

## MODULE 4

### Strategies to Address Feeding Difficulties for Infants with Disabilities

#### 4.1 Addressing Feeding Difficulties Before, During, and After Feeding

**Time:** 145 minutes

**Preparation & materials required:** Slide Deck, flipchart, markers, dolls, blanket/cloth/scarf, MAMI Counseling Cards (generic or country-specific), applying strategies during feeding activity sheet & answer key.

**Objectives:** At the end of this module, learners will be able to:

- Apply MAMI breastfeeding support actions for infants with disabilities.
- Learn strategies for supporting infants with disabilities to breastfeed successfully.

#### Key message(s) to take away for learners:

1. Managing alertness and tone are important ways to support an infant before feeding.
2. A variety of breastfeeding positions may support an infant with disabilities to achieve and maintain good attachment during feeding.
3. MAMI breastfeeding support actions can be applied to support infants with disabilities and their mothers.
4. Infant feeding recommendations should aim to improve safe and effective feeding for both the infant and mother, always prioritizing the principle of "do no harm."
5. Understanding an infant's communication and cues equips mothers to provide responsive care and discern if their infant is getting enough or experiencing any discomfort after feeding.

#### Activity 4.1.1 (45 minutes)

Strategies to prepare infants with disabilities before feeding

Activity Summary	Key message(s)	Slides & Material(s)
Swaddling activity	1	Slides 143-151  Dolls, blanket, cloth or scarf for each doll

#### Instructions

- Introduce the module:
  - Once you have systematically looked at an infant's feeding and identified the issues, then you will have important information to help you select targeted interventions to address the feeding difficulties identified.

- We discussed how to investigate feeding difficulties by looking at key aspects of feeding during three parts: before feeding, during feeding, and after feeding. We will look at some key strategies to address challenges during each of these key parts.

### ***Managing alertness***

- Explain managing alertness:
  - Before feeding, one of the first areas of intervention is managing the infant's alertness.
- Facilitate a conversation about strategies to manage an infant's alertness using the following questions as prompts and then referring to the notes below to offer additional suggestions:
  - What kind of strategies do you use/recommend to alert a drowsy or sleepy infant?
  - What kind of strategies do you use/recommend to calm an agitated or crying infant?
  - What do you think would happen if infants with feeding difficulties are fed while sleepy/asleep? Why could this be a problem?
- Present the following strategies to help manage an infant's alertness:
  - You can help an infant transition to a better state for feeding by changing the environment or amount of stimulation the infant is given.
  - If the infant is drowsy or sleepy, then they may need to be alerted.
    - Try changing the environment, for instance, by turning on a light or moving to a space that is brighter. Or you can offer something to see, hear, or suck to help rouse the infant to a more alert state.
    - Other strategies to alert a drowsy or sleepy infant include removing layers of blankets, holding the infant upright and rocking gently side-to-side, and using firm but gentle pressure/damp cloth to touch the baby on the face, extremities or chest.
  - If the infant is very active, agitated, or crying, then they may need to be calmed.
    - Try dimming the lights, moving to a space that is more dark or shaded and not so bright, or removing distractions (e.g., visual and sounds) to promote a calm, quiet state.
    - Other strategies to help calm an infant include wrapping the infant in a cloth (swaddle), skin to skin, or gently patting the infant's back rhythmically (avoid bouncing).
  - Many infants, especially in the first few months, will still suck on the breast in a drowsy state. For infants with feeding difficulties, however, feeding when drowsy or sleepy may make it difficult to achieve good attachment and increase risk for aspiration. In addition, the infant is not actively engaged and learning feeding skills when feeding in this state.

### ***Managing tone***

- Explain managing tone:
  - Managing tone is an important strategy to support safe and effective breastfeeding for infants with high or low muscle tone.

- Present information about good positioning and managing tone:
  - A developmentally supportive position for young infants with disabilities is a flexed position with the arms at midline.
  - All infants need support for good positioning during feeding, but infants with high or low muscle tone may need extra support to maintain a good body position for feeding.
  - Unlike older children, infants' body structures for feeding and breathing support feeding in a semi-reclined position. However, feeding an infant lying flat on their back can lead to increased risk for ear infections, choking, and aspiration.
  - During feeding, infants with high and low tone should be held with the body fully supported. The infant needs to focus on breastfeeding and use energy for this, rather than for maintaining their position. A good position will help the infant to achieve a good latch and feed effectively. The key parts of the body for positioning infants during feeding are the head, shoulders, and trunk:
    - *Head:* Supported in a neutral position with chin slightly tucked towards the chest and resting in the middle, not turned to one side or the other.
    - *Shoulders:* Relaxed and symmetrical, the same on both sides.
    - *Trunk:* Elongated, not leaning to one side, curved forward or arching back, and in a straight line from the hips.
  - **Swaddling** (with one cloth) can be an effective way to provide stability and additional support during feeding for infants with low and high tone. Swaddling is often recommended for young infants, especially in the first few weeks of life, to help calm and soothe them. Because swaddling is often used to soothe infants, this strategy may not be helpful for some infants who tend to be very sleepy during feeding.

