of the child.”

# Games to Play With Your Infant



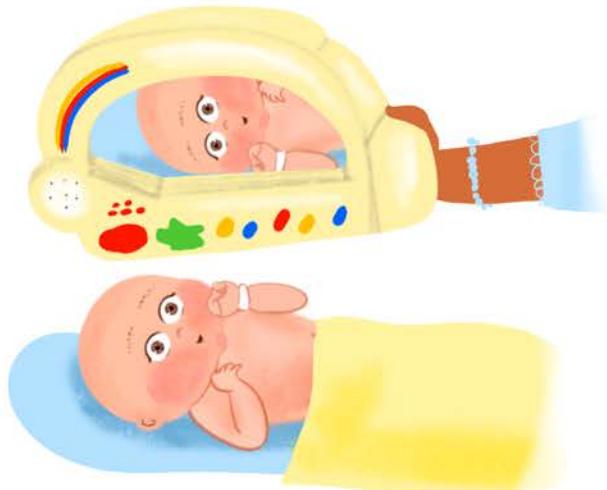
Pee-ka-boo



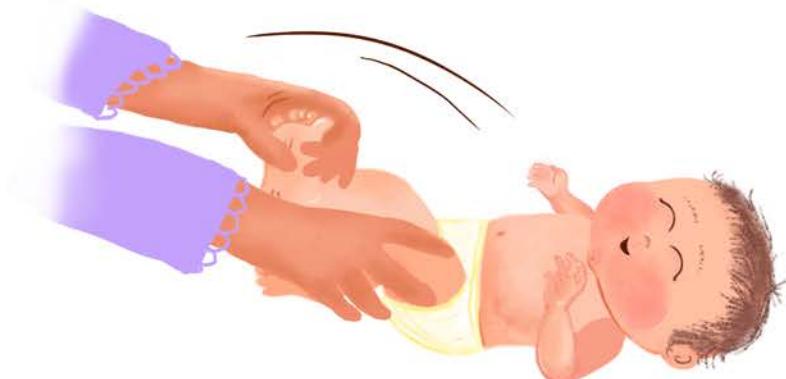
Touch and tickle the baby



Roll the baby over



Show me in the mirror



Baby bike ride play

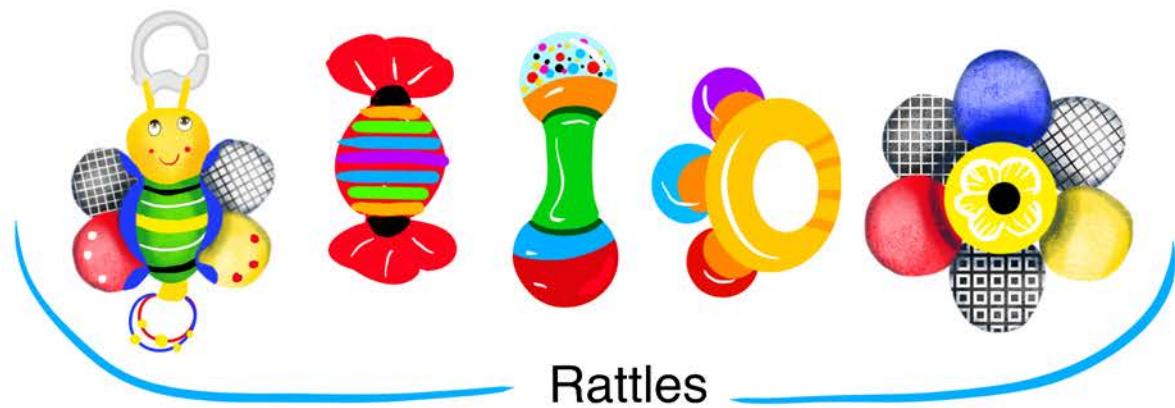
# Toys for 0-6 months

When choosing toys understand the following:

- Keep development and age in mind.
- Children learn through senses choose toys that can stimulate their senses.
- Encourage exploration but don't compromise on safety.



Soft toys like plush animals or plush balls



Rattles



# Toy and Play Safety



## Toy Size

Should not be too large or too small.  
Should not pose choking hazards.



## Age Suitability

Select toys keeping in mind your child's developmental ability.  
Supervise them while they play with toys.



## Cleanliness



Make sure that you clean all the toys, wash the fabric and stuffed toys as your baby might take them to mouth to suck.

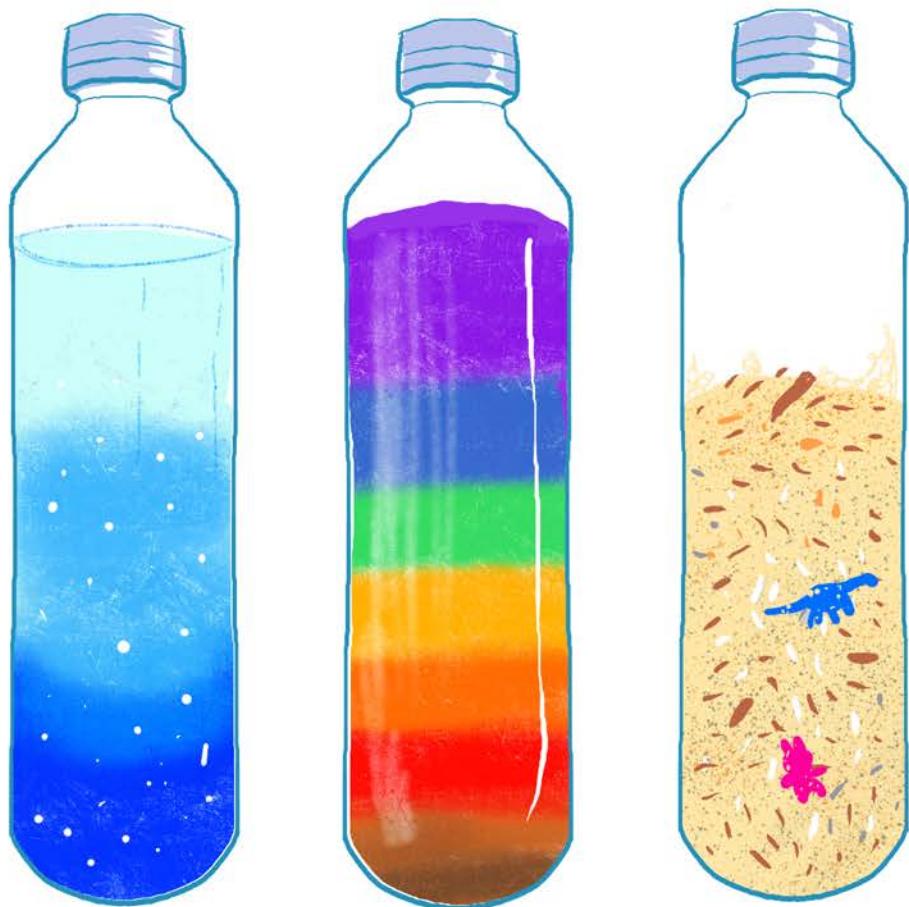


## Sharp Edges

Ensure that the toys do not have broken and sharp, pointed edges that could harm the baby.

# Low-cost, Homemade Toy Ideas

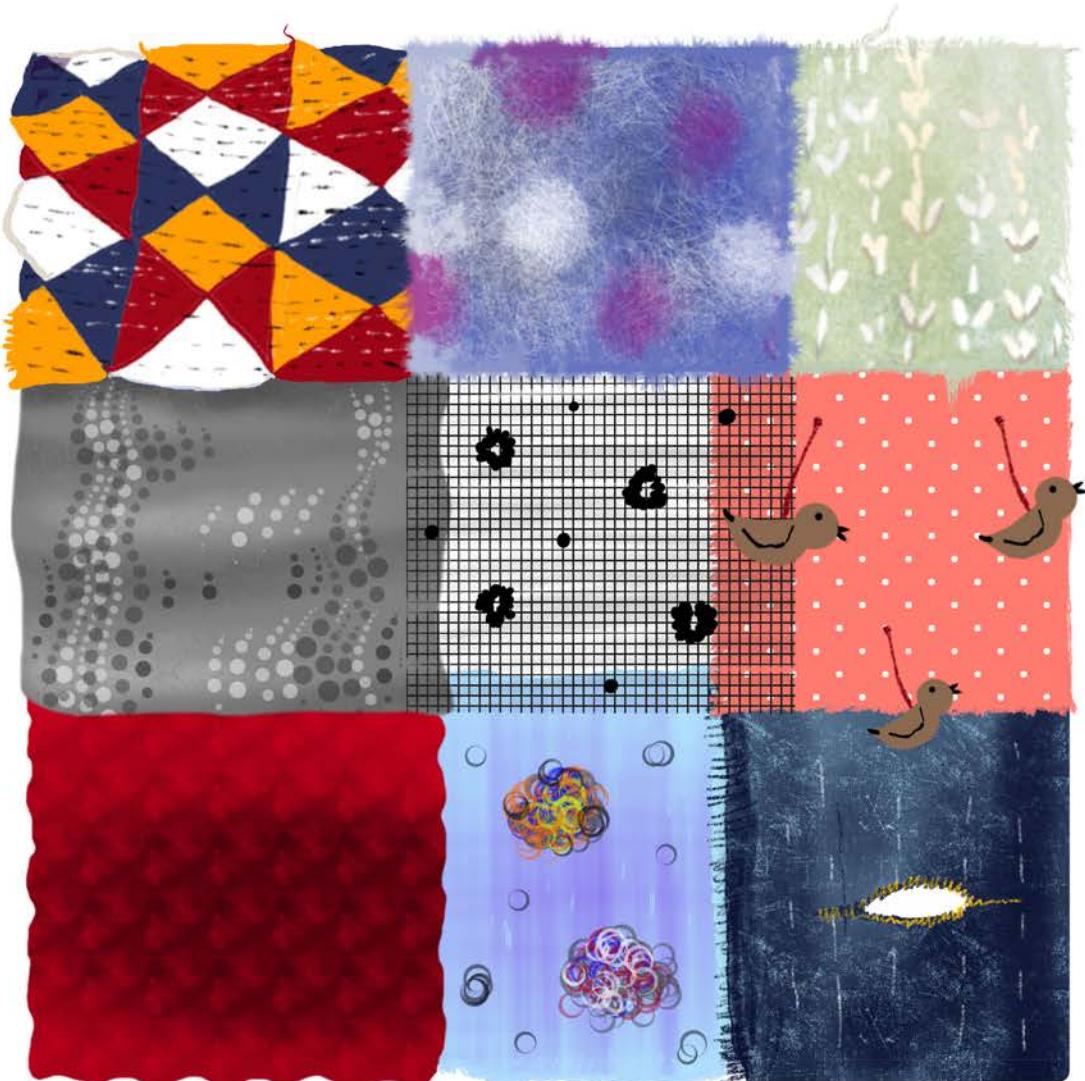
## Sensory bottles



Fill a plastic bottle with water, glitter, and small toys or beads for a sensory experience.

