INTEGRATED MANAGEMENT OF NEONATAL & CHILDHOOD ILLNESS

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Presentation Outline

- Integrated Management Of Neonatal And Childhood Illness
  - Introduction
  - Objectives
  - Components
  - Principles
  - Case Management Process
    - Assess, classify, identify and treat the sick child age up to 2 months and 2 months up to 5 years
  - F-IMNCI
  - C-IMNCI

IMNCI

- **Integrated Management Of Neonatal And Childhood Illness**
  - WHO & UNICEF have developed new strategy for management of common childhood illnesses, in an integrated manner, which are responsible for main causes of morbidity and mortality in the developing countries by improved performance of health workers
  - 10 million children/year-die in developing countries due to acute respiratory infections, diarrhea, measles, malaria, malnutrition
  - 1990-WHO+UNICEF +other agencies-(IMCI)
  - India adopted as (IMNCI)

IMNCI Definition

- IMNCI is an integrated approach to child health that focuses on the well being of the whole child. It focused primarily on the most common causes of child mortality i.e., diarrhea, pneumonia, measles, malaria, and malnutrition, illness affecting under five children aged including both preventive and curative elements to be implemented by families

- IMNCI is an integrated approach to child health that focuses on the well-being of the whole child. IMNCI aims to reduce death, illness and disability, and to promote improved growth and development among under five children

IMNCI caters to two groups

0-2 Months Young Infants

2 months to 5 years children

Objectives of IMNCI

- Reduce mortality
- Reduce frequency and severity of illness and disability
- Improve growth and development during first five years of a child life

Components of IMNCI

- 1. Health worker component
- 2. Improve in the overall health system
- 3. Improvement in family and community health care practices

1. Health Worker

Improve in case management skills

- Skilled case-management
  - Guidelines
  - Training

2. Health System

Improve is needed for effective management

- Essential drugs
- Health workers
- Identified referral
- Swifted transferred
- Referral centers
- Supervision and monitoring

3. Family & Community Care

- It includes a list of tasks in planning and implementing activities to improve family and community practices and guidelines on how to build on and strengthen community resources to promote improved nutrition

Principle's of IMNCI

- 1. All sick children under 5 years of age must be examined for conditions which indicate immediate referral or hospitalization
- 2. Children must be routinely assessed for major symptoms, nutritional and immunization status, feeding problems and other potential problems
- 3. Only a limited number of carefully selected clinical signs, are used based on evidence of their sensitivity and specificity to detect disease

Principle's of IMNCI

- 4. Based on the presence of selected clinical signs, the child is placed in a 'classifications'. Classifications are not specific diagnosis but categories that are used to determine the treatment
  - Referral
  - Treatment in health facility
  - Management at home
- 5. IMNCI guidelines address most common but not all pediatric problems
- 6. A limited number of essential drugs are used

Principle's of IMNCI

- 7. Care takers are actively involved in the treatment of children
- 8. Counseling of caretakers about home care including feeding, fluids and when to return to health facility

Case Management Process

The Case Management Process:

- The charts describes the following steps
  - 1. Assess the child or young infant
  - 2. Classify the illness
  - 3. Identify the treatment
  - 4. Treat the child
  - 5. Counsel the mother
  - 6. Give follow up care

Classification

PINK means the child has a severe classification and needs urgent attention and referral or admission for inpatient care.

YELLOW means the child needs a specific medical treatment such as an appropriate antibiotic, an oral anti-malarial or other treatment; also teaches the mother how to give oral drugs or to treat local infections at home. The health worker teaches the mother how to care for her child at home and when she should return.

GREEN not given a specific medical treatment such as antibiotics or other treatments. The health worker teaches the mother how to care for her child at home.