**Activity (25 minutes):**

- Ask for a volunteer to demonstrate to the group how to swaddle an infant.
- Present the following steps to support proper swaddling:
  - Spread a blanket out flat with one corner folded toward the center of the blanket.
  - Lay the infant, face up, on the blanket with their head above the folded corner.
  - Use the blanket to snugly wrap the infant. Bring the infant's arms toward the middle of the chest. Fold one side of the blanket over the infant's body and tuck it under the other side.
  - Bring the bottom corner up over the infant's feet. Make sure the hips and feet can move and that the blanket is snug, but not too tight.
  - Wrap the remaining corner across the body and tuck it under the infant's body. You want to be able to get at least two to three fingers between the infant's chest and the swaddle.
- Divide participants into groups and provide each group with a doll and a blanket or cloth.
- Provide these key reminders:
  - Do not swaddle too tightly around the infant's chest, legs, or hips.
  - Do not swaddle with a heavy blanket.
  - Do not swaddle once the infant can roll over.
  - Do not swaddle during infants who are already drowsy while feeding.

- Ask participants to take turns swaddling the doll until everyone in each group has had a chance to try it. Walk around the room offering support as needed.

### ***Non-feeding suck***

- Explain non-feeding suck:
  - The final aspect that we looked at with the Feeding Difficulties Checklist before feeding was the non-feeding suck.
- Present information about one possible strategy to support non-feeding suck:
  - Infants with feeding difficulties may need support to initiate sucking or to maintain rhythmical sucking. Sucking can improve with practice. In fact, research has shown that practicing non-feeding sucking can support an infant to improve sucking for feeding, too.
  - Introducing sucking on a clean, gloved finger or a gloved finger dipped in breast milk, can help the infant to practice sucking skills. (*Note: proper hygiene is critical for this strategy*)
  - Begin with a gloved finger. Gently stroke the infant's tongue or palate to initiate a suck. Some infants may benefit from dipping the gloved finger into breast milk to elicit a stronger suck. *Please note: if you are unable to elicit a suck at all despite multiple attempts, referral to a medical provider for additional assessment may be necessary.*
  - Once the infant is active and continuously sucking on the finger with organized and coordinated sucking, try breastfeeding.
  - Some infants may benefit from this "practice" for several feeds.
- Conclude this section:
  - Ask a few participants to share a brief summary of something new they learned or something they understand differently.

#### **Activity 4.1.2 (60 minutes)**

Strategies to support infants with disabilities during feeding

Activity Summary	Key message(s)	Slides & Material(s)
Demonstrating/describing breastfeeding positions  Applying Strategies During Feeding Brainstorm (option 1 & 2)	2, 3, & 4	Slides 152-162  Dolls  MAMI Counselling cards: A1-Good positioning & attachment (Kaarkas A1 & A2), A2-Effective suckling (Kaarkas A3)  Mod04_Handout_Breastfeeding Positions  Mod04_ActivitySheet_Applying Strategies During Feeding

		Mod04_ActivitySheet_Applying Strategies During Feeding Answers
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## Instructions

- Introduce this section by reminding participants that during feeding, there are three key areas that we will focus on: latch, sucking, and swallowing.

### **Latch**

- During feeding, the first aspect we will discuss is latch or attachment.
- Present information about good attachment:
- A good latch is necessary for effective extraction of milk from the breast. A poor latch can increase the amount of air the infant swallows and can cause pain and damage to the mother's nipples.
- Positioning can be an effective way to support improved latch. Some breastfeeding positions may work better for specific conditions or circumstances. However, different mothers and infants may have different experiences depending on breast size, milk flow, and the infant's skills, so it is good to encourage mothers to try different positions to identify their most successful option.

### **Activity (10 minutes):**

- Show each position named below using the images in the PowerPoint slides.
- Invite a participant to volunteer to demonstrate the position that is pictured on the slide. Then use the content below to name and discuss each position:
- *Note: For reference, the following positions are included on the MAMI counselling card for Good Attachment-A1 (MAMI Kaarkas A2): cradle hold, under arm, cross cradle, reclined, or side lying.*
  - *Cradle hold:* this may be the most familiar position, but it gives the mother less control of the infant's head. It works better when the infant is bigger and easy to handle or has already learned to breastfeed effectively. It does not work as well for small infants, infants that need additional positioning support, or if the mother's breasts are large.
  - *Underarm:* this position gives the mother a good view of the infant's attachment. It works well with infants with very low tone (floppy) or infants with tight or small jaws. This position gives the mother good control of the infant's head to help achieve and maintain a good latch.
  - *Cross cradle:* this position supports the infant's body well and gives the mother more control of the infant's head position. It often works well for infants that are small or in need of additional support for body position. The mother is able to provide support along the infant's body to help promote and maintain a good latch.
  - *Reclined:* this position is good for skin to skin and closeness that can help calm the infant. In addition, gravity may help the infant to attach deeply in this position.
  - *Side lying:* this position helps mother to rest while breastfeeding. The infant's nose should be level with mother's nipple, so that they do not need to bend their neck to reach the nipple. This position works well for infants who are larger.