# Low-cost, Homemade Toy Ideas

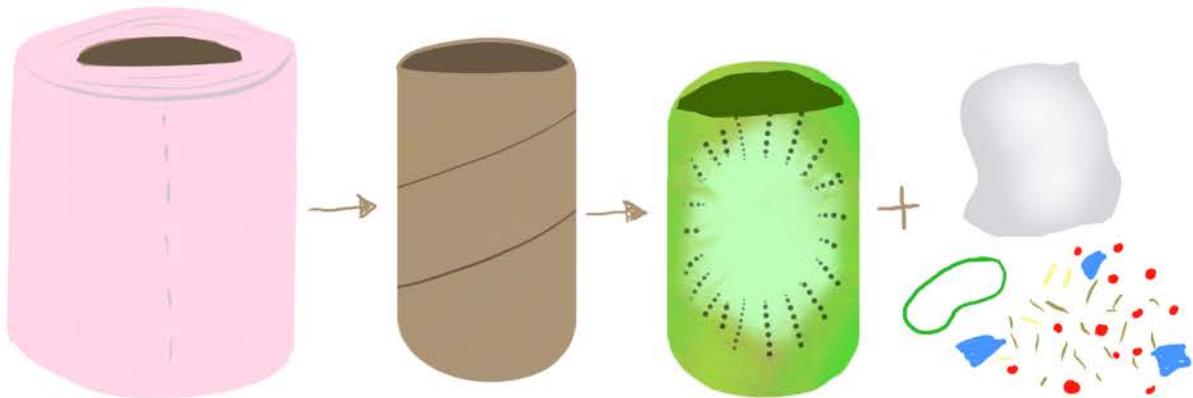
## Fabric squares



Cut up fabric squares and let your baby explore the different textures.

# Low-cost, Homemade Toy Ideas

## Paper towel roll



Roll up a paper towel roll and stuff it with fabric scraps for a homemade rattle.

# Low-cost, Homemade Toy Ideas

## Cardboard boxes



Give your baby a cardboard box to explore, crawl through, and play with.

# Quick Tips for Parents

- Provide safe environment and ensure to clean the toys and learning materials
- Use low cost home made simple toys
- Do not force play
- Understand and respect baby's cues and behaviour.
- Know that all infants are different. Some may like playing with materials some may like just playing with you/caregivers.



# Module 4:

# Maternal Postpartum

# Health



# Postpartum Maternal Health

Postpartum maternal health refers to the physical, emotional, and social well-being of women following childbirth.  
(World Health Organization, 2013).



# Postpartum Blues

- Persistent feelings of sadness and emptiness
- Loss of interest in daily activities
- Excessive or difficulty in sleeping
- Frequent mood swings
- Irritability and anger
- Excessive worry, fear and apprehension
- Extreme tiredness and exhaustion
- Recurrent, unwanted and distressing thoughts that interfere with daily activities and increase anxiety and depression



# Mental Health Checklist for New Moms

During the past 7 days...

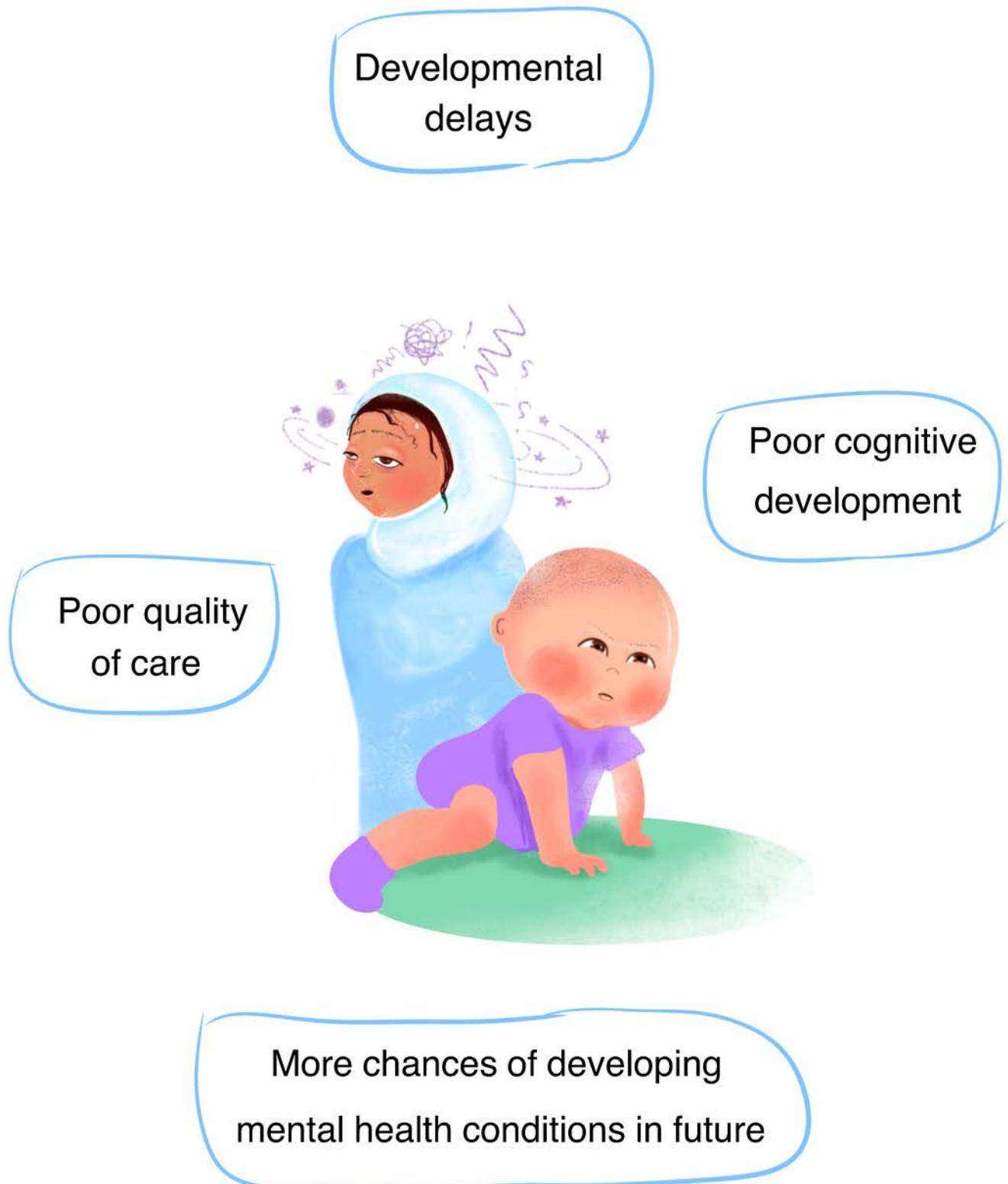
- I have been overly anxious or worried about little things
- I have been blaming myself for things that were not under my control
- I have been excessively sleeping or not sleeping at all
- I have been overly eating or not eating at all
- I have not been able to enjoy things that used to make happy earlier
- I do not feel connected to my child
- I do not feel like breastfeeding my child

## Note

If you feel like any of the symptoms and you want to talk about it, please seek help from your nearest LADY HEALTH VISITOR (LHV).

Ensure that you are approaching a trained, qualified and credentialed staff.

# Impact of Mother's Mental Health on Growing Child

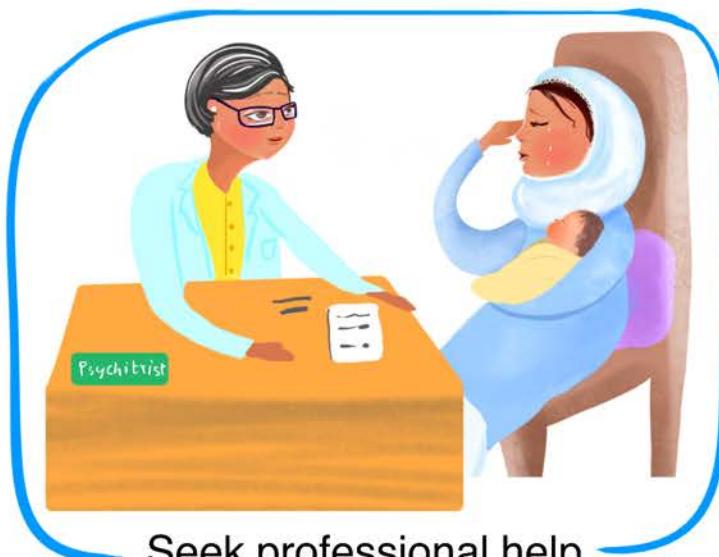


# Take Help!

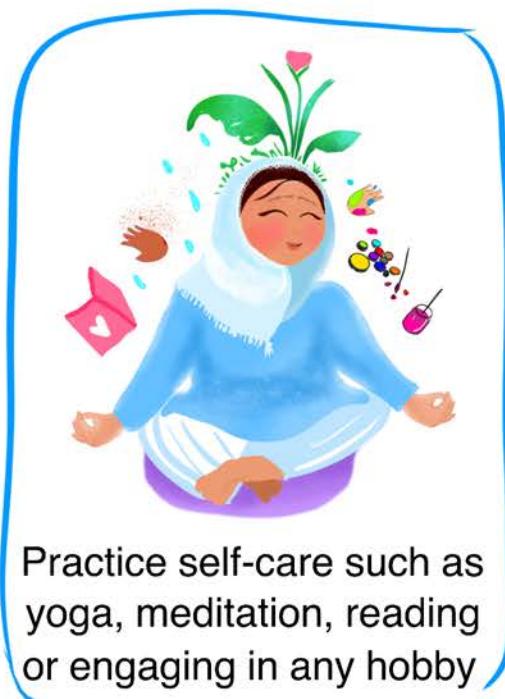
Mental health conditions can range from mild to severe and can affect the mother's ability to function and care for herself and her baby. It is important to seek professional help if experiencing any symptoms of mental health conditions during postpartum.



