

Module 12 : Birth Asphyxia : Diagnosis and Early Management with Mucus Extractor

Session 2 : Managing asphyxia - Step 1 : Using the mucus extractor

Day : 3

Time Required : 2 hours

Purpose

To introduce the ASHA to the first step in the management of asphyxia : how to use the mucus extractor.

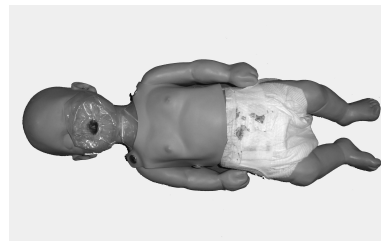
Objectives

At the end of the session the ASHA will be able to:

1. Explain the first steps to be taken at the birth of an asphyxiated baby.
2. Demonstrate correct use of the mucus extractor.

Materials

- Sterile mucus extractors.
- Life size rubber dolls (with open nostrils and mouth) or resuscitation mannequins (one for each small group of 5 ASHAs)
- Saucers or small plates
- Water for demonstration
- Reading Material 1 : Asphyxia Action Tree
- Reading Material 2 : Initial steps in asphyxia management
- Reading Material 3 : Skills Checklist: Using the Mucus Extractor



Resuscitation mannequin

Preparation

- Obtain and have ready the materials listed above.
- One sterile mucus extractor for each ASHA to practice, and 2 sets each to take home. Arrange for 3 mucus extractors for each ASHA.
- Have enough saucers or small plates for small groups.
- Ensure availability of adequate copies of Reading Material 1 and 2 depending on the number of trainees.

Training Methods

Presentation (30 minutes)

Instructions to Trainers :

1. Ask the ASHA's what they would do as soon as the baby is born. Listen to their answers. Responses should include *dry the baby, and wrap it in a warm and dry blanket*. This should be followed for all babies. Drying alone stimulates some babies to start breathing and no further action is needed.
2. Ask the ASHAs to explain what they would look for in the baby when they do the 30-second

observation. (Answer: *if the baby is crying, breathing and moving*)

3. Ask them what would do they do if the baby is crying and breathing normally? (Answer: *provide normal care, keep warm, place close to mother, start breastfeeding, etc.*)
4. Ask the ASHA to define asphyxia (from previous session). Praise correct answers and fill in any gaps.
5. Ask ASHAs to refer to Reading Material : The Asphyxia Action Tree.
6. Have the ASHAs read The Asphyxia Action Tree. Explain that if on breaking of the bag of waters the fluid is thick, yellow or green they should immediately clean the mouth cavity of the baby with gauze piece as soon as the head emerges without waiting for the complete baby to come out. ASHAs have learned this in the Training Workshop 2 and may have done this at the time of delivery. These are the initial steps in management of asphyxia. Review the steps given in the content box below.

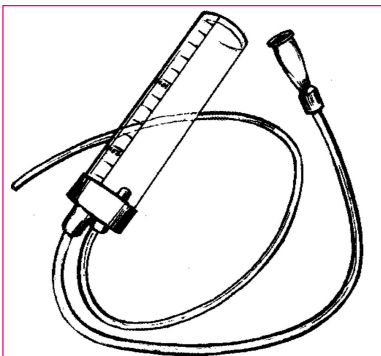
Content Box :

Initial steps after the baby is born

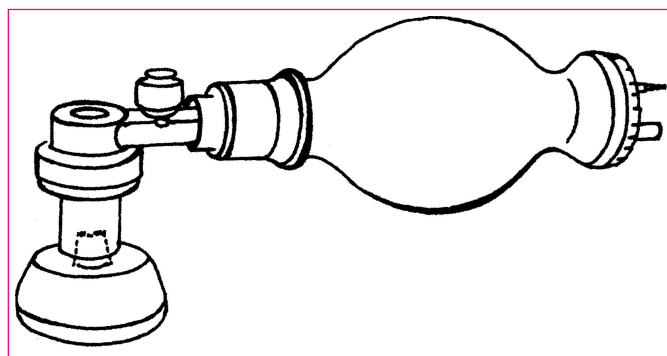
- Ask the mother about /observe the fluid after the waters break
- If the fluid is thick yellow / green, as soon as the head is seen (even before delivery of complete baby) clean the mouth of the baby with gauze piece
- As soon as baby is born note the time of birth and start counting time
- No cry, weak cry, no breathing, weak breathing or gasping - decision about asphyxia
- Dry the baby
- Cover the baby with cloth