- *Upright (not shown in counseling card)*: The mother holds the infant upright, facing toward her breast. The mother should provide plenty of support to the infant's body. She places the infant on her lap or with legs straddling the mother's thigh. This position works well for older infants, but when provided with adequate support, it can also be helpful for smaller and younger infants with difficulty coordinating sucking and swallowing, frequent reflux, tongue tie, or low tone.
- Distribute handout on breastfeeding positions to participants.
- Check for questions and clarify understanding before continuing to the next section.

### ***Sucking***

- The next aspect we will look at during feeding is *sucking*. You are familiar with the supports and key messages to support effective sucking from the MAMI counselling cards (A2-Effective suckling or MAMI Kaarkas A3).
- Explain:
  - When you complete an Infant Feeding Difficulties Checklist, and you identify additional concerns with sucking, such as weak suck, disorganized suck, long pauses, poor endurance, or wide-open jaw movements, then some additional strategies may be helpful to support effective feeding.
- Today, we will discuss two strategies to address some of these concerns with sucking: breast compression/massage and the dancer hold. Present information about each of the strategies:
  - *Breast compressions/massage*: If the infant has a weak suck or uses long pauses, try using breast compressions or massage to stimulate milk flow. Breast compressions should be tested before the infant is on the breast to know how much milk flow it may generate. Too much milk flow for an infant that cannot coordinate sucking and swallowing could increase the risk for aspiration.
  - For breast compression, instruct the mother to use one hand to gently squeeze the breast.
  - For breast massage, instruct the mother to massage her breast with downward and inward strokes. For some infants, alternating massage at the base of the breast with the infant's bursts of sucking can increase efficiency.
  - *Dancer hold*: (Note: this position is also called "Dancer hand" or "Dancer position") This position can help an infant to achieve and maintain a complete seal. If the infant is using wide-open jaw movements, use the dancer position to support the infant's jaw and cheeks.
  - Instruct the mother to use one hand to support the breast with four fingers on one side and her thumb on the other. Have her slide the hand that is under the breast forward, so the hand is supporting the breast with three fingers rather than four. Tell her to form a U-shape with the thumb and forefinger to cradle the infant's chin and support the jaw and cheeks.
- Check for questions and clarify understanding before continuing to the activity.

### **Activity (25 minutes):**

- Divide participants into at least four small groups. Assign each group one of the following conditions:

- Down syndrome
- Cleft lip (*Note: we will discuss cleft lip and cleft palate at length in the next session*)
- Cerebral palsy
- Spina bifida/hydrocephalus

### Option 1:

- Distribute the Applying Strategies During Feeding Answer Key. *Note: In this option, you will only use the answer key and not the activity sheet.*
- Instruct participants to review the answer key and discuss the anticipated challenges during feeding, recommended positions & strategies, and the reasons for the recommendations. Each group will then have the opportunity to present what they learned to the large group and demonstrate the recommended techniques.
- Move about the room to answer questions as needed.
- Once groups have had the opportunity to discuss, invite each group to present about their assigned condition.
- Use the Answer Key to clarify or expand on the participant's answers.

### Option 2:

- Instruct each group to recall together some of the challenges during feeding that they might anticipate for an infant with the assigned condition. Based on their discussion, the group should agree on (1) which position(s) or strategy they would recommend a mother to try and (2) be ready to explain the reason for their recommendation.
- Distribute the Applying Strategies During Feeding activity sheet so groups can take notes about their discussions and what other participants share.
- Move about the room to answer questions as needed.
- Once groups have had the opportunity to discuss, invite each of the groups to share about their discussion including the strategies they would recommend and the reason they made that decision.
- There may not be a single correct answer for each condition. Use the Answer Key to clarify or expand on the participant's answers.
- Distribute the Answer Key as a handout.

### ***Swallowing***

- The final aspect during feeding we will discuss is swallowing.
- Present information about safety and swallowing:
  - Recall that a safe swallow involves the timely and coordinated movement of breast milk from the mouth to the stomach. A delayed or uncoordinated swallow may lead to aspiration.
  - It is important to note that when we recommend changes, we are aiming to improve safe and effective feeding for the infant and the mother. To do this well, we must always remember to **do no harm**. That is, do not accidentally make a situation worse with the changes you are recommending. Always be responsive to the infant's communication to ensure that the strategies or support actions are helping.
  - Here are a few tips to ensure that you support safe swallowing:
    - If the infant is not swallowing, do not feed orally and refer for further evaluation.