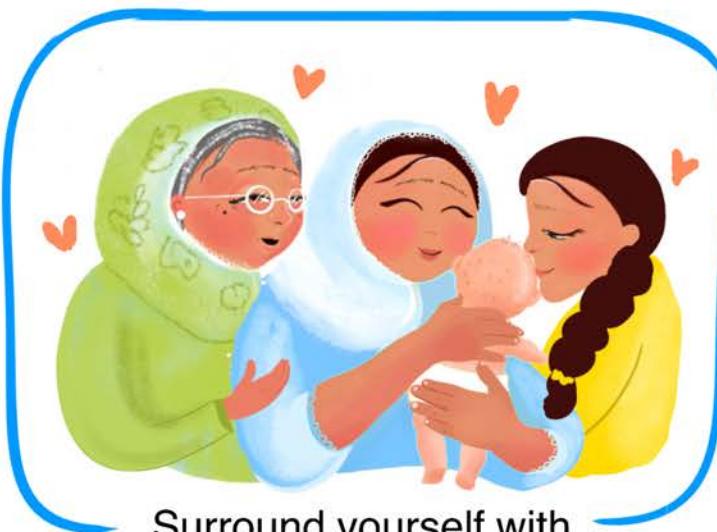
# Tips and Tricks to Support Maternal and Infant Mental Health



Seek professional help



Practice self-care such as yoga, meditation, reading or engaging in any hobby



Surround yourself with a supporting network



Take a good sleep



Connect with your baby through interactive play, talking, reading and singing



Breastfeed to bond with your baby



Provide a safe and nurturing environment to your infant



Be kind to yourself. Its ok to take a break

# Postnatal Exercises

## Benefits

- Helps to regain the strength back
- Increases metabolism
- Helps to reduce pregnancy weight
- Strengthening of the pelvic

01: Deep Breathing

02: Interdigital Exercise

03: Coughing

04: Calf Stretching

05: Cross Leg Stretching

06: Kegal Exercises (Should be done after  
healthcare provider consultation)

07: Shoulder and Breast Stretching

08: Abdominal Tightening

09: Pelvic Rolling

# Postnatal Exercises

## 01: Deep Breathing

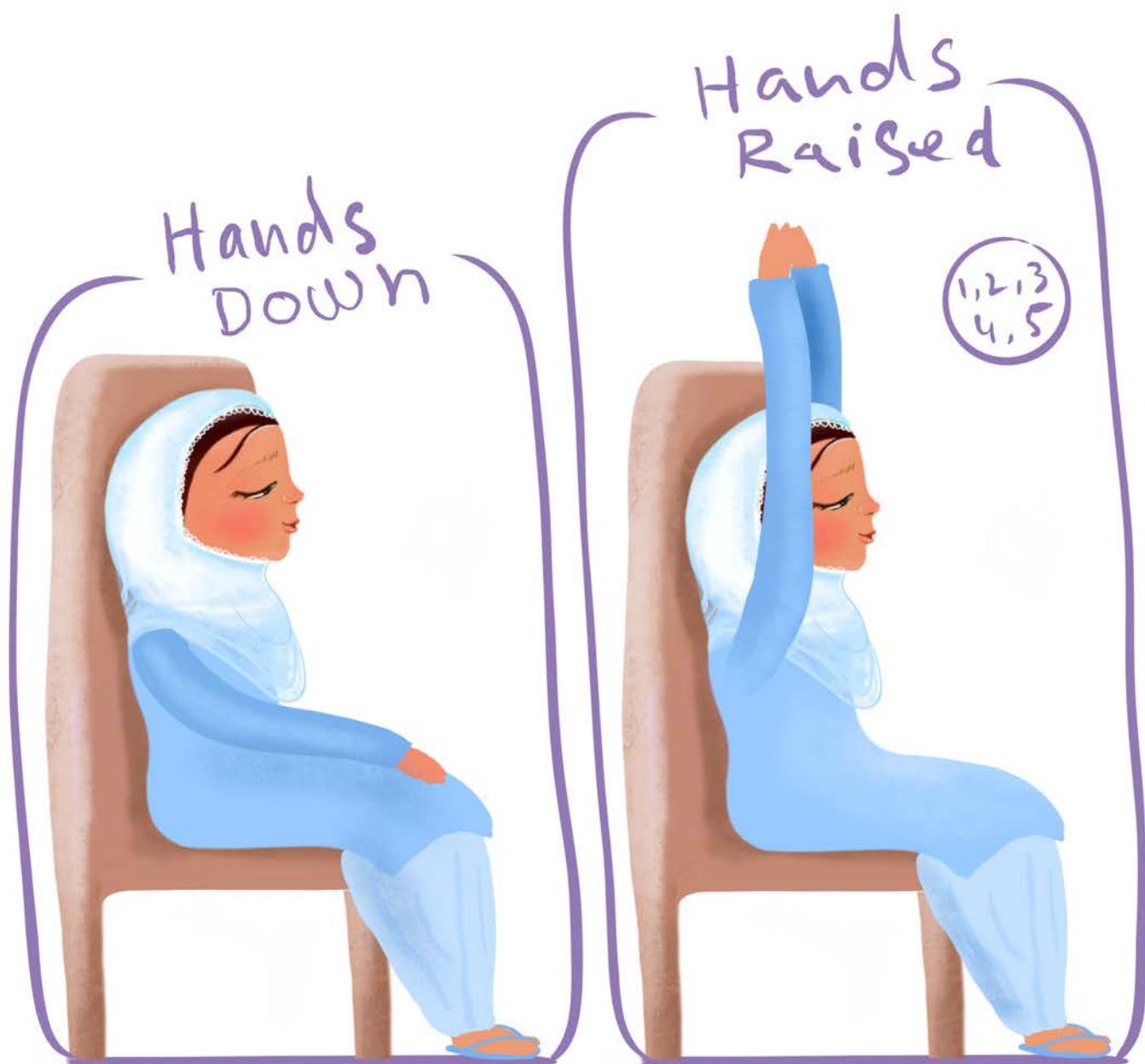
Place both hands on your chest. Breathe in slowly through your nose, close your mouth and count 5 and gradually take your breath out of your mouth.



# Postnatal Exercises

## 02: Interdigital Exercise

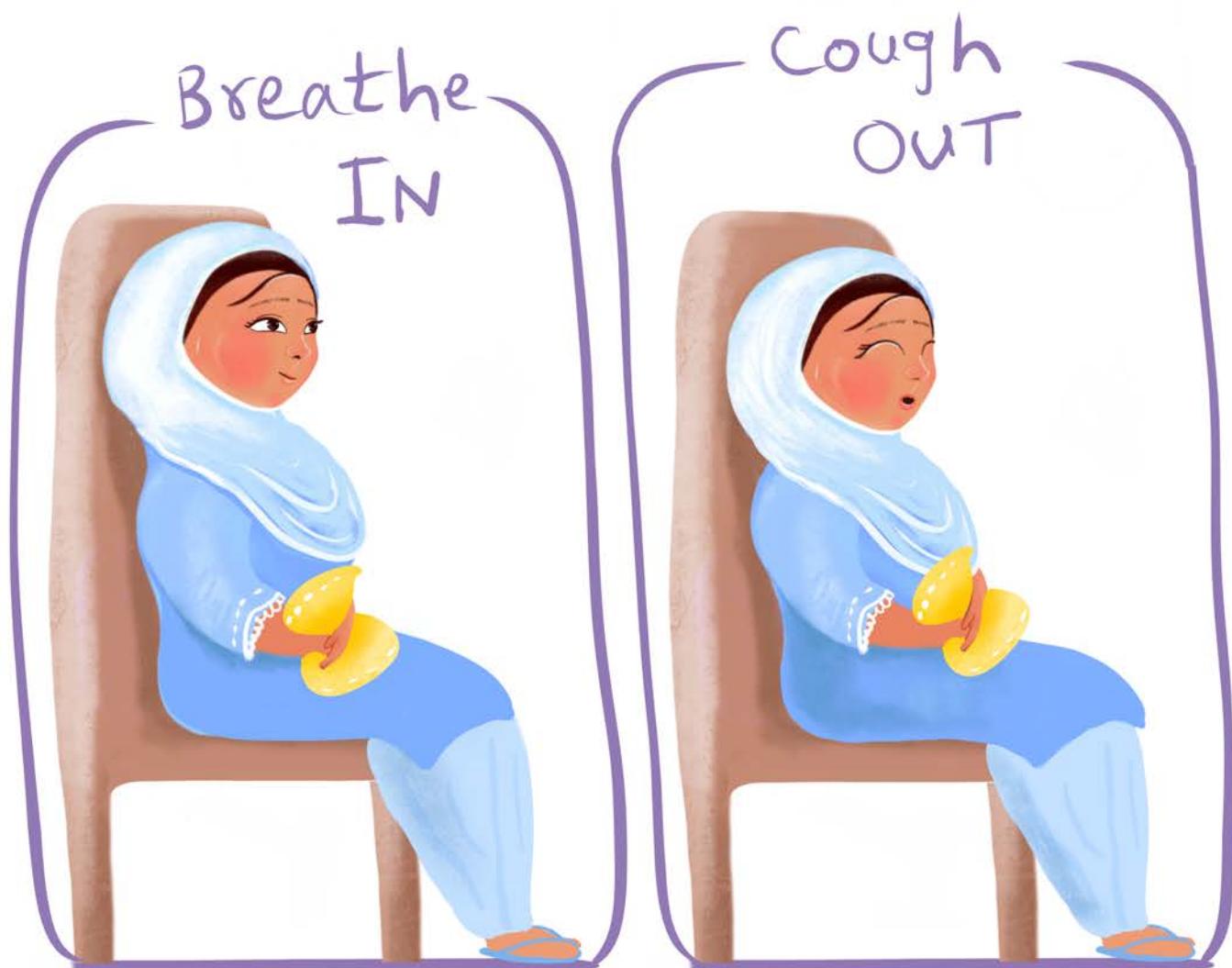
Clasp your hands together and raise above your head. Count 5 and then bring them down together along with deep breathing.