7. Explain that if the baby is not crying or breathing or breathing weakly, or gasping, it has asphyxia and an action has to be initiated. This action to treat asphyxia is called **resuscitation**.

Illustration of mucus extractor and bag and mask



Mucus extractor



Bag and Mask

8. Explain the steps in resuscitation:
 - 1) **Dry and wrap:** Explain that the baby should be quickly dried with cloth and then wrapped in a dry cloth; sometimes this itself stimulates a cry and the baby starts breathing.
 - 2) **Use the mucus extractor:** If the baby does not cry after drying and wrapping, the next step for asphyxia is clearing secretions in the airway (mouth, throat and nose) so that the baby can inhale freely. For this, a mucus extractor is used. The baby's mouth is cleared and if the baby still does

not cry or breathe, the throat and nose are cleared.

- 3) **The cord need not be cut before the mucus extractor is used** (unless the cord is short and there is not enough space). If the mother delivers on a cot, it is good to place the baby on the floor below her so that blood in the placenta flows into the baby. If the mother delivers on floor, place the baby on the floor to the right side of the mother, with its head toward the mother's head.
 - 4) **Bag & mask:** If using the mucus extractor does not result in the baby crying or breathing, start using the bag and mask immediately. This is the 2nd step in managing asphyxia and will be discussed in the next training workshop.
9. Remind the ASHAs:
- If the baby is breathing and crying normally, the mucus extractor is not needed.
 - It is important to keep the baby covered and warm.
 - Once the baby starts crying and breathing normally, stop using the mucus extractor.

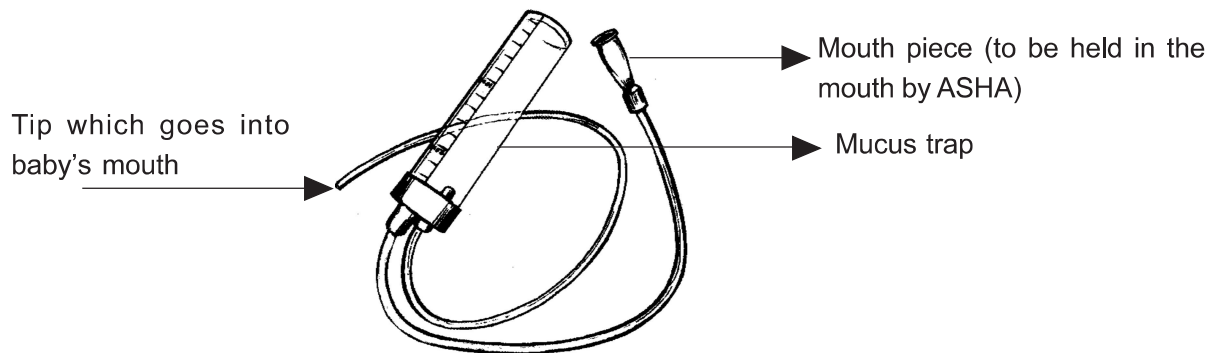
Demonstration (30 minutes)

Instructions to Trainers :