- If an infant is not pausing from sucking and swallowing to occasionally just breathe, instruct the mother to insert a clean finger in the corner of the infant's mouth to break the seal. This will make the infant pause and breathe.
- If the infant is often fatigued and having difficulty consistently when they are tired (e.g., always starts coughing as they get tired), try feeding the infant more frequently and for shorter durations.
- If the infant has persistent coughing or respiratory problems, referral for additional assessment may be necessary.
- Check for questions and clarify understanding before concluding this section.
- Conclude this section:
  - There are certain positions that may be well suited for particular feeding challenges. A good position is both comfortable for the mother and helps the infant attach well. However, there is no single correct way to position an infant for breastfeeding, so it may require trials to figure out what works best for each mother and infant pair.
  - Applying MAMI breastfeeding support actions for infants with disabilities can support mothers to address challenges during feeding.
  - Always be responsive to an infant's communication to ensure that the strategies or support actions are helping and being well-tolerated by the infant.

#### Activity 4.1.3 (40 minutes)

Strategies to support infants with disabilities after feeding

Activity Summary	Key message(s)	Slides & Material(s)
Group Discussion	5	Slides 163-169
Round Robin Review		Flipchart, markers

### Instructions

- Introduce this section:
  - Observing an infant's state after feeding and for signs of discomfort are an important part of the process of identifying feeding difficulties. We will now consider strategies to address challenges after feeding:
  - Supporting a mother to recognize her infant's cues is a key strategy to foster responsive care and improved feeding.
  - State: Infants will communicate when they are full or satisfied and they will communicate if they are experiencing stress, fatigue, or discomfort.

#### Activity (20 minutes):

- Facilitate a group discussion about signs that an infant is getting enough to eat, signs of fullness, signs of dehydration, and signs of discomfort.
- Use information below as needed to clarify or expand the conversation:
  - *Signs of getting enough:*



- Soiled diapers: Several bowel movements per day; yellow stools by day 4
- Wet diapers: 5-7 wet diapers per day by day 5 until about 6 months of age (*Note: Dark yellow or strong-smelling urine may be sign of dehydration*)
- Weight gain: Gaining  $\frac{1}{2}$ -1 oz. (14-28 grams) per day
- Mood and appearance: Calm/active when awake and satisfied after a feeding (not lethargic)
- *Signs of fullness:*
  - Encourage mothers to stop a feeding when the infant indicates fullness. This will reinforce the infant's communication skills and may help reduce discomfort from overfeeding.
    - Fullness cues say, "I'm done."
    - A relaxed body shows us the infant is calm and satisfied. This can include fists opening, arms lying low across the body, falling asleep with the body relaxed (not lethargic or fatigued).
- *Signs of dehydration:* A dehydrated infant needs urgent referral to a hospital for clinical care.
  - Infant has not urinated for over 6 hours
  - No tears when infant cries
  - Mouth feels dry and sticky
  - "Soft spot" on top of head is flat or sunken
  - Infant is acting confused
- *Signs of discomfort & Vomiting:* Infants may communicate discomfort in a number of ways including crying, agitation, and fussing. Vomiting frequently or in large amounts could mean the infant has had too much milk, they are not tolerating the milk or the amount, their gut is immature, they have reflux, or the infant swallowed too much air while feeding. Infants with feeding difficulties may experience vomiting more often. Frequent vomiting can cause infants to become sensitive to touch in and around the mouth and gag easily, leading to refusal to feed and dehydration.
  - For infants that vomit frequently:
    - Try increasing the frequency of feeds but feeding for shorter durations so the infant is likely to take a smaller volume each feed.
    - Position the infant upright after feeding for at least 10-15 minutes.
    - Avoid wrapping the infant tightly in a cloth or securing diapers too tightly, especially right after feeding.
    - Position the infant on the left side after feeding. (*Do not leave unattended*)
    - For some infants, referral for additional assessment may be necessary.
- Conclude this section with a review activity.

**Activity (15 minutes):**

- Tell participants, you will now play a game to review the strategies we have discussed to address feeding difficulties *before, during, and after* feeding.
- Instruct participants on how to play a Round Robin Review:

- Each one of you will need to recall one key message, fact, or point of interest about strategies to address feeding difficulties *before, during or after* feeding.
  - I will select a participant to begin the round and then each of you will present their comment one after the other.
  - Try to avoid repeating what someone else has shared before you.
  - If you present something that is inaccurate, we will take a moment to refine or correct your comment.
- Have participants stand in a circle or participate from their seats, depending on time and space available.
  - Allow participants 2-3 minutes first to think about their response. After a few minutes, begin the round robin by selecting a person to start the round.
  - *Note: If the group enjoys competition or is very large, you can divide participants into 2 groups and see who can complete a round first. Timing the game to see how fast they can complete the round may be a fun adaptation for some groups, too.*



### **Check before proceeding.**

These are the key messages for this module. Have these been explicitly addressed and learners appear to have a good understanding of them?