# Postnatal Exercises

## 03: Coughing

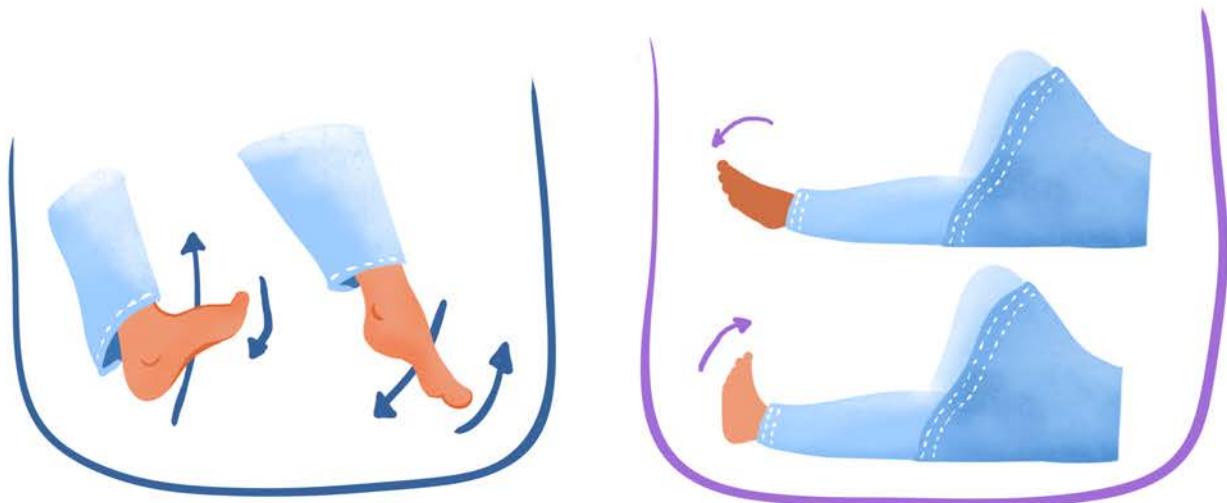
Put your hands firmly with a towel or pillow on your stitches and breathe in through your nose and cough forcefully.



# Postnatal Exercises

## 04: Calf Stretching

Move your ankle up and down in sitting and lying position



## 05: Cross Leg Stretching

Place one leg over the other leg above the knee and move your ankle up and down.



# Postnatal Exercises

## 06: Kegal Exercises

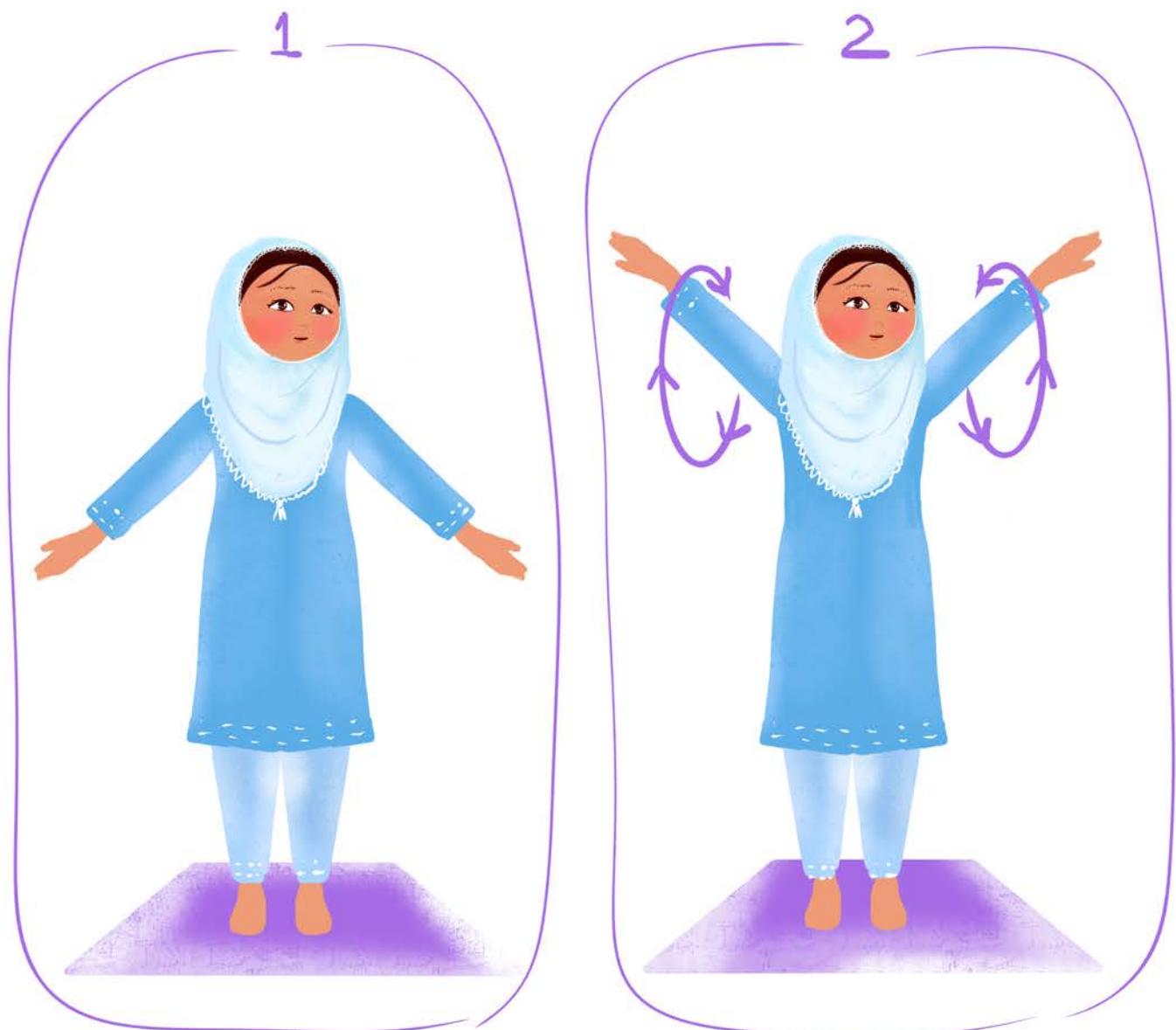
Tighten your pelvic floor muscles and do not hold your breath or tummy tuck



# Postnatal Exercises

## 07: Shoulder and Breast Stretching

Clasp your hands together and move them in front and back, rotate your arms.



# Postnatal Exercises

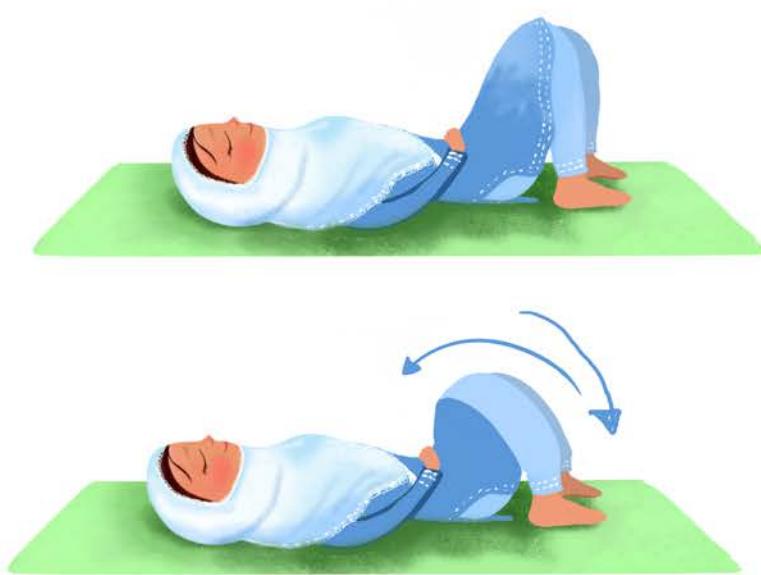
## 08: Abdominal Tightening

Lay down flat on your back, place hands on your tummy and breathe in. Count 5 and release.

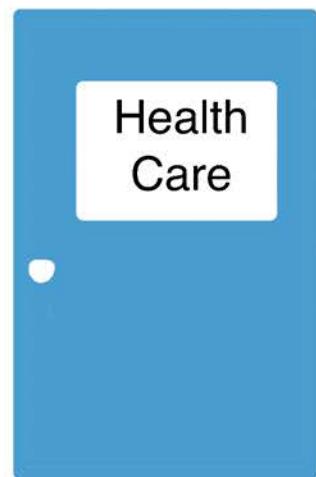


## 09: Pelvic Rolling

Lay flat on your back. Bend your legs up and move lower side of your body to either side.