Integrated Case Management Process

Check for Danger Signs

1. Convulsions
2. Lethargy
3. Inability to drink/ breast fed
4. Vomiting

Assess Main Symptoms

1. Cough/Difficulty in breathing
2. Diarrhea
3. Fever
4. Ear Problems

Assess

1. Nutritional
2. Immunization Status
3. Potential feeding problem

Check for other problems

Classify the condition of the child and assign one of the three colour codes & Identify the treatment options as per the action listed in that colour band

URGENT REFERRAL

1. Pre-referral treatment
2. Advice parents
3. Refer the child

At the referral facility

- ETAT
- Diagnosis, Treatment
- Monitoring and Follow-up

TREAT AT OPD

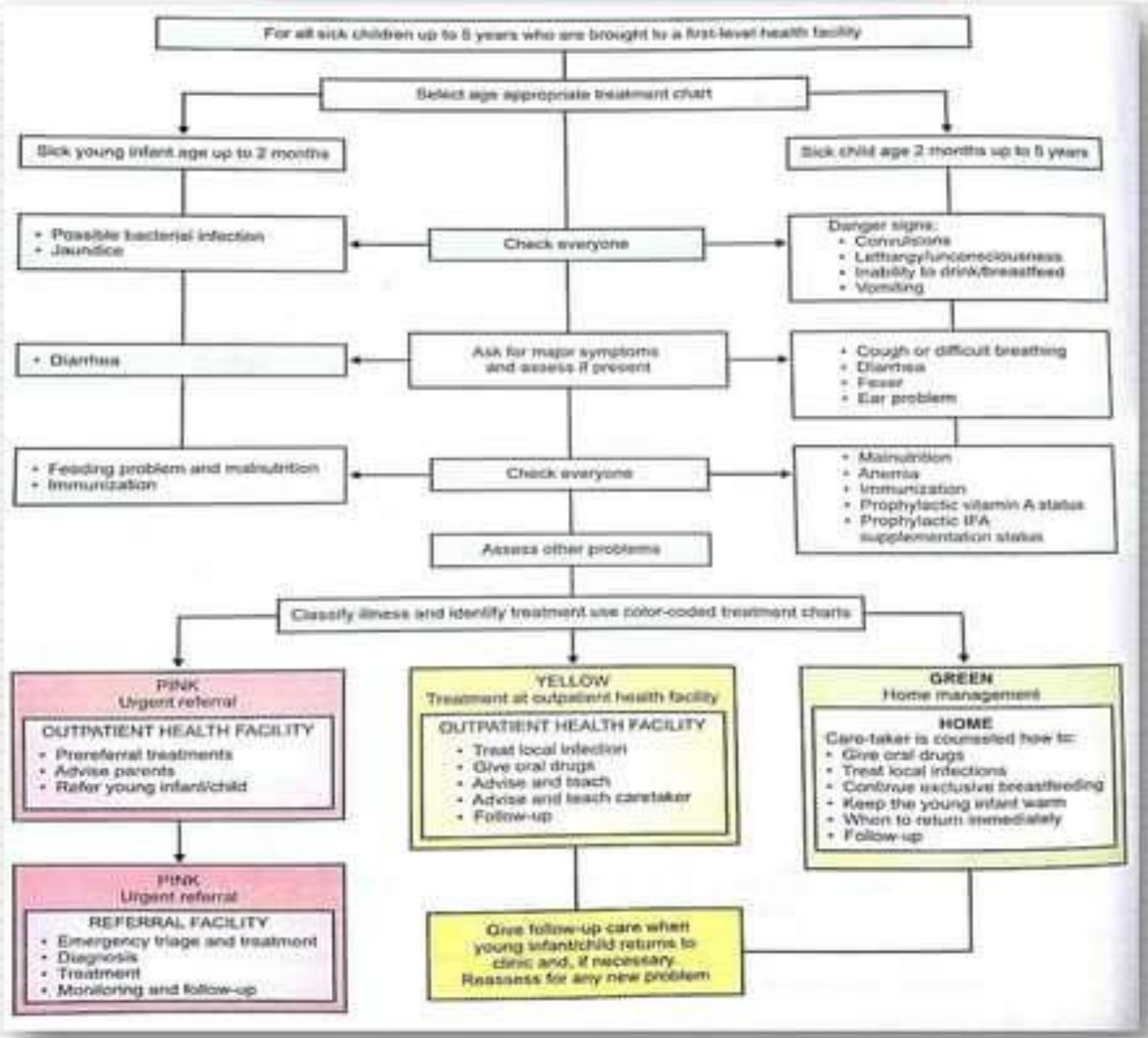
1. Treat local infection
2. Give oral drugs
3. Advice and tech mother
4. Follow-up

HOME MANAGEMENT

Counsel care taker on how to:

1. Give oral drugs
2. Treat local infections at home
3. Continue feeding
4. Danger Signs
5. Follow up

IMNCI Case Management Process



INFANT AGE UP TO 2 MONTHS

ASSESS AND CLASSIFY THE SICK YOUNG INFANT AGE UPTO 2 MONTHS

ASSESS

ASK THE MOTHER WHAT THE YOUNG INFANT'S PROBLEMS ARE
- Determine if this is an initial or follow-up visit for this problem.
- If follow-up visit, use the follow-up instructions on the bottom of this chart.