1. Managing alertness and tone are important ways to support an infant before feeding.
2. A variety of breastfeeding positions may support an infant with disabilities to achieve and maintain good attachment during feeding.
3. MAMI breastfeeding support actions can be applied to support infants with disabilities and their mothers.
4. Infant feeding recommendations should aim to improve safe and effective feeding for both the infant and mother, always prioritizing the principle of "do no harm."
5. Understanding an infant's communication and cues equips mothers to provide responsive care and discern if their infant is getting enough or experiencing any discomfort after feeding.

## **4.2 Strategies for Feeding Infants with Cleft Lip/Palate**

**Time:** 30 minutes

**Preparation & materials required:** Slide Deck, flipchart, markers, straws (or small pieces of paper).

**Objectives:** At the end of this module, learners will be able to:

- Learn strategies for supporting infants with cleft lip and palate.

**Key message(s) to take away for learners:**

1. Infants with cleft lip/palate may have difficulties with breastfeeding due to gaps in their oral structure(s) affecting suction and compression needed for efficient feeding.



2. There are a number of strategies before, during, and after feeding that you can use to support a mother to feed her infant with cleft lip/palate safely and effectively.

#### Activity 4.2.1 (30 minutes)

Understanding suction and compression

Activity Summary	Key message(s)	Slides & Material(s)
Simulation activity	1 & 2	Slides 170-177  Straws or small pieces of paper that can be rolled into a straw-like tube Mod 04_Handout_Feeding Infants with Cleft Lip and Palate

### Instructions

- Introduce this section by explaining that there are some feeding challenges that are unique to infants with cleft lip/palate. This section will focus on some key strategies to optimize breastfeeding for infants with cleft lip, cleft palate, or both.

#### Activity (10 minutes)

- Provide these key reminders:
  - Recall that during breastfeeding, both compression and suction are important for an infant to efficiently extract milk from the breast. The lips form a complete seal and the movement of the tongue help to create suction. At the same time, the tongue compresses the breast tissue by pressing it toward the top of the mouth.
- Provide instructions for participation in the simulation activity:
  - Today we are going to attempt to simulate the difference a complete seal can make. *Note: this exercise is only a simulation to build understanding of the concepts of suction and the impact an opening or gap can have on creating that suction. Breastfeeding and straw drinking are not comparable.*
  - Distribute straws (or small pieces of paper that can be rolled into a small tube or straw).
  - Provide instructions and demonstration:
    - Place the straw between your lips. Make sure to round your lips and make a complete seal around the straw.
    - Suck air into your mouth through the straw.
    - Place a finger on the opposite end of the straw while sucking to feel the suction created. Tell participants to take note of the suction.
    - Once everyone has felt the suction, instruct the participants to part their lips, so that they do not have a complete seal around the straw.
    - Suck air into your mouth without a complete seal of the lips.
    - Place a finger on the opposite end of the straw while attempting to draw air in and feel the difference in the suction created.
  - Ask participants to reflect on the difference between the two experiences.
  - Invite a few people to describe the experience and their reflections.
  - Tell participants that you would like them to try one more thing.

- Instruct participants to make a sucking motion with their mouth closed. If it is helpful, you can imagine you have a mint or hard piece of candy in your mouth.
  - Ask participants to describe the movement of their tongue during that sucking action.
  - Highlight how the tongue moves not only back and forth, but pushes against the top of the mouth/palate.
  - Explain that this should highlight the importance of the palate during breastfeeding.
- Conclude this activity by saying:
  - For infants with cleft lip/palate, an opening or gap in the oral cavity (e.g., lip or palate) reduces the strength of suction, making the extraction of milk from the breast more difficult.
  - Infants with a cleft palate do not have a surface against which to compress the breast.
  - So, you can see that when there is an opening or gap in structure, that is the lip or the palate, this could have a significant impact on an infant's ability to effectively and efficiently breastfeeding.
- Briefly remind participants of some of the feeding challenges that infants with a cleft lip/palate may experience:
  - Weak suck
  - Non-rhythmic suck
  - Swallowing too much air
  - Trouble maintaining a good seal
  - Gagging and choking
  - Milk leaking out of the nose. Sometimes milk can escape into the nose because of the opening in the palate, or if the palate muscle is weak.
  - May tire more easily and not nurse long enough; the intake of milk may be limited.
  - The feeding process can take a long time
  - May prefer the side without the cleft
- Present strategies to address feeding difficulties for infants with cleft lip/palate:
  - General cleft lip/palate recommendations:
    - Have mother apply a warm compress *before* breastfeeding using a warm, damp towel or a hot water bottle to help stimulate milk flow.
    - Stimulate flow of milk by using breast compressions or massage initially. Some infants may need continued breast compressions to increase the efficiency of feeding and reduce fatigue throughout.
    - Have the mother try breastfeeding in an upright position.
    - If the infant has a small jaw, they may benefit from feeding in reclined position (prone).
    - Burp the infant frequently. Keep the infant upright about 10 mins after a feed.
    - Increase the frequency of feeds and decrease the duration.
    - Instruct the mother to press the infant into the breast to support the latch and create a better seal.
  - Unilateral cleft lip:
    - Orient the cleft towards the top of the breast.