# Go to a doctor!



- ⌚ Excessively feeling down and hopeless
- ⌚ Extreme bleeding
- ⌚ Infection/abscess
- ⌚ Fever, and chills
- ⌚ Non-stop vomiting



# You Can't Look After Your Baby If You Don't Look After Yourself



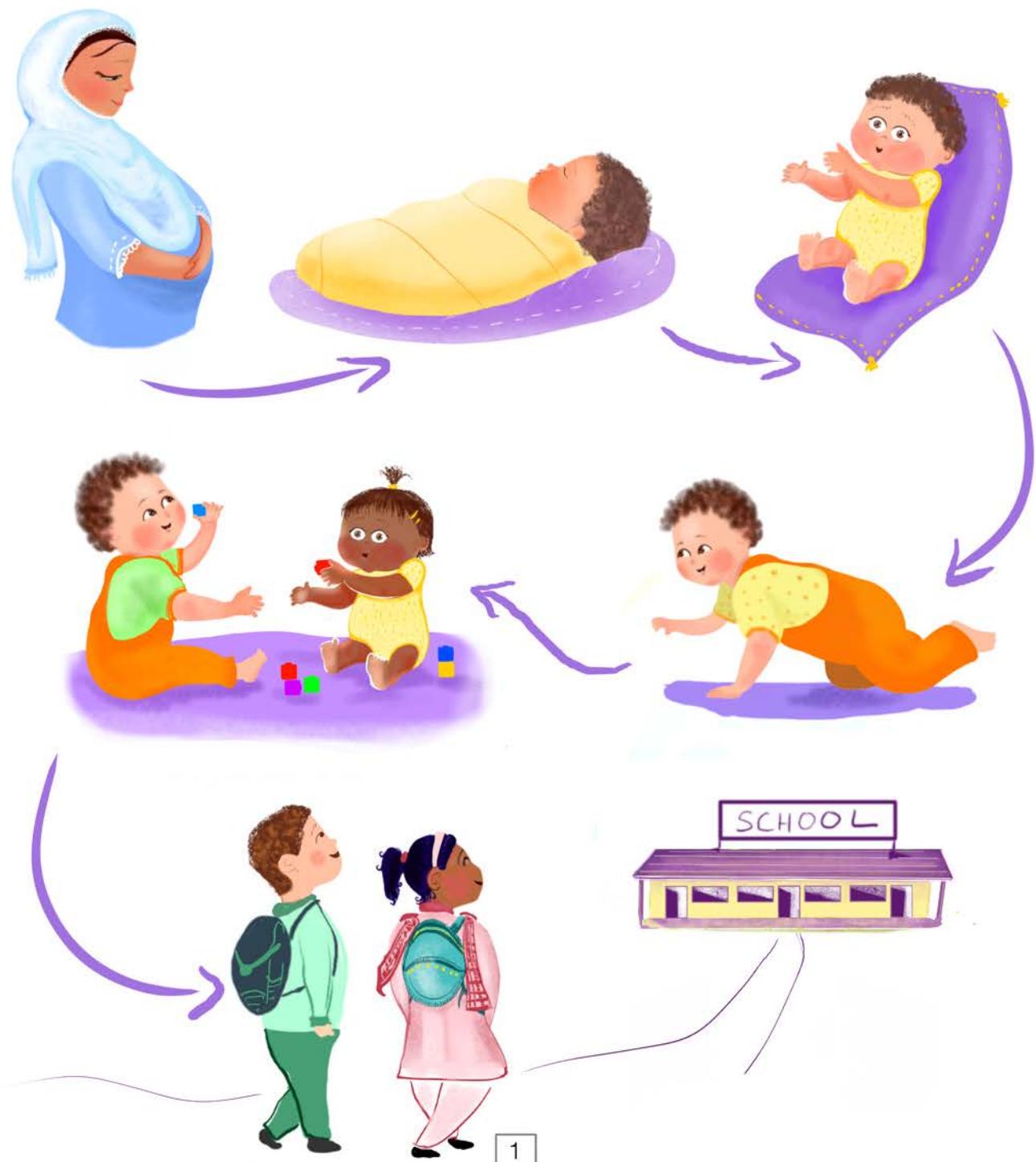
# **Module 5:**

# **Neonatal Development**



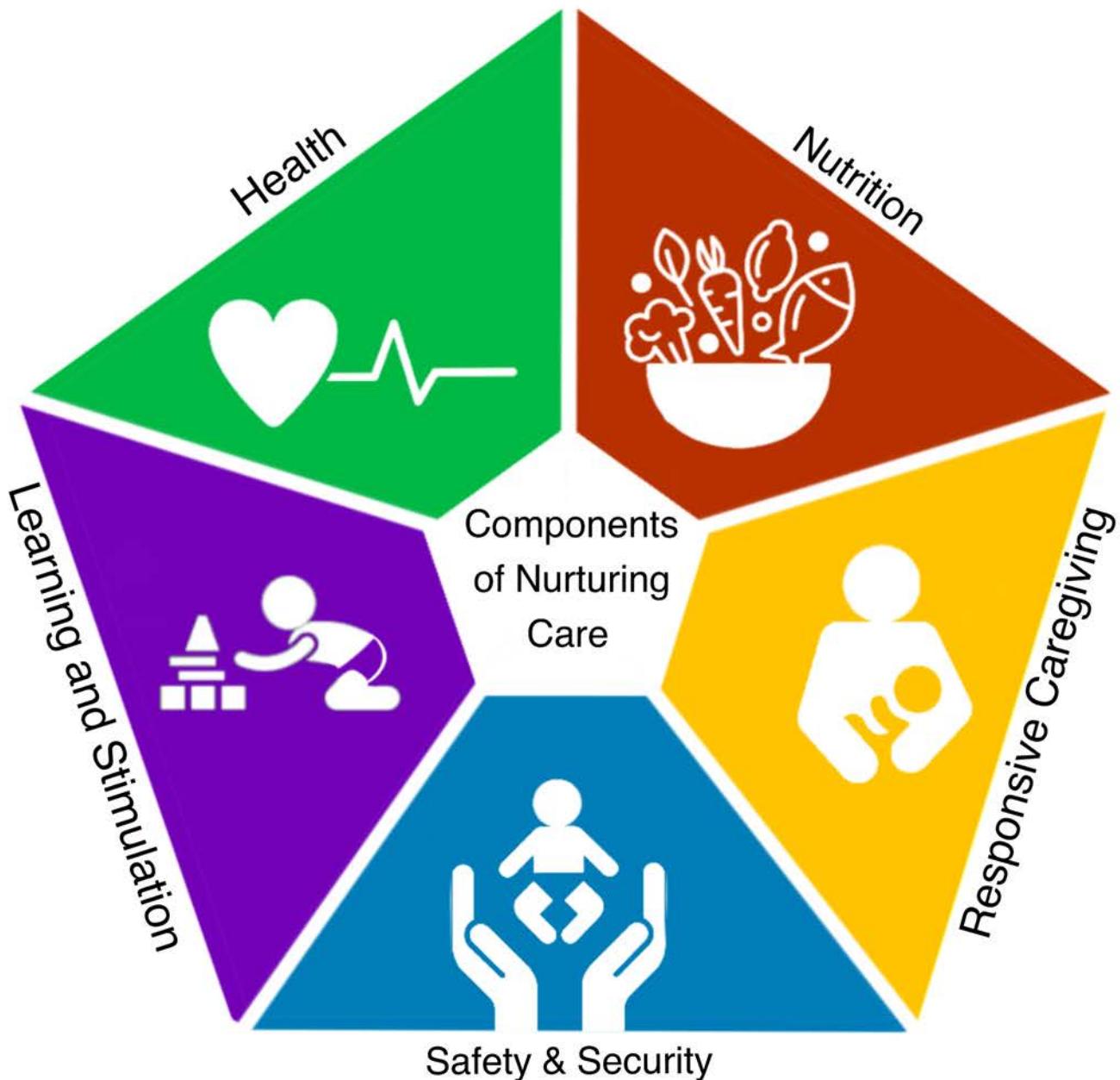
# What is ECD?

ECD stands for early childhood development. It starts from conception to age 8. It lays the foundation for future development.



# What is nurturing Care?

It is a framework to support children to survive and thrive.



# Domain of a newborn



Psychosocial



Cognitive

Holistic  
Newborn  
Development

Physical



Language



# Neonatal Reflexes

Reflexes are involuntary movements present in newborns at the time of birth. These reflexes help to identify normal brain activity.



Tonic Neck Reflex



Grasp Reflex



Step Reflex



Crawl Reflex

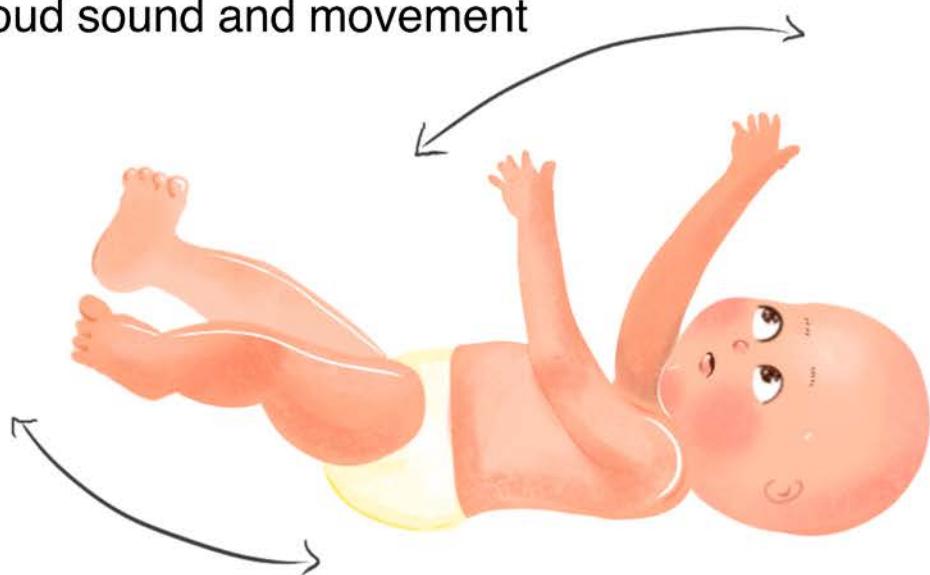
# Rooting Reflex

This reflex starts when baby is gently stroked at the side of the mouth. In response the baby turns on the side in the direction of the stroke.



