

**INTEGRATED
MANAGEMENT OF
NEONATAL AND
CHILDHOOD
ILLNESS**

**Identify Treatment for
the Sick Young Infant**

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INTRODUCTION

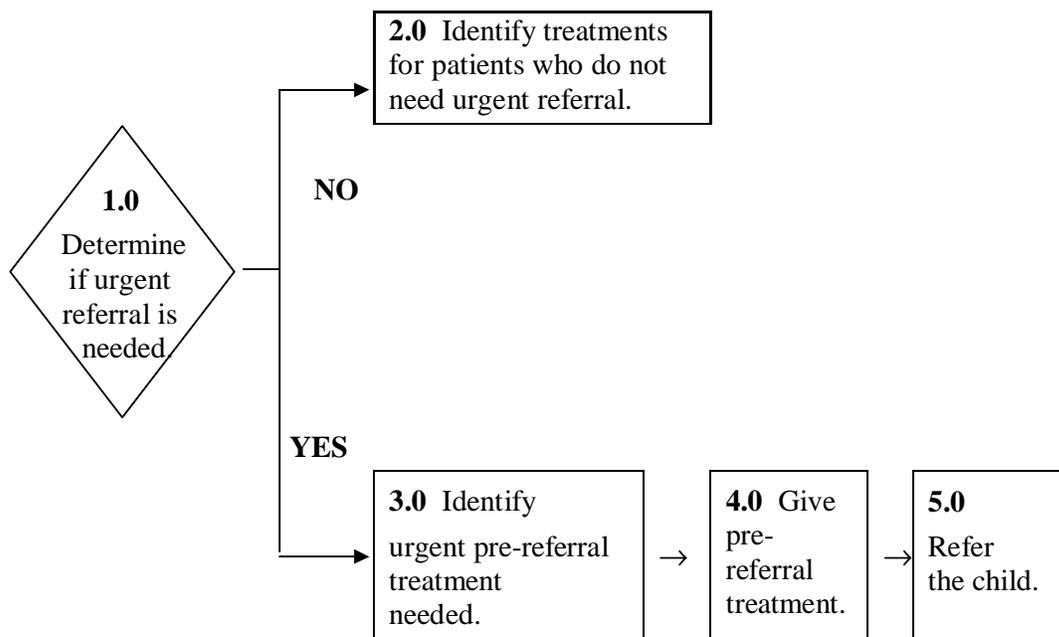
You have already learned to assess the sick young infant age up to 2 months and to classify the young infant's illness or illnesses. The next step is to identify the necessary treatments. In some instances, the very sick young infant will need referral to a hospital for additional care. If so, you will begin urgent treatments before the infant's departure.

LEARNING OBJECTIVES

This module will describe and allow you to practice the following skills:

- * determining if urgent referral is needed
- * identifying treatments needed
- * for patients who need urgent referral:
 - identifying the urgent pre-referral treatments
 - explaining the need for referral to the mother
 - writing the referral note

This module will focus on **identifying which treatments are needed**. The next module, *TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER*, will teach how to give the treatments. This flowchart shows the steps involved in identifying treatment. Each step corresponds to a section in the module. Most patients will not need urgent referral and will be covered in step 2.0. However, for those patients who do need urgent referral, you will go straight to step 3.0.



In this section of the module you will use the "Identify Treatment" column of the *ASSESS & CLASSIFY THE SICK YOUNG INFANT* chart. If a young infant has only one classification, it is easy to see what to do for the infant. However, many sick young infants have more than one classification. For example, a young infant may have both LOCAL BACTERIAL INFECTION and FEEDING PROBLEM OR LOW WEIGHT.

When a young infant has more than one classification, you must look in more than one place on the *ASSESS & CLASSIFY THE SICK YOUNG INFANT* chart to see the treatments listed.