1. Show the (DeLee) mucus extractor and explain the main parts: plastic mucus trap container, plastic tubing from baby to mucus container, tubing from container to resuscitator's mouth (see Content Box).
2. Ask ASHAs to refer to the Skills Checklist for the Mucus Extractor, provided in Reading Material 2.
3. First demonstrate how the mucus extractor is used by sucking in some water from a saucer or a small plate.
4. Then demonstrate use of the mucus extractor on a life size doll. Read the steps out aloud as you perform each step.
 - 1) Place the doll in the proper position, dry and covered, lying on its back with the head slightly extended. Place a folded piece of cloth under the shoulders to help the head maintain the correct position.
 - 2) Take the mucus extractor out of the sterile wrapper.
 - 3) Place the mouth piece in your mouth. Hold the other tube in your hand at least one hand's length from the tip. Avoid touching the tip that goes in the baby's mouth to limit the risk of infection. Hold the tube well away from the end as you place it in the baby's mouth.
 - 4) Place ½ finger length of clear tubing in the baby's mouth and suck for a few seconds moving the tip around the mouth to clear secretions. If the baby cries and breathes normally—stop. If not, proceed to the next step. Emphasise that it is best to use the mucus extractor quickly, within the first 30 seconds after delivery.
 - 5) If the baby is still not breathing after suctioning the mouth, suction the throat. Insert the tube no further than the distance of your index finger, into the baby's throat and gently suck out any secretions. If the baby cries and breathes normally—stop.
 - 6) If the baby is still not breathing well, remove the clear tubing from the baby's mouth and place the tip into one nostril. Gently suck. Repeat with the other nostril. Be especially thorough if the mother's amniotic fluid was green, or if there is a lot of fluid in the baby's mouth. Suctioning must be done quickly, lasting only about 15-20 seconds.

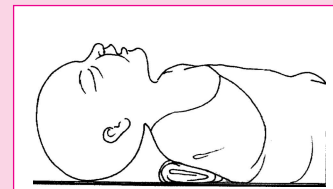
- 7) If after suctioning, the baby is still not breathing, **move immediately** to the next step: using a bag & mask to push air into the baby's lungs. If too much time is lost, the baby's brain may become damaged or baby may even die. (How to use the bag and mask is covered in next training workshop.) The mucus extractor is for one time use only. After use please dispose it.

Labeled illustration of mucus extractor:



Skills Checklist : Using Mucus Extractor

1. Place the baby in the proper position, dry and covered, with folded cloth under baby's shoulders. The baby's head should be slightly extended.



2. Take mucus extractor out of sterile wrapper.
3. Place tube with the mouth piece in your mouth. Hold the other tube in your hand at least 1 hand's length from the tip.
4. Place $\frac{1}{2}$ finger length of clear tubing in the baby's mouth and suck for a few seconds moving tip around mouth to clear secretions. If baby cries and breathes normally, stop. If not, proceed with next step.
5. Insert the tube no further than the distance of your index finger into the baby's throat and gently suck out any secretions. If baby cries and breathes normally, stop. If not, proceed with next step.
6. Remove clear tubing from baby's throat and mouth and place tip into one nostril and gently suck. Repeat with other nostril.
7. When resuscitation is finished, dispose of mucus extractor (do not reuse).

Practice (45 minutes)

Instructions to Trainers:

1. Divide the ASHAs in groups of three.
2. Have each ASHA practice using the mucus extractor with a saucer or a small plate of water.
3. When they have mastered this, let them practice with the life-size doll or mannequin following the steps outlined, while others observe using the checklist.
4. Let the ASHAs take their time during practice so that the correct method is mastered. Afterwards, have them practice quickly using the mucus extractor, i.e., within 30 seconds.
5. Move around the room observing and helping if necessary, and assessing the level of skill acquired.

Summary (15 minutes)

- Ask an ASHA to explain what to do if a baby has asphyxia.
- Have an ASHA to demonstrate use of the mucus extractor while the rest of the group observes using the checklist.
- Make corrections if any and add missing information.
- Praise the ASHAs for their good work.

Evaluation of the session

Objectives	Assessment Method	Output
Explain the steps to be taken at the birth of an asphyxiated baby.	Discussion of asphyxia action tree.	-
Demonstrate correct use of the mucus extractor	Observe demonstration with skills checklist. Each trainee demonstrates the correct use of the mucus extractor.	Trainer's observation with the help of a checklist