# Startle Reflex

In this reflex the baby extends his arms and legs in response to loud sound and movement



# Grasping Reflex

In the reflex upon stroking the palm of the infant the baby closes his fingers to grasp.



# Spinal Galant Reflex

In this reflex the back of the infant is stroked in response to which the hip is curled upward.



# Curling Reflex

This reflex can last up to two years of age when the baby's toe is firmly strokes the big toe of the foot bends backward and other fingers fan out. This reflex is also called Babinski reflex.



# Developmental Milestones

## 0-8 weeks

- Can focus 8-12 inches away, just enough to see your face.
- Black and white patterns will draw their attention.
- Can lift their head briefly, turn their head when on stomach.
- Smiles selectively.
- Recognises the sound of Parents' voices.
- Uses vocalization to interact socially.
- Exhibit startle reflex to sudden noises.
- Begins to get fussy if the activity doesn't change.



## 3-6 months

- Grasps rattle and reach for objects.
- Distinguishes primary caregivers from others.
- Coos, squeals and gurgles.
- Smiles at people, looks at people when being played with.
- Follows moving things with eyes from side to side.
- Uses hands and eyes together.
- Pushes down on legs when feet are on a hard surface.
- Can hold head steady unsupported.
- Responds to name.
- Begins to pass objects from one hand to the other.
- Begins to sit without support.
- Rolls over front to back.

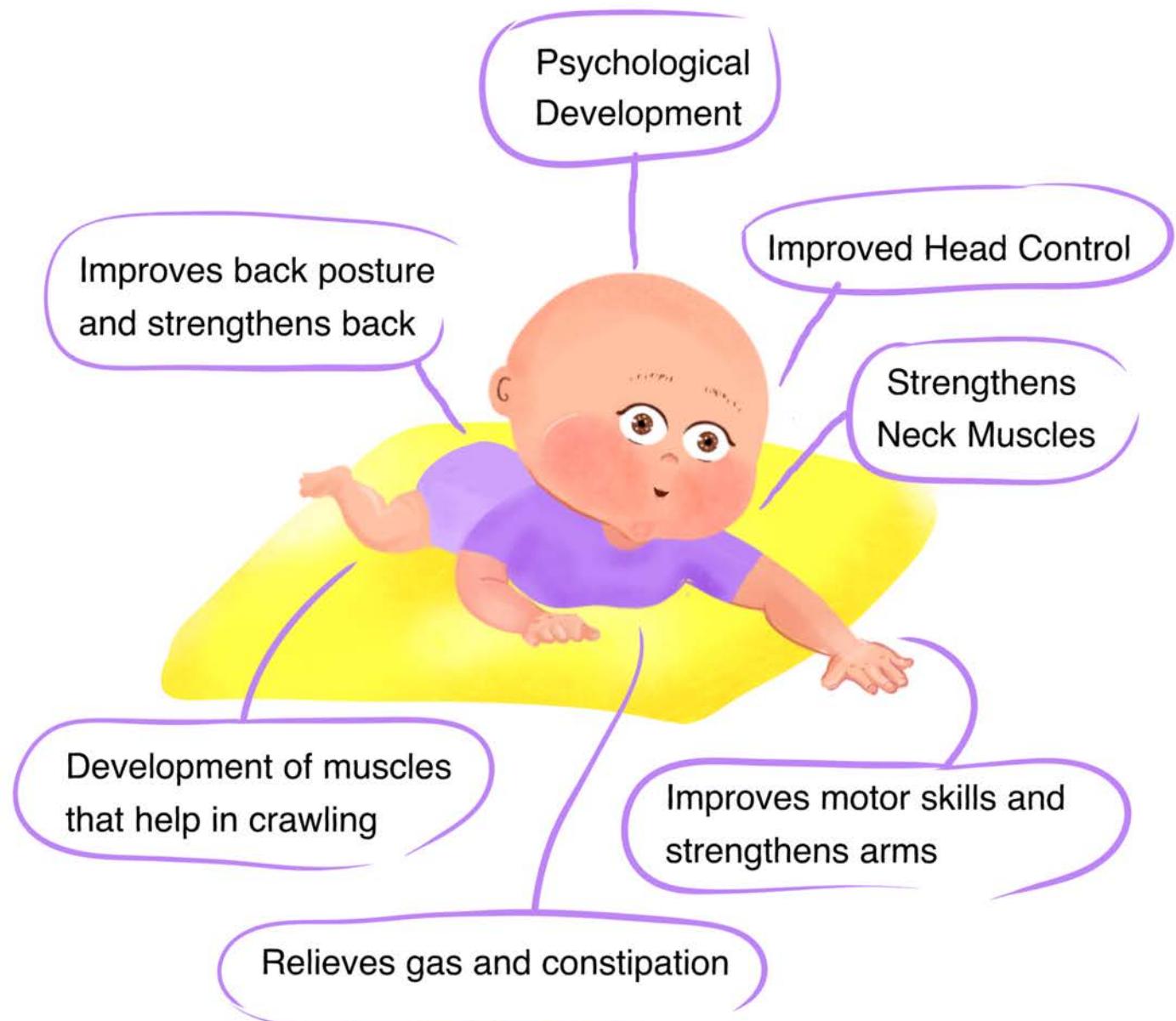


# Infant Massage

An effective baby massage is beneficial for infants in variety of ways which includes weight gain, improved sleep, relief from colic and constipation, mental, and physical health development. It also positively impacts the mother-infant bond.



# Tummy Time



# Baby Hygiene

Bathing hygiene is essential as it protects the baby from environmental germs and bacteria and helps to regulate baby's body temperature.

Baby hygiene includes:



Baby bath



Nail care



Cloth nappies/  
Diaper Care



Waste disposal

# Bathing

- Check the temperature of the water with your wrist or elbow.
- Try not to mix any kind of soap or cleanser in the water before one month. Plain water best for the skin of baby.



- Wash baby's hair with plain water and a mild shampoo while closing both the ears with your fingers.



- Now gently placing the baby in the bathtub you are using while supporting the head, neck and shoulder of the baby, clean the body.
- Keep baby head out of the water.



# Diaper Care

Timely diaper changes protects the baby from rashes.

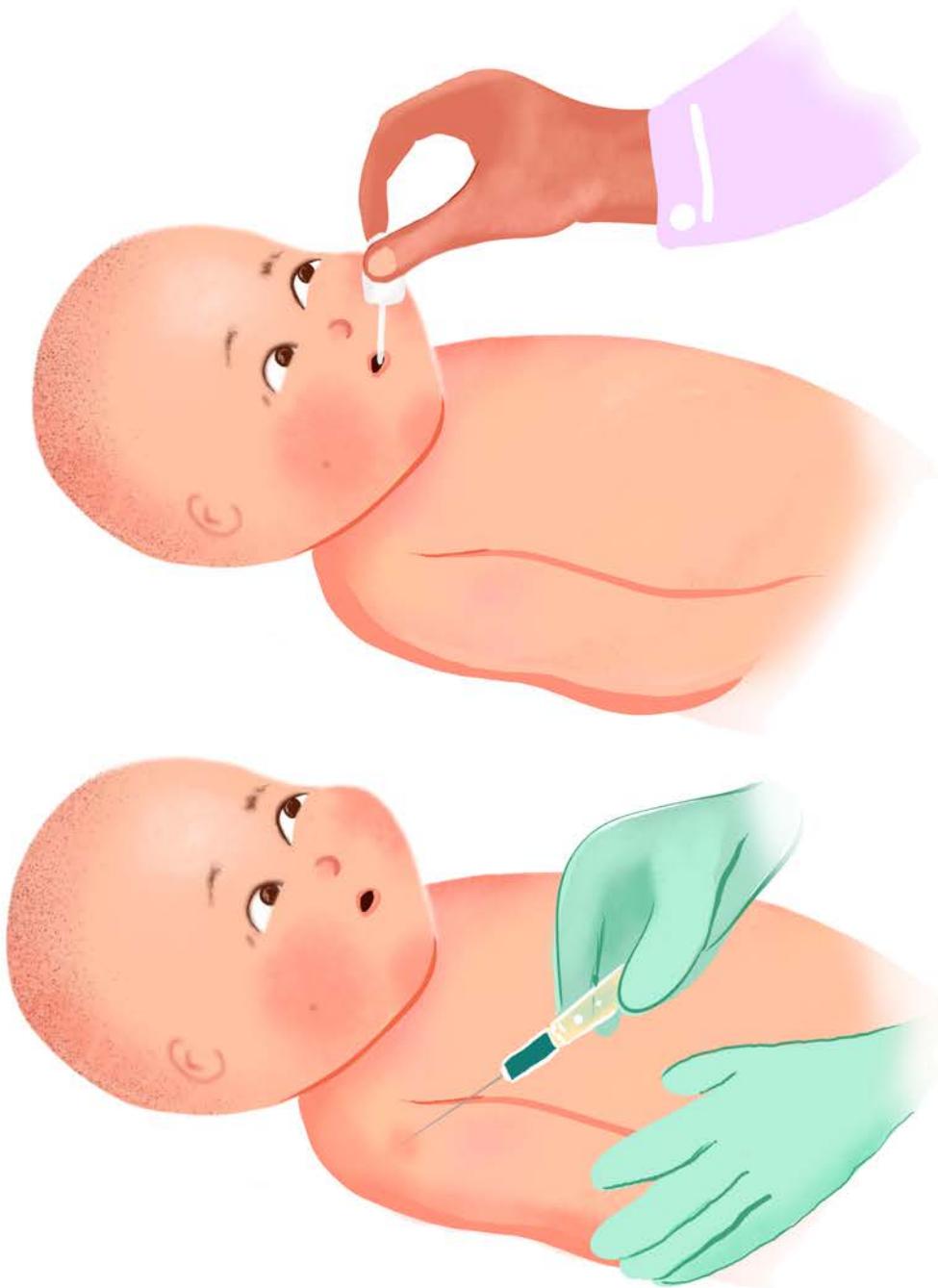


# Waste disposal



# Newborn Vaccination

The newborn immune systems is not fully developed therefore vaccination helps newborn's immune system to learn to fight against different diseases.