For some young infants, the *ASSESS & CLASSIFY THE SICK YOUNG INFANT* chart says "Refer URGENTLY to hospital." By hospital, we mean a health facility with inpatient beds, supplies and expertise to treat a very sick young infant or child. If you work in a health facility with inpatient beds, referral may mean admission to the inpatient department of your own facility.

If the young infant must be referred urgently, you must decide which treatments to do before referral. Some treatments are not necessary before referral. This module will help you identify urgent pre-referral treatments.

If there is no hospital in your area, you may make some decisions differently than described in this module. You should only refer a young infant or a child if you expect that he will actually receive better care. In some cases, giving your very best care is better than sending a young infant or a child on a long trip to a hospital that may not have the supplies or expertise to care for young infants and children.

If referral is not possible, or if the parents refuse to take the young infant or child, the doctor should help the family care for the infant or child. The patient may stay near the clinic to be seen several times a day. Or a doctor may visit the home to help give drugs on schedule and to help give fluids and food. There is a section *Where Referral is not Possible* in the module *Treat the Young Infant and Counsel the Mother*, which explains what to do when referral is needed but not possible.

1.0 DETERMINE IF URGENT REFERRAL IS NEEDED

REFERRAL FOR SEVERE CLASSIFICATIONS

Look at the severe classifications on the *ASSESS & CLASSIFY THE SICK YOUNG INFANT* chart. These are coloured red and include:

- POSSIBLE SERIOUS BACTERIAL INFECTION
- SEVERE JAUNDICE
- SEVERE DEHYDRATION
- SEVERE PERSISTENT DIARRHOEA
- SEVERE DYSENTERY
- NOT ABLE TO FEED - POSSIBLE SERIOUS BACTERIAL INFECTION or SEVERE MALNUTRITION

Notice the instruction "**Refer URGENTLY to hospital**" in the lists of treatments for the classifications POSSIBLE SERIOUS BACTERIAL INFECTION, SEVERE JAUNDICE, NOT ABLE TO FEED - POSSIBLE SERIOUS BACTERIAL INFECTION OR SEVERE MALNUTRITION. This instruction means to refer the young infant immediately after giving any necessary pre-referral treatments. Do not give treatments that would unnecessarily delay referral.

Notice the instruction "**Refer to hospital**" in the lists of treatments for the classifications SEVERE PERSISTENT DIARRHOEA and SEVERE DYSENTERY. This means that referral is needed, but not as urgently. There is time to identify treatments as described in this module and give all of the treatments.

THE YOUNG INFANT WITH DIARRHOEA WITH SEVERE DEHYDRATION

If the young infant with diarrhoea has SEVERE DEHYDRATION (and does not have low weight or any other severe classification), the infant needs rehydration with IV fluids according to Plan C. If you can give IV therapy, you can treat the infant in the clinic. Otherwise urgently refer the infant for IV therapy with pre-referral antibiotics.

If a young infant has SEVERE DEHYDRATION and low weight or any another severe classification, give first dose of intramuscular ampicillin and gentamicin and refer the infant urgently to hospital. The mother should give frequent sips of ORS on the way and continue breastfeeding.

THE YOUNG INFANT WITH DIARRHEA WITH SOME DEHYDRATION

If a young infant has SOME DEHYDRATION and low weight or any another severe classification, give first dose of intramuscular ampicillin and gentamicin and refer the infant urgently to hospital. The mother should give frequent sips of ORS on the way and continue breastfeeding.

THE YOUNG INFANT WITH SEVERE PERSISTENT DIARRHEA

If the young infant has SEVERE PERSISTENT DIARRHEA, give first dose of intramuscular ampicillin and gentamicin if the young infant has low weight, dehydration or another severe classification, and refer the infant urgently to hospital. The mother should give frequent sips of ORS on the way and continue breastfeeding.

THE YOUNG INFANT WITH SEVERE DYSENTERY

If the young infant has SEVERE DYSENTERY, give first dose of intramuscular ampicillin and gentamicin if the young infant has low weight, dehydration or another severe classification, refer the infant urgently to hospital. The mother should give frequent sips of ORS on the way and continue breastfeeding.