USE ALL BOXES THAT MATCH INFANT'S SYMPTOMS

CLASSIFY IDENTIFY TREATMENT

A child with a pink classification needs URGENT attention, complete the assessment and pre- referral treatment immediately so referral is not delayed

CHECK FOR POSSIBLE BACTERIAL INFECTION / JAUNDICE

ASK:

- Has the infant had convulsions?

LOOK, LISTEN, FEEL:

- Count the breaths in one minute. Repeat the count if elevated.
- Look for severe chest indrawing
- Look for nasal flaring
- Look and listen for grunting
- Look and feel for bulging fontanelle
- Look for pus draining from the ear.
- Look at the umbilicus. Is it red or draining pus?
- Look for skin pustules. Are there 10 or more skin pustules or a big boil?
- Measure axillary temperature (if not possible, feel for fever or low body temperature).
- See if the young infant is lethargic or unconscious.
- Look at the young infant's movements. Are they less than normal?
- Look for jaundice? Are the palms and soles yellow?

} YOUNG INFANT MUST BE CALM

* If referral is not possible, see the section **Where Referral is Not Possible** in the module ***Treat the Young Infant and Counsel the Mother***

	SIGNS	CLASSIFY AS	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print.)
Classify ALL YOUNG INFANTS	• Convulsions or • Fast breathing (60 breaths per minute or more) or • Severe chest indrawing or • Nasal flaring or • Grunting or • Bulging fontanelle or • 10 or more skin pustules or a big boil or • If axillary temperature 37.5°C or above (or feels hot to touch) or temperature less than 35.5°C (or feels cold to touch) or • Lethargic or unconscious or • Less than normal movements.	POSSIBLE SERIOUS BACTERIAL INFECTION	➤***Give first dose of intramuscular ampicillin and gentamicin.*** ➤***Treat to prevent low blood sugar.*** ➤***Warm the young infant by Skin to Skin contact if temperature less than 35.5°C (or feels cold to touch) while arranging referral.*** ➤***Advise mother how to keep the young infant warm on the way to the hospital.*** ➤***Refer URGENTLY to hospital****
	• Umbilicus red or draining pus or • Pus discharge from ear or • <10 skin pustules	LOCAL BACTERIAL INFECTION	➤***Give oral amoxycillin for 5 days.*** ➤Teach mother to treat local infections at home. ➤Follow up in 2 days.
And if the infant has jaundice	• Palms and soles yellow or • Age < 24 hours or • Age 14 days or more	SEVERE JAUNDICE	➤***Treat to prevent low blood sugar.*** ➤***Warm the young infant by Skin to Skin contact if temperature less than 35.5°C (or feels cold to touch) while arranging referral.*** ➤***Advise mother how to keep the young infant warm on the way to the hospital.*** ➤***Refer URGENTLY to hospital***
	• Palms and soles not yellow	JAUNDICE	➤Advise mother to give home care for the young infant. ➤Advise mother when to return immediately ➤Follow up in 2 days.
And if the temp. is between 35.5- 36.4°C	•Temperature between 35.5 - 36.4°C	LOW BODY TEMPERATURE	➤Warm the young infant using Skin to Skin contact for one hour and REASSESS. If no improvement, refer ➤Treat to prevent low blood sugar.

THEN ASK:
Does the young infant have diarrhoea?*

IF YES, ASK:

- For how long?
- Is there blood in the stool?

LOOK AND FEEL:

- Look at the young infant's general condition. Is the infant:
  Lethargic or unconscious?
  Restless and irritable?
- Look for sunken eyes.
- Pinch the skin of the abdomen.
  Does it go back:
  Very slowly (longer than 2 seconds)?
  Slowly?