# Tips for taking care of a Newborn Baby



Hold your baby with care



Keep hand sanitizer handy



Help your baby latch On during breastfeeding



Make the baby sleep on the back



Tend to diaper duty timely



Give only sponge baths in the Beginning



Apply moisturiser often



Give full body massages

# Infant Sleep - Quick Facts

- Newborns sleep 14-17 hours a day in short periods.
- Newborns spend 50% of their time in each sleep state.

Wake time per age	
Newborn	30 mins-1 hour
2 months	1 hour-1.5 hours
3 months	1-2 hours
6 months	2-2.5 hours



# How to Modulate Infant Sleep?

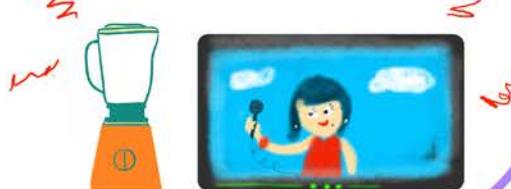
Encourage daytime naps



Consider co-sleeping



Address potential sleep disruptors



Create a soothing sleep environment



Develop a consistent sleep routine



Unwrap the baby to wake them up



Reposition the baby to wake them up



Use gentle sleep training methods such as rocking or patting the baby to sleep



# **Cleanliness and Health are Secret to Happy Family**



# Module 6: Responsive Interactions and Attachment



# Attachment

- Early attachments work as a safety net for young children.
- Through secured attachments baby develop trust.
- They learn to self regulate.
- It helps them to grow and become independent.



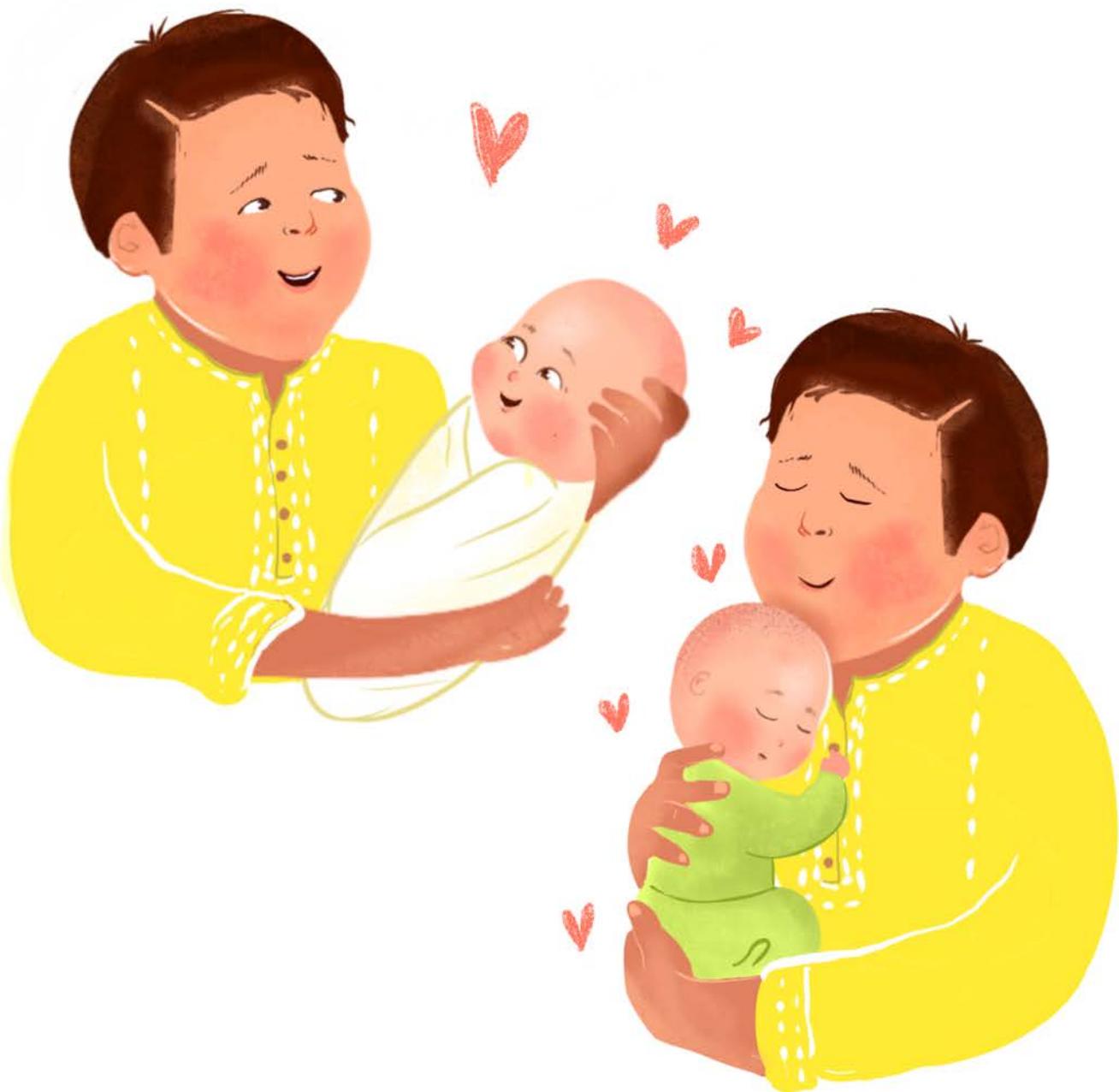
# Parent-Child Attachment

The capability of parents to perceive and react to their newborn's needs and attention positively impacts the parent-child relationship and attachment.



# Father's Engagement

Fathers' involvement in children makes them more empathetic, better-adjusted, less behavior problems, and they readily make good friendships.



# Father's Engagement

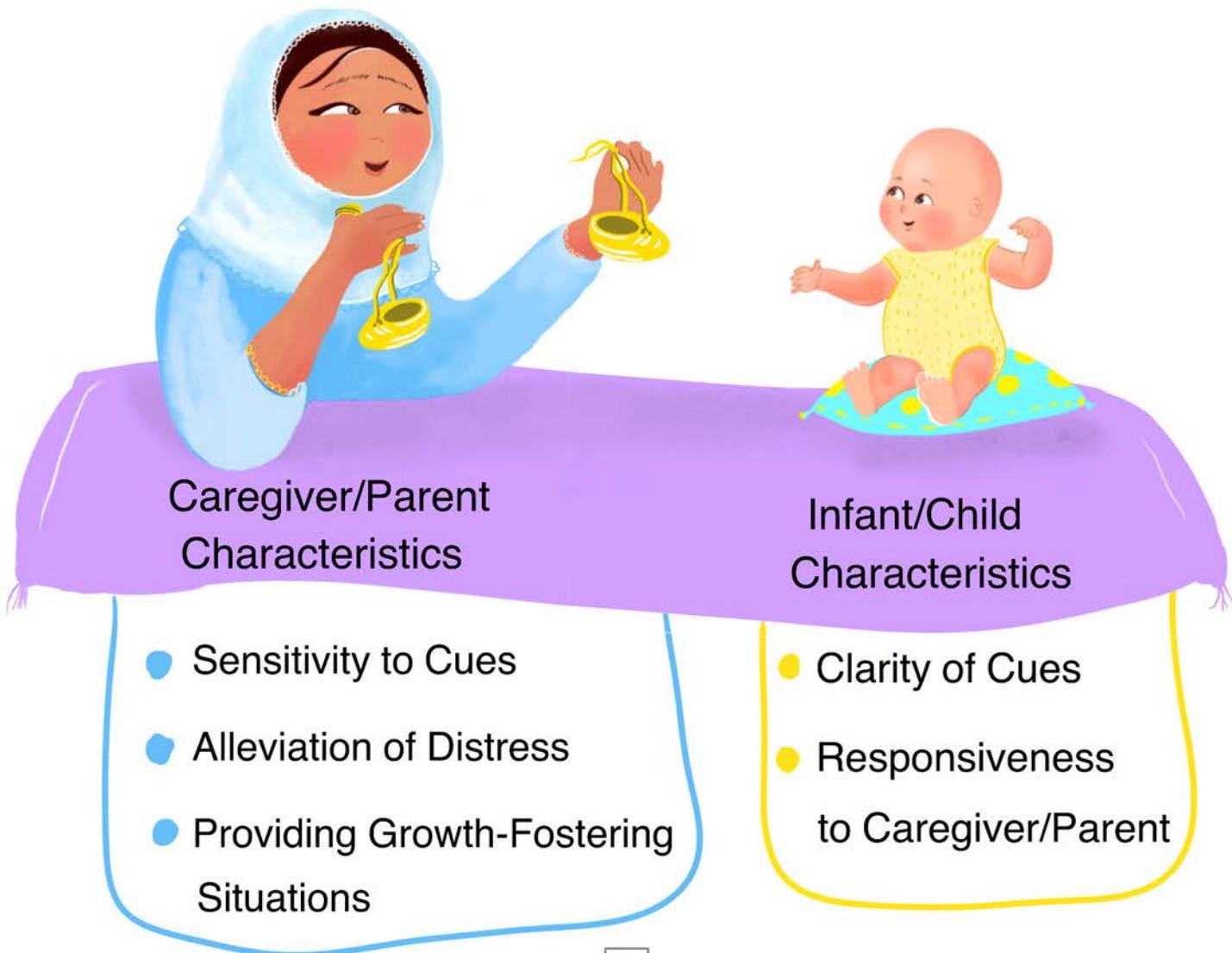
Father's engagement is essential in child development. It yields positive and growth promotive holistic development of the young child.



# Barnard Model

## (Parent-Child Interaction System)

Positive interaction by the care givers plays a potential role in the healthy development of an infant. If an infant does not receive the required amount of attention, affection, and care by the parent; his/her development may get negatively influenced.