- Use the breast to fill the gap in the lip. This helps to create a better lip seal and an air-tight oral cavity.
  - Give the infant cheek support to decrease the width of the cleft lip (e.g., Dancer hold), or instruct the mother to occlude the gap with her thumb.
- Bilateral cleft lip:
  - Position the infant “face on,” or directly facing the breast (not to one side or the other), using an upright position.
- Cleft palate:
  - Position breast away from the cleft to have surface for compression.
- Present briefly about specialized feeders used in certain contexts:
  - If the infant is unable to breastfeed, alternative feeding methods such as cups, spoons, or tube feeding may be necessary.
  - In some contexts, where proper hygiene is possible and access to specialized equipment is available, specialized infant feeders or bottles may be used to feed infants before resorting to tube feeding. The slide contains images of specialized feeders. It is recommended to try several feeding strategies and cup feeding before using specialized bottles.
- Conclude this section:
  - Check for questions and clarify understanding.
  - Distribute Mod 04\_Handout\_Feeding Infants with Cleft Lip and Palate



**Check before proceeding.**

These are the key messages for this module. Have these been explicitly addressed and learners appear to have a good understanding of them?

1. Infants with cleft lip/palate may have difficulties with breastfeeding due to gaps in their oral structure(s) affecting suction and compression needed for efficient feeding.
2. There are a number of strategies before, during, and after feeding that you can use to support a mother to feed her infant with cleft lip/palate safely and effectively.

## 4.3 Other Feeding Considerations

**Time:** 90 minutes

**Preparation & materials required:** Slide Deck, flipchart, markers, dolls, small cups, drinking water, MAMI Counseling Cards, Global Health Media video, food that requires chewing (biscuit, bread).

**Objectives:** At the end of this module, learners will be able to:

- Explore alternatives to breastfeeding for infants with disabilities.
- Discuss considerations for complementary feeding for infants with disabilities.

**Key message(s) to take away for learners:**



**Save the Children**

1. Cup and spoon feeding may be appropriate alternative methods to feed infants with disabilities and require careful observation for readiness, skills, and any signs of difficulty or aspiration.
2. Tube feeding may be necessary for infants who are medically unstable, consistently not alert during feeding, show aspiration signs, or have poor weight gain and urine output.
3. If Infants can safely feed by mouth, follow this order: first breastfeed, then cup feed, and lastly tube feed.
4. At about 6 months, infants need foods beyond breast milk. For infants with disabilities, timely introduction of complementary feeding and developmental considerations are crucial.

#### Activity 4.3.1 (50 minutes)

##### Alternative methods for feeding

Activity Summary	Key message(s)	Slides & Material(s)
Cup feeding Simulation	1, 2, & 3	Slides 178-191  Flipchart, markers, small cups, water, dolls  MAMI counselling card: A 22 (Counselling Kaarkas A24) cup feeding  “Cup Feeding Your Small Baby” video from Global Health Media (0:00-5:06)

### Instructions

- Introduce this section by telling participants that you will discuss alternative methods for feeding, like spoon, cup or tube feeding for infants with disabilities.
- Facilitate a conversation about participants’ current practices around cup feeding:
  - Do you use cup feeding for some infants?
  - Describe some of the circumstances where you recommend cup feeding.
  - What guidelines do you have, if any?
  - If necessary, prompt additional details with questions like: Are all the infants cup fed? Is this before or after trying to breastfeed? When is it used instead of breastfeeding? How are the volumes determined?
- Listen to responses and note words or phrases to summarize the circumstances on a flipchart.
- Expand or clarify the conversation by explaining when to use cup feeding:
  - Cup feeding may be used when:
  - An infant’s mother is unavailable
  - An infant is alert and can suck but is unable to latch onto the breast
  - An infant is not able to effectively breastfeed or is only able to partially breastfeed