Classify DIARRHOEA

for DEHYDRATION		
Two of the following signs: • Lethargic or unconscious • Sunken eyes • Skin pinch goes back very slowly	**SEVERE DEHYDRATION**	➢ *Give first dose of intramuscular ampicillin and gentamicin.* ➢ *If infant also has low weight or another severe classification:* *- Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way.* *- Advise mother to continue breastfeeding.* *- Advise mother how to keep the young infant warm on the way to the hospital.* **OR** ➢ If infant does not have low weight or any other severe classification: - Give fluid for severe dehydration (Plan C) and then refer to hospital after rehydration.
Two of the following signs: • Restless, irritable. • Sunken eyes. • Skin pinch goes back slowly.	**SOME DEHYDRATION**	➢ *If infant also has low weight or another severe classification:* *-Give first dose of intramuscular ampicillin and gentamicin* *- Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way.* *-Advise mother to continue breastfeeding.* *-Advise mother how to keep the young infant warm on the way to the hospital.* ➢ *If infant does not have low weight or another severe classification* - Give fluids for some dehydration (Plan B). - Advise mother when to return immediately. - Follow up in 2 days.
• Not enough signs to classify as some or severe dehydration.	**NO DEHYDRATION**	➢ Give fluids to treat diarrhea at home (Plan A). ➢ Advise mother when to return immediately. ➢ Follow up in 5 days if not improving.
and if diarrhoea 14 days or more		
• Diarrhoea lasting 14 days or more.	**SEVERE PERSISTENT DIARRHOEA**	➢ Give first dose of intramuscular ampicillin and gentamicin if the young infant has low weight, dehydration or another severe classification. ➢ Treat to prevent low blood sugar. ➢ Advise how to keep infant warm on the way to the hospital. ➢ Refer to hospital.#
and if blood in stool		
• Blood in the stool.	**SEVERE DYSENTERY**	➢ Give first dose of intramuscular ampicillin and gentamicin if the young infant has low weight, dehydration or another severe classification. ➢ Treat to prevent low blood sugar. ➢ Advise how to keep infant warm on the way to the hospital. ➢ Refer to hospital.#

* *What is diarrhoea in a young infant?*

If the stools have changed from usual pattern and are many and watery (more water than fecal matter). The normally frequent or loose stools of a breastfed baby are not diarrhoea.

If referral is not possible, see the section ***Where Referral is Not Possible*** *in the module* ***Treat the Young Infant and Counsel the Mother.***

THEN CHECK FOR FEEDING PROBLEM & MALNUTRITION:

ASK:

- Is there any difficulty feeding?
- Is the infant breastfed? If yes, how many times in 24 hours?
- Does the infant usually receive any other foods or drinks? If yes, how often?
- What do you use to feed the infant?

LOOK, FEEL:

- Determine weight for age.

Classify FEEDING

IF AN INFANT: **Has any difficulty feeding, or**
Is breastfeeding less than 8 times in 24 hours, or
Is taking any other foods or drinks, or
Is low weight for age,

AND

Has no indications to refer urgently to hospital:

ASSESS BREASTFEEDING

- Has the infant breastfed in the previous hour?

If the infant has not fed in the previous hour, ask the mother to put her infant to the breast. Observe the breastfeed for 4 minutes.
(If the infant was fed during the last hour, ask the mother if she can wait and tell you when the infant is willing to feed again.)

- Is the infant able to attach?

no attachment at all *not well attached* *good attachment*

TO CHECK ATTACHMENT, LOOK FOR:

- *Chin touching breast*
- *Mouth wide open*
- *Lower lip turned outward*
- *More areola visible above than below the mouth*

(All of these signs should be present if the attachment is good)

- Is the infant suckling effectively (that is, slow deep sucks, sometimes pausing)?

not suckling at all *not suckling effectively* *suckling effectively*

Clear a blocked nose if it interferes with breastfeeding.

- Look for ulcers or white patches in the mouth (thrush).

- Does the mother have pain while breastfeeding?