REFERRAL FOR OTHER SEVERE PROBLEMS

The *ASSESS & CLASSIFY THE SICK YOUNG INFANT* chart does not include all problems that infants may have. You must ask yourself:

Does the infant have any other severe problem that cannot be treated at this clinic?

For example, the infant may have a severe problem that is not covered on the chart, such as a major congenital malformation. If you cannot treat a severe problem, you will need to refer the young infant.

Remember: Most young infants will have none of the severe classifications or other severe problems. **If the infant has none of these, the infant does not need urgent referral to a hospital.** You will identify treatments needed as described in this module.



EXERCISE A

In this exercise you will decide whether or not urgent referral is needed. Tick the appropriate answer.

1. Sarla is an 11-day-old girl. She has no signs of possible serious bacterial infection. She has:
LOCAL BACTERIAL INFECTION
NO FEEDING PROBLEM
no other classifications

Does Sarla need urgent referral? YES NO

2. Neena is a 6-week-old girl. She has no signs of jaundice, low body temperature, or local bacterial infection. She has the classification:
NOT ABLE TO FEED – POSSIBLE SERIOUS BACTERIAL INFECTION or
SEVERE MALNUTRITION
no other classifications

Does Neena need urgent referral? YES NO

3. Hanif is a 7-day-old boy. He has no signs of possible serious bacterial infection, jaundice, low body temperature, or local bacterial infection. He has:
Diarrhoea with NO DEHYDRATION
FEEDING PROBLEM OR LOW WEIGHT
No other classifications

Does Hanif need urgent referral? YES NO

4. Habib is a 19-day-old boy. He has:
POSSIBLE SERIOUS BACTERIAL INFECTION
NOT ABLE TO FEED - POSSIBLE SERIOUS BACTERIAL INFECTION or SEVERE
MALNUTRITION
No other classifications

Does Habib need urgent referral? YES NO

2.0 IDENTIFY TREATMENTS FOR YOUNG INFANTS WHO DO NOT NEED URGENT REFERRAL

Your facilitator will present the examples in this section and will show you how to use the back of the Sick Young Infant Recording Form. The facilitator will show you how to:

- * Fold the "Classify" column of the Sick Young Infant Recording Form so that you can see it while looking at the back of the form.
- * Look at the *ASSESS & CLASSIFY THE SICK YOUNG INFANT* chart to find the treatments needed for each of the infant's classifications.
- * List each treatment needed on the back of the Sick Young Infant Recording Form.

For each classification listed on the front of the Sick Young Infant Recording Form, you will write the treatments needed on the back of the form. The treatments that may be needed are in the "Identify Treatment" column of the *ASSESS & CLASSIFY THE SICK YOUNG INFANT* chart. You will list only the treatments that apply to the specific young infant being treated.

Be sure to include items that begin with the words "Follow-up." These mean to tell the mother to return in a certain number of days. The follow-up visit is very important to see if the treatment is working, and to give other treatment if needed. You may abbreviate follow-up as "F/up." If several different times are specified for follow-up, you will look for the earliest definite time. (A definite time is one that is not followed by the word "if"). For example:

"Follow-up in 2 days" gives a definite time for follow-up.

"Follow-up in 5 days if not improving" in a young infant who has diarrhoea is not definite. The child only needs to come back if the diarrhoea does not improve.

Record the earliest definite time for follow-up in the appropriate space on the back of the Sick Young Infant Recording Form. (Also tell her about any earlier follow-up that may be needed if a condition such as diarrhoea does not improve) Later, when the mother returns for follow-up, you can tell her about any additional visits needed.

Follow-up visits are especially important for a young infant. If you find at the follow-up visit that the infant is worse, you will refer the infant to the hospital. A young infant who receives antibiotics for local bacterial infection should return for follow-up in 2 days. A young infant who has diarrhoea with some dehydration, a feeding problem or thrush should return in 2 days. An infant with low weight for age should return for follow-up in 14 days.