**Activity (10 minutes):**

- Tell participants:
  - You will watch a video clip that demonstrates cup and spoon feeding. (*Note: You can show the video and ask all the questions OR show the cup feeding first (0:00-4:32) and ask questions then show the spoon feeding (4:33-5:06) and ask the last question*)
- Explain the activity:
  - During the video, I want you to watch and listen carefully. Pay attention to what happens before and during feeding. Listen for information about signs that the infant is ready for cup feeding, the steps the mother should take, how the infant feeds from the cup, and how the infant signals they are done with feeding. After each part, I will ask you some questions.
- Write these key words/phrases on a flipchart as a reminder about the topics you will ask questions about: readiness, mother's steps before, how infant feeds, stopping signs, and spoon feeding.
- After the video has concluded, go through the questions and use the notes provided to support participants to answer each question:
  - When is the infant ready to cup feed?
  - If he can swallow milk without coughing, choking or turning blue.
  - What are some key steps the mother must take before feeding?
  - Practice first with guidance from a trained health worker.
  - Recognize the infant's feeding signals.
  - Wash hands
  - Pour milk into a small cup
  - Wrap the infant and position nearly upright.
  - During the first example, what do you notice in the video about the small infant's pace of cup feeding?
  - The infant pauses, sometimes for longer periods of time.
  - The infant laps the milk from the cup.
  - The infant controls moving the liquid into their mouth
  - During the first example, what signs did the small infant give that it was done feeding?
  - The infant held his hand up
  - The infant starts to fall asleep
  - Why does cup feeding help prepare the infant for breastfeeding?
  - It uses a similar tongue action.
  - When is spoon feeding a good alternative method to cup feeding?
  - According to the video, especially in the first few days when the infant only needs a very small amount of milk.
  - Spoon feeding is an alternative to cup feeding that can give the infant more time to swallow, as they can more easily take breaks between sips. This method could be used as an introduction to cup feeding to help the infant and feeder learn the rhythm of feeding and giving breaks.
- Explain that the MAMI Counselling cards outline key steps and tips for successful cup feeding, as well. Explain that these same steps and key messages are important when cup feeding an infant with disabilities. Additional consideration may be necessary depending on the infant's positioning, tone, feeding skills, and risk for aspiration.





- Present these key tips for successful cup feeding for all infants including infants with disabilities:
  - The infant should be alert and able to suck. Never cup or spoon feed a sleeping infant.
  - Use a small cup, such as a medicine cup (10 ml).
  - Position the infant upright. Never feed the infant lying flat on their back.
  - Present the cup to the infant's lips and bring the liquid to the rim of the cup.
  - Do not pour milk into the mouth!
  - Avoid applying too much pressure on the infant's lip.
  - Avoid putting the cup too far inside the infant's mouth.
  - Observe the infant closely for swallowing. If the infant is having difficulty coordinating sucking and swallowing, try offering single sips and moving the cup away from the mouth to observe for a swallow. As the infant can manage it, you can allow the infant to suck and swallow for 3 or 4 sips and then provide a short break.
  - *Cup feeding may be risky if not done correctly*, especially if the infant cannot control the milk in their mouth. Watch the infant closely for signs of aspiration and discontinue cup or spoon-feeding trials if signs increase or persist.
  - *Stop cup feeding immediately if:*
    - the infant is not responsive (e.g., no lips or jaw movement),
    - milk remains in the mouth then pours out (i.e., not swallowing), or
    - the infant is coughing, gasping, change in color.

#### **Activity (15 minutes):**

- Introduce activity by telling participants that they will now practice cup feeding together.
- Divide participants into pairs or small groups.
- Provide each participant with their own small cup.
- Instruct participants to practice cup feeding:
  - Use dolls to practice positioning an infant for cup feeding.
  - Use water to practice bringing water to the edge of the cup.
  - If comfortable, practice presenting water to each other by bringing water to the edge of the cup without pouring the liquid into their partner's mouth.
- After groups have had time to practice, bring the large group back together to discuss the experience.

#### ***Tube feeding***

- Tell participants that another alternative method of feeding is tube feeding.
- Facilitate a conversation about tube feeding practices that participants are familiar with:
  - Is tube feeding available in your health facilities?
  - When do you use tube feeding in your facilities?
  - How is the decision made to start or stop tube feeding?
  - What are the criteria?
- Listen to responses and, if appropriate, make notes or summarize on a flipchart.
- Present information about tube feeding:
  - An infant needs tube feeding if they are:
    - medically unstable

- consistently not alert at breast/cup, even after trial on gloved finger
  - showing signs of aspiration or respiratory distress while/after feeding
  - not gaining weight
  - not passing urine
- If an infant is safe to feed by mouth, but still needs tube or cup feeding, try the following sequence:
  - First, breastfeed.
  - Then, cup feed.
  - Lastly, tube feed.
- Conclude this section:
  - Ask participants to reflect on their experiences with alternative methods of feeding in the past and how these methods may also be used to support infants with disabilities.
  - Invite participants to share about their own reflections or remaining questions.

#### Activity 4.3.2 (40 minutes)

##### Considerations for Complementary feeding

Activity Summary	Key message(s)	Slides & Material(s)
Feeding Skill Experience	4	Slides 192-198  Biscuit, bread or other food that requires chewing

### Instructions

- Introduce this section:
  - Starting at about 6 months, infants need other foods in addition to breast milk. The timely introduction of complementary feeding at 6 months is important for infants with disabilities, too. For some infants with disabilities, additional considerations may be necessary when introducing complementary foods.
- Ask participants to name some key messages around introduction of complementary foods. Listen to responses and write briefly on flipchart.
- Use information below to expand or clarify the statements that participants share:
  - Refer to key messages from MAMI counselling card C7 – “Start complementary feeding at 6 months of age” (Kaarkas C8), which focuses on frequency, amount, thickness, variety, active/responsive feeding, and hygiene.
  - The World Health Organization (WHO) recommends timely, adequate, and appropriate introduction of complementary foods beginning at 6 months of age.
  - *Timely*: Refers to introducing foods when an infant needs more energy and nutrients than they can get from breastmilk or formula alone. When introducing new foods, it is also important to recognize a child's readiness and skill level to eat and drink safely.
  - *Adequate*: Refers to offering foods that provide sufficient energy, protein, and micronutrients to meet the child's nutritional needs.