If yes, look and feel for:
- Flat or inverted nipples, or sore nipples
- Engorged breasts or breast abscess

• Not able to feed or • No attachment at all or • Not suckling at all or • Severely Underweight (<-3 S.D.)	**NOT ABLE TO FEED - POSSIBLE SERIOUS BACTERIAL INFECTION OR SEVERE MALNUTRITION**	➤*Give first dose of intramuscular 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 mother how to keep the young infant warm on the way to the hospital.* ➤*Refer URGENTLY to hospital**
• Not well attached to breast or • Not suckling effectively or • Less than 8 breastfeeds in 24 hours or • Receives other foods or drinks or • Thrush (ulcers or white patches in mouth) or • Moderately Underweight (<-2 to -3 S.D.) *or* • Breast or nipple problems	**FEEDING PROBLEM OR LOW WEIGHT FOR AGE**	➤If not well attached or not suckling effectively, teach correct positioning and attachment. ➤If breastfeeding less than 8 times in 24 hours, advise to increase frequency of feeding. ➤If receiving other foods or drinks, counsel mother about breastfeeding more, reducing other foods or drinks, and using a cup and spoon. • If not breastfeeding at all, advise mother about giving locally appropriate animal milk and teach the mother to feed with a cup and spoon. ➤If thrush, teach the mother to treat thrush at home. ➤If low weight for age, teach the mother how to keep the young infant with low weight warm at home. ➤If breast or nipple problem, teach the mother to treat breast or nipple problems. ➤Advise mother to give home care for the young infant. ➤Advise mother when to return immediately. ➤Follow-up any feeding problem or thrush in 2 days. ➤Follow-up low weight for age in 14 days.
• Not low weight for age (≥ -2SD) and no other signs of inadequate feeding	**NO FEEDING PROBLEM**	➤Advise mother to give home care for the young infant. ➤Advise mother when to return immediately. ➤Praise the mother for feeding the infant well.

** If referral is not possible, see the section **Where Referral is Not Possible** in the module **Treat the Young Infant and Counsel the Mother**.*

MANAGEMENT OF THE SICK YOUNG INFANT AGE UP TO 2 MONTHS

Name:_____ Age:_____ Sex: M_____ F_____ Weight:_____kg Temperature:_____ °C Date:

ASK: What are the infant's problems? _____ Initial visit? _____ Follow-up Visit? _____

ASSESS (Circle all signs present) **CLASSIFY**

CHECK FOR POSSIBLE BACTERIAL INFECTION / JAUNDICE

- Has the infant had convulsions?
- Count the breaths in one minute_____breaths per minute
  Repeat if elevated _____ Fast breathing?
- Look for severe chest indrawing.
- Look for nasal flaring.
- Look and listen for grunting.
- Look and feel for bulging fontanelle.
- Look for pus draining from the ear.
- Look at the umbilicus. Is it red or draining pus?
- Look for skin pustules. Are there 10 or more pustules or a big boil?
- Measure axillary temperature (if not possible, feel for fever or low body temperature):
  - 37.5°C or more (or feels hot)?
  - Less than 35.5°C ?
  - Less than 35.5°C but above 35.4°C (or feels cold to touch)?
- See if young infant is lethargic or unconscious.
- Look at young infant's movements. Less than normal?
- Look for jaundice. Are the palms and soles yellow?

DOES THE YOUNG INFANT HAVE DIARRHOEA? Yes ___ No ___

- For how long? _____ Days
- Is there blood in the stool?
- Look at the young infant's general condition. Is the infant:
  - Lethargic or unconscious?
  - Restless and irritable?
- Look for sunken eyes.
- Pinch the skin of the abdomen. Does it go back:
  - Very slowly (longer than 2 seconds)?
  - Slowly

THEN CHECK FOR FEEDING PROBLEM & MALNUTRITION

- Is there any difficulty feeding? Yes ___ No ___
- Is the infant breastfed? Yes _____ No ___
  If Yes, how many times in 24 hours? ____ times
- Does the infant usually receive any other foods or drinks? Yes ___ No ___
  If Yes, how often?
- What do you use to feed the infant?
- Determine weight for age. Severely underweight ___
  Mod underweight ——— Not low weight ——

If the infant has any difficulty feeding, is feeding less than 8 times in 24 hours, is taking any other food or drinks, or is low weight for age AND has no indications to refer urgently to hospital:

ASSESS BREASTFEEDING:

- Has the infant breastfed in the previous hour?
  If infant has not fed in the previous hour, ask the mother to put her infant to the breast. Observe the breastfeed for 4 minutes.
- Is the infant able to attach? To check attachment, look for:
  - Chin touching breast Yes ___ No ___
  - Mouth wide open Yes _____ No ___
  - Lower lip turned outward Yes _____ No ___
  - More areola above than below the mouth Yes ___ No ___

  no attachment at all not well attached good attachment
- Is the infant sucking effectively (that is, slow deep sucks, sometimes pausing)?

  not sucking at all not sucking effectively sucking effectively
- Look for ulcers or white patches in the mouth (thrush).
- Does the mother have pain while breastfeeding? If yes, then look for:
  - Flat or inverted nipples, or sore nipples
  - Engorged breasts or breast abscess

!) _____

CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS Circle immunizations needed today.

BCG OPV 0 OPV 1 DPV 1 HEP-B 1

Return for next immunization on:

_____ (Date)

ASSESS OTHER PROBLEMS:

AGE 2 MONTHS UP TO 5 YEARS

ASSESS AND CLASSIFY THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ASSESS

ASK THE MOTHER WHAT THE CHILD'S PROBLEMS ARE

- Determine if this is an initial or follow-up visit for this problem.
  - if follow-up visit, use the follow-up instructions on *TREAT THE CHILD* chart.
  - if initial visit, assess the child as follows:

CHECK FOR GENERAL DANGER SIGNS

ASK:	LOOK:
• Is the child able to drink or breastfeed? • Does the child vomit everything? • Has the child had convulsions?	• See if the child is lethargic or unconscious.

A child with any general danger sign needs URGENT attention; complete the assessment and any pre-referral treatment immediately so referral is not delayed.

CLASSIFY

USE ALL BOXES THAT MATCH THE CHILD'S SYMPTOMS AND PROBLEMS TO CLASSIFY THE ILLNESS.

IDENTIFY TREATMENT

THEN ASK ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing?

IF YES, ASK:	LOOK, LISTEN:	
• For how long?	• Count the breaths in one minute • Look for chest indrawing • Look and listen for stridor	} CHILD MUST BE CALM → *Classify COUGH or DIFFICULT BREATHING*

If the child is:	Fast breathing is:
2 months up to 12 months	50 breaths per minute or more
12 months up to 5 years	40 breaths per minute or more

SIGNS	CLASSIFY AS	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print.)
• Any general danger sign or • Chest indrawing or • Stridor in calm child	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	➢ ***Give first dose of injectable chloramphenicol (if not possible give oral amoxycillin).*** ➢ ***Refer URGENTLY to hospital.#***
• Fast breathing	**PNEUMONIA**	➢ *Give Amoxycillin for 5 days.* ➢ Soothe the throat and relieve the cough with a safe remedy if child is 6 months or older. ➢ Advise mother when to return immediately. ➢ Follow-up in 2 days.
No signs of pneumonia or very severe disease.	**NO PNEUMONIA: COUGH OR COLD**	➢ If coughing more than 30 days, refer for assessment. ➢ Soothe the throat and relieve the cough with a safe home remedy if child is 6 months or older. ➢ Advise mother when to return immediately. ➢ Follow-up in 5 days if not improving.

If referral is not possible, see the section *Where Referral is Not Possible* in the module *Treat the Child*.

Does the child have diarrhoea?

IF YES, ASK:

- For how long?
- Is there blood in the stool?