Notice that the Sick Young Infant Recording Form already lists the item, "Advise mother when to return immediately." You do not need to list this again. You will need to teach each mother the signs that mean she should return immediately for more care for her infant. You will learn these signs later in this module.

Your facilitator will now demonstrate the process on the case recording form.



EXERCISE B

In this exercise you will identify treatments for 4 young infants: Harish, Baby of Shashi, Ankit and Neera, for whom you had completed the assessment and classification (Exercise B in the *ASSESS AND CLASSIFY THE SICK YOUNG INFANT* module).

Decide which of the 4 sick young infants need to be referred **URGENTLY** to the hospital. For the others, identify treatments and list them on the back of the Young Infant Recording Forms. Refer to the "Identify Treatment" column of the *ASSESS & CLASSIFY THE SICK YOUNG INFANT* chart as you list treatments needed.

When you have completed this exercise,
please discuss your answers with a facilitator.

WHEN TO RETURN IMMEDIATELY

For all young infants going home, you will advise the mother when to return immediately. This means to **teach** the mother certain signs that mean to return immediately for further care. These signs are listed on the *TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER* chart in the section WHEN TO RETURN. Use local terms that the mother will understand.

When to Return Immediately:

Advise the mother to return immediately if the young infant has any of these signs:
--

Breastfeeding or drinking poorly Becomes sicker Develops a fever or feels cold to touch Fast breathing Difficult breathing Yellow palms and soles (if infant has jaundice) Diarrhoea with blood in stools

This is an extremely important section of WHEN TO RETURN. Tell every mother to return immediately if her infant is:

- **breastfeeding or drinking poorly,**
- **becomes sicker, or**
- **develops a fever or feels cold to touch**
- **fast breathing**
- **difficult breathing.**

Advise mothers of children with **jaundice** to watch for:

- **yellow palms and soles**

Advise mothers of children with **diarrhoea** to watch for:

- **blood in the stool**

3.0 IDENTIFY URGENT PRE-REFERRAL TREATMENT NEEDED

When a young infant needs urgent referral, you must quickly identify and begin the most urgent treatments for that infant. The following are urgent treatments. Pre-referral treatments are in bold print on the *ASSESS & CLASSIFY THE SICK YOUNG INFANT* chart. You will give just the first dose of the drugs before referral. Below are the pre-referral treatments for a young infant:

- Give first dose of intramuscular injection of Ampicillin and Gentamicin.
- Treat to prevent low blood sugar.
- Warm the young infant by Skin to Skin contact if temperature less than 36.5°C (or feels cold to touch) while arranging referral.
- Advise the mother how to keep the infant warm on the way to the hospital.
- Advise mother to give frequent sips of ORS and continue breast feeding on the way.
- Advise mother to continue breastfeeding.

The first three treatments above are urgent because they can prevent serious consequences such as progression of pneumonia, septicaemia or meningitis, or brain damage from low blood sugar. The other listed treatments are also important to prevent worsening of the illness. Before urgently referring a young infant to hospital, give all appropriate pre-referral treatments. Pre-referral treatments are in bold print on the chart.

Some treatments should not be given before referral because they are not urgently needed and would delay referral. For example, do not teach a mother how to treat a local infection before referral. If immunizations are needed, do not give them before referral. Let hospital personnel determine when to give immunizations. This will avoid delaying referral.

4.0 REFER THE YOUNG INFANT



Do four steps to refer a young infant to the hospital:

- 1. Explain to the mother the need for referral, and get her agreement to take the young infant. In addition, explain that young infants are particularly vulnerable. When they are seriously ill, they need hospital care and need to receive it promptly. If you suspect that she does not want to take the infant, find out why.***

Possible reasons are:

- * She thinks that hospitals are places where people often die, and she fears that her infant will die there too.
- * She does not think that the hospital will help the infant.
- * She cannot leave home and tend to her young infant during a hospital stay because:
 - there is no one to take care of her other children, or
 - she is needed for farming or other work, or
 - she may lose a job.
- She does not have money to pay for transportation, hospital bills, medicines, or food for herself during the hospital stay.