- *Appropriate*: Refers to offering foods that are both safe and properly fed.
- *Safe* means foods are hygienically stored and prepared.
- *Properly fed* means that the child is fed appropriately for their age. That includes providing the appropriate texture and meal frequency, and using responsive feeding techniques. **Responsive feeding** is when the adult acknowledges and responds warmly to the infant's or child's communication of hunger, fullness, discomfort, or readiness.

#### Activity (5 minutes):

- Ask participants to stand up.
- Instruct participants to begin by rubbing their stomach.
- Then, while continuing to rub their stomachs, instruct participants to close their eyes, then balance on one leg, and pat their head.
- Ask participants to share their experience with the activity.
- Explain that while this was mostly just a silly task, hopefully it also reminds us how difficult it can be when we have many demands placed on us and how difficult it can be for an infant who is required to learn many new skills.
- Present additional considerations for infants with disabilities:

#### ***Readiness***

- An infant's readiness has to do with being equipped to learn and grow. This includes their willingness and confidence to advance to a new skill and a caregiver's responsiveness to the child.
- For feeding skills, this may include the infant's readiness to begin first foods or to advance food textures, that is to progress from easy-to-eat foods to food textures that require more skills.
- Readiness is an important factor in developing feeding skills and an important consideration when introducing complementary foods for infants with disabilities. The infant must be able to move their lips, tongue, and jaw to prepare the food to be swallowed safely and easily.
- Advancing a diet when a child does not yet have the necessary feeding skills can lead to gagging, choking, coughing, fear, and refusal to eat.
- It is important to look closely at the skills the infant has, and not just the skills we expect them to have at a certain age.

#### ***Positioning***

- How the child sits can have a big impact on safe feeding. Proper positioning helps the infant eat and drink safely and learn skills for more independence during mealtime.
- To introduce complementary foods, the infant should be able to sit with minimal support. When feeding first foods, make sure the infant is seated as upright as possible. Check that hips are steady and balanced, body is straight, head is upright, and feet are resting on a flat, firm surface.
- Provide additional support if needed. Some children are not able to maintain proper positioning on their own. Infants with disabilities that affect their body movement or posture may need additional support to make mealtime safer.

### ***Food textures***

- Select appropriate food textures when introducing complementary foods.
- *Puree*: smooth, without lumps and no chewing is required
- *Mashed*: *soft, lumpy, and thick*. May need to mash before swallowing
- *Soft and bite-sized*: soft and tender pieces, must be chewed before swallowing.
- A child who does not yet have the necessary skills to manage the texture provided may gag, choke, cough, become fearful, and refuse to eat.
- Select food high in energy and nutrients. Encourage mothers to offer their infant a diverse diet that includes a variety of foods.
- Mothers can prepare the foods in a texture that is appropriate for the infant's feeding abilities.

### **Activity (15 minutes):**

- Introduce activity:
  - We will experience and better understand the challenges a child may face if they are given food they do not yet have the skills to eat.
- Pass out food items for this activity.
- Tell participants that for this activity, they are going to try to eat as if they have the feeding skills of a typical 6-month-old infant.
- Remind participants of the skills they should have:
  - They can only move their tongue forward/back and up/down.
  - The tongue is not able to move the food to the side of the mouth to chew it, but it can only push the food against the top of the mouth.
  - The lips can come together, but do not form a strong seal so the tongue may push past the lips.
- Instruct participants to place a piece of food that requires some chewing (e.g., bread, biscuit) on the center of your tongue and try to eat it only with the skills of a 6-month-old infant.
- Give feedback if people are using more advanced feeding skills than you instructed them to.

Facilitate a discussion about what it felt like to be offered a food that was too challenging to eat.
- Conclude this section:
  - For infants with disabilities who may have delays in their feeding skills, consideration of their developmental skills and the textures of the foods being introduced are especially important for successful introduction of complementary foods.
  - Check for questions and clarify understanding.



**Check before proceeding.**

These are the key messages for this module. Have these been explicitly addressed and learners appear to have a good understanding of them?



**Save the Children**

1. Cup and spoon feeding may be appropriate alternative methods to feed infants with disabilities and require careful observation for readiness, skills, and any signs of difficulty or aspiration.
2. Tube feeding may be necessary for infants who are medically unstable, consistently not alert during feeding, show aspiration signs, or have poor weight gain and urine output.
3. If infants can safely feed by mouth, follow this order: first breastfeed, then cup feed, and lastly tube feed.
4. Starting at about 6 months, infants need other foods in addition to breast milk. Timely introduction of complementary feeding is important for infants with disabilities. Additional consideration for the infant's stage of development can help guide strategies for positive and support introduction of complementary feeding.