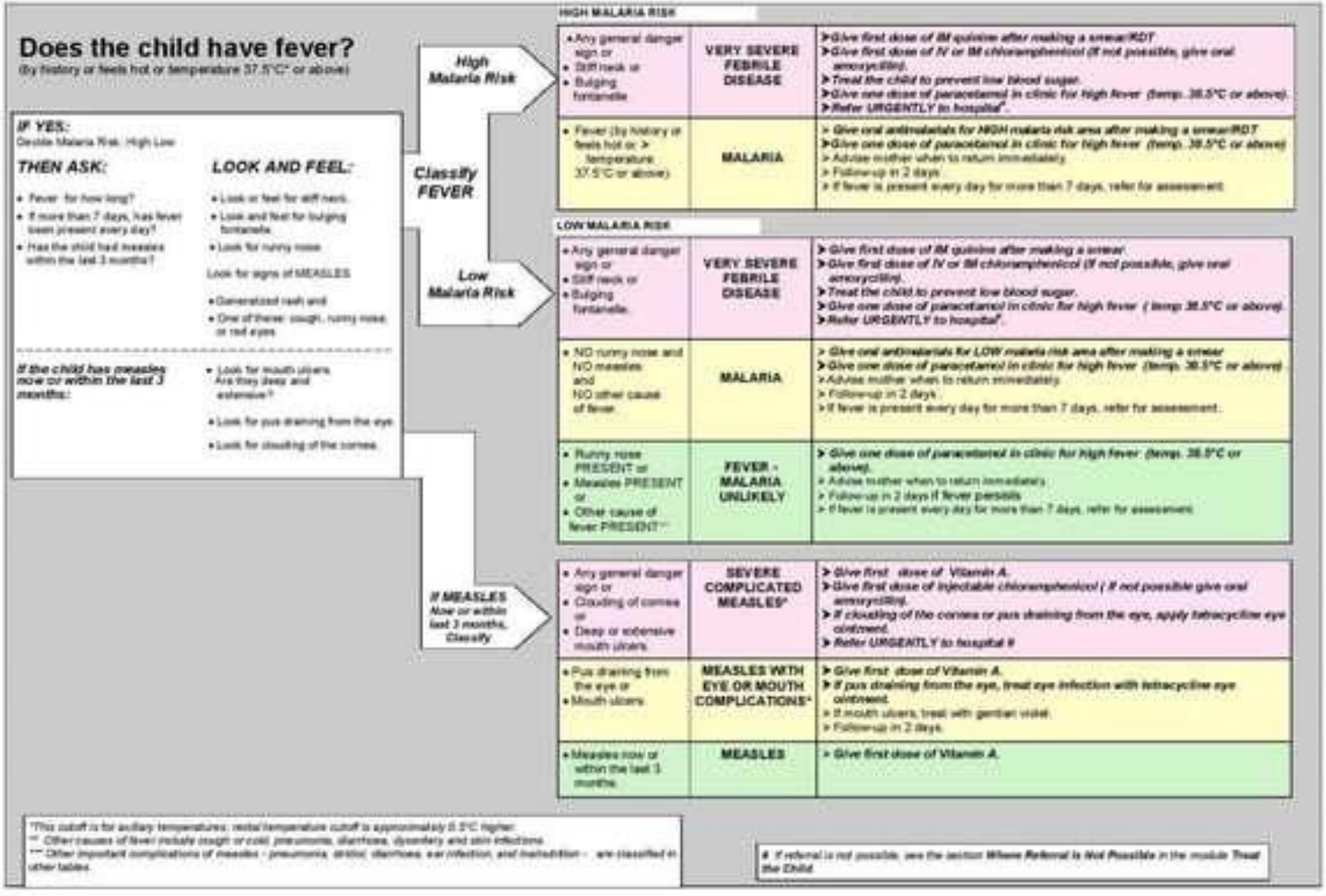
LOOK AND FEEL:

- Look at the child's general condition.
  Is the child:
  Lethargic or unconscious?
  Restless and irritable?
- Look for sunken eyes.
- Offer the child fluid. Is the child:
  - Not able to drink or drinking poorly?
  - Drinking eagerly, thirsty?
- Pinch the skin of the abdomen. Does it go back:
  - Very slowly (longer than 2 seconds)?
  - Slowly?