2. ***Calm the mother's fears and help her resolve any problems.***

For example:

- * If the mother fears that her infant will die at the hospital, reassure her that the hospital has doctors, supplies, and equipment that can help cure her infant.
- * Explain what will happen at the hospital and how that will help her infant.
- * If the mother needs help at home while she is at the hospital, ask questions and make suggestions about who could help. For example, ask whether her husband, sister or mother could help with the other children or with meals while she is away.
- * Discuss with the mother how she can travel to the hospital. Help arrange transportation if necessary.

You may not be able to help the mother solve her problems and be sure that she goes to the hospital. However, it is important to do everything you can to help. If referral is not possible, there are some things you can do for the child from your clinic. These are described in the module *Where Referral is Not Possible*.

3. ***Write a referral note for the mother to take with her to the hospital. Tell her to give it to the doctor there.***

Write:

- * the name and age of the patient,
 - * the date and time of referral,
 - * description of the patient's problems,
 - * the reason for referral (symptoms and signs leading to severe classification),
 - * treatment that you have given,
 - * any other information that the doctor at the hospital needs to know in order to care for the infant, such as earlier treatment of the illness or immunizations needed,
- your name and the name of your clinic.

4. Give the mother any supplies and instructions needed to care for her infant on the way to the hospital:

- * Tell the mother how to keep the young child warm during the trip.
- * Advise the mother to continue breastfeeding.
- * If the infant has some or severe dehydration and can drink, give the mother some ORS solution for the infant to sip frequently on the way.

EXAMPLE OF REFERRAL NOTE

<i>2 - 8 - 2002 11:00 am</i>
<i>Urgent referral to Safdarjung Hospital</i>
<i>Baby of Shashi, age 4 days</i>
<i>Referred for: SEVERE JAUNDICE</i> <i>Also has a few skin pustules on her buttocks</i>
<i>Treatment given at the PHC:</i> <i>First dose of amoxycillin</i> <i>Mother advised to breastfeed the baby and keep her warm on the way to the hospital</i>
<i>Needs BCG and OPV 0 dose - not given</i>
<i>Dr. Ramesh Gupta</i> <i>Medical Officer</i> <i>Mehrauli PHC</i>



EXERCISE C

In this exercise you will review the steps related to referral through a case study. You will use this same case study in a role play.

Part 1.

First, study the Sick Child Recording Form for Harish. He is 3 weeks of age and has the classifications POSSIBLE SERIOUS BACTERIAL INFECTION and NO FEEDING PROBLEM.

1. Should Harish be referred? Why or why not?
2. What urgent, pre-referral treatments are needed? Record these on the back of the Sick Young Infant Recording Form.
3. Write a referral note for Harish to a hospital. Use today's date and the current time. Use your own name.

REFERRAL NOTE FOR HARISH

When you have finished this part of the exercise,
tell the facilitator that you are ready for the group discussion and role play.

Part 2. Role play

Role Play Instructions

DOCTOR: Explain the need for referral to Harish's mother and give her instructions. Discuss any problems she may have about going to the hospital. Assume that the hospital is about an hour away and that transportation is similar to what is available in your own area. If you have a telephone in your own clinic, assume that one is available in the role play.

MOTHER: You will be given a write up that describes your attitude and situation. Try to act as a real mother might act if her child needed referral.

OBSERVERS: Watch the role play. Be prepared to comment on what was done well and what could be improved. Be prepared to answer the questions:

Is this mother likely to go to the hospital? Why or why not?

Has she been given all the necessary instructions? If not, what information was missing?