# Parent-Child Positive Interaction

## Verbal Communication

- Tone of the voice
- Words
- Language that your child understands



## Non-Verbal Communication

- Eye contact
- Facial Expressions
- Physical touch like hug and gentle strokes



# Characteristics of Parent-Child Interaction

Affect

Positioning

Verbalness

Social Support

Praise and Cheerleading

Growth Promotive Interactions (Feedback)



# Feeding interactions

1-Position the baby securely to ensure they can have eye to eye contact with you.



2- When feeding, provide positive, non-verbal communication.



### 3- Verbally communicate.

My lovely child.



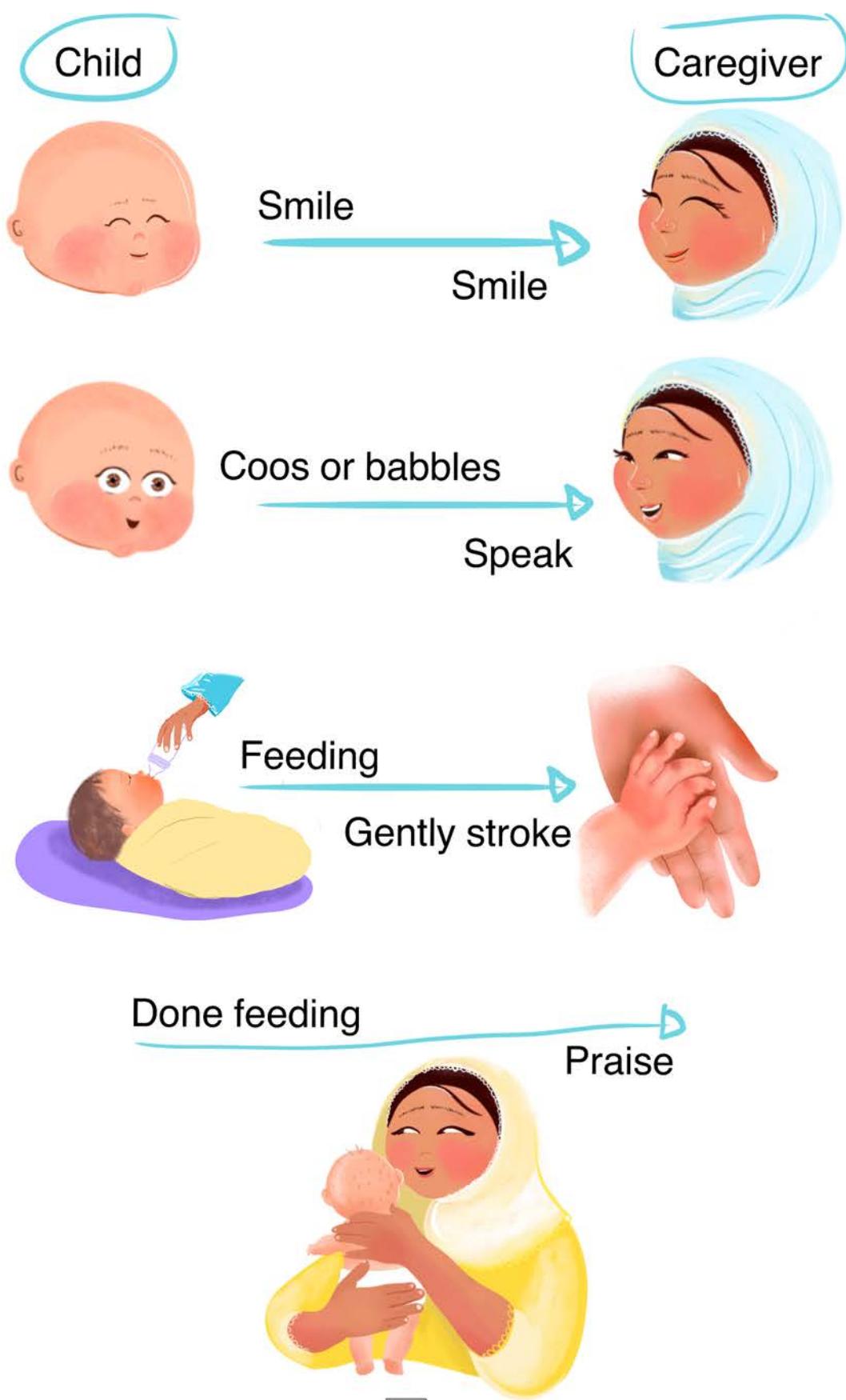
Today is so cold.  
We are freezing.



Well done!  
My baby finished the milk.



#### 4- show sensitivity to child's cues:



# Teaching Interaction

The teaching loop is a cycle of interaction between a caregiver and a child.

It involves five steps:



1-Alerting:

Show the material to the baby and get their attention.



2-Instruction:

Let the baby explore the material first and then share with the baby about the task to be done.



### 3-Performance:

Let the baby explore the material and perform the task and make cheerleading comments, positive comments, smile and talk to them comprehensively.



### 4-Feedback:

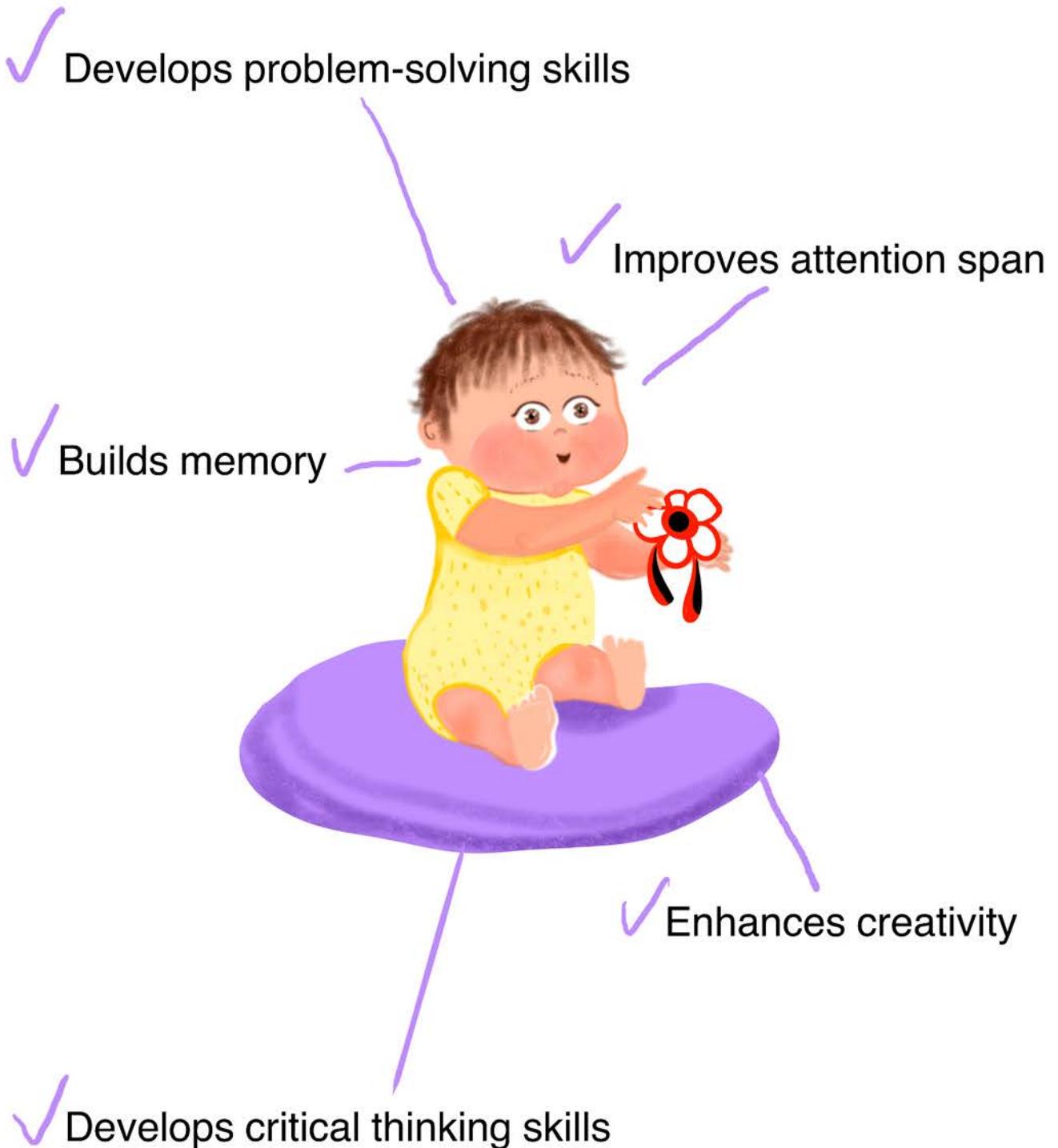
Share a positive feedback.



### 5-Windup:

Tell the child activity is over.

# How Can Teaching Loop Benefit Your Baby?



# Family Bond

In order to create a positive relationship of parent-newborn and sibling newborn it is essential that the family spends quality time together whether it be playing, learning or just reading a book together.





# **Reference and Bibliography:**

The content in the manual is adapted from a wide range of sources; mainly from UNICEF, WHO, Nurturing Care, CDC etc. For a detailed bibliography, please visit our website or contact [ecdprep@aku.edu](mailto:ecdprep@aku.edu)

We are also grateful for the capacity development support provided to the authors on Keys to Caregiving by Parent-Child Relationship Programs at the Barnard Center, University of Washington

Contact Details:

ECD PREP,

Department of Obstetrics and Gynaecology,

Aga Khan University

Tel: 021-348669715

Email: [ecdprep@aku.edu](mailto:ecdprep@aku.edu)

[shelina.bhamani@aku.edu](mailto:shelina.bhamani@aku.edu)

This material is compiled and designed by ECD PREP Team at Aga Khan University,  
This Curriculum (Version 2) is Adapted, Published and Printed as a part of grant support from:



## **Foundations for Health and Empowerment (F4HE) Early Childhood Newborn Parenting Project**