Classify DIARRHOEA

for DEHYDRATION		
Two of the following signs: • Lethargic or unconscious • Sunken eyes • Not able to drink or drinking poorly • Skin pinch goes back very slowly	**SEVERE DEHYDRATION**	➢ If child has no other severe classification: - Give fluid for severe dehydration (Plan C). ➢ ***If child also has another severe classification :*** ***Refer URGENTLY to hospital# with mother giving frequent sips of ORS on the way. Advise the mother to continue breastfeeding.*** ➢ ***If child is 2 years or older and there is cholera in your area, give doxycycline for cholera.***
Two of the following signs: • Restless, irritable • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly	**SOME DEHYDRATION**	➢ Give fluid zinc supplements and food for some dehydration (Plan B). ➢ ***If child also has a severe classification:*** ***Refer URGENTLY to hospital# with mother giving frequent sips of ORS on the way. Advise the mother to continue breastfeeding.*** ➢ Advise mother when to return immediately. ➢ Follow-up in 5 days if not improving.
Not enough signs to classify as some or severe dehydration.	**NO DEHYDRATION**	➢ Give fluid ,zinc supplements and food to treat diarrhoea at home (Plan A). ➢ Advise mother when to return immediately. ➢ Follow-up in 5 days if not improving.
and if diarrhoea 14 days or more		
• Dehydration present.	**SEVERE PERSISTENT DIARRHOEA**	➢ Treat dehydration before referral unless the child has another severe classification. ➢ **Refer to hospital.#**
• No dehydration.	**PERSISTENT DIARRHOEA**	➢ Advise the mother on feeding a child who has PERSISTENT DIARRHOEA. ➢ **Give single dose of vitamin A.** ➢ Give zinc supplements daily for 14 days. ➢ Follow-up in 5 days.
and if blood in stool		
• Blood in the stool.	**DYSENTERY**	➢ ***Treat for 3 days with ciprofloxacin. Treat dehydration*** ➢ *Give zinc supplements for 14 days* ➢ Follow-up in 2 days.

If referral is not possible, see the section **Where Referral is Not Possible** in the module ***Treat the Child***.


Does the child have fever?
(By history or feels hot or temperature 37.5°C* or above)
IF YES:
Decide Malaria Risk: High Low
THEN ASK:
• Fever for how long?
• If more than 7 days, has fever been present every day?
• Has the child had measles within the last 3 months?
LOOK AND FEEL:
• Look or feel for stiff neck.
• Look and feel for bulging fontanelle.
• Look for runny nose.
Look for signs of MEASLES:
• Generalized rash and
• One of these: cough, runny nose, or red eyes
If the child has measles now or within the last 3 months:
• Look for mouth ulcers. Are they deep and extensive?
• Look for pus draining from the eye.
• Look for clouding of the cornea.
Classify FEVER
High Malaria Risk
Low Malaria Risk
If MEASLES Now or within last 3 months, Classify
HIGH MALARIA RISK
• Any general danger sign or
• Stiff neck or
• Bulging fontanelle
VERY SEVERE FEBRILE DISEASE
➤Give first dose of IM quinine after making a smear/RDT.
➤Give first dose of IV or IM chloramphenicol (If not possible, give oral amoxycillin).
➤Treat the child to prevent low blood sugar.
➤Give one dose of paracetamol in clinic for high fever (temp. 38.5°C or above).
➤Refer URGENTLY to hospital#.
• Fever (by history or feels hot or > temperature 37.5°C or above)
MALARIA
➤ Give oral antimalarials for HIGH malaria risk area after making a smear/RDT
➤Give one dose of paracetamol in clinic for high fever (temp. 38.5°C or above)
➤ Advise mother when to return immediately
➤ Follow-up in 2 days
➤ If fever is present every day for more than 7 days, refer for assessment
LOW MALARIA RISK
• Any general danger sign or
• Stiff neck or
• Bulging fontanelle
VERY SEVERE FEBRILE DISEASE
➤Give first dose of IM quinine after making a smear.
➤Give first dose of IV or IM chloramphenicol (If not possible, give oral amoxycillin).
➤Treat the child to prevent low blood sugar.
➤Give one dose of paracetamol in clinic for high fever (temp 38.5°C or above).
➤Refer URGENTLY to hospital#.
• NO runny nose and NO measles and NO other cause of fever.
MALARIA
➤ Give oral antimalarials for LOW malaria risk area after making a smear
➤Give one dose of paracetamol in clinic for high fever (temp. 38.5°C or above)
➤Advise mother when to return immediately
➤ Follow-up in 2 days.
➤If fever is present every day for more than 7 days, refer for assessment.
• Runny nose PRESENT or
• Measles PRESENT or
• Other cause of fever PRESENT**
FEVER - MALARIA UNLIKELY
➤ Give one dose of paracetamol in clinic for high fever (temp. 38.5°C or above).
➤ Advise mother when to return immediately
➤ Follow-up in 2 days if fever persists
➤ If fever is present every day for more than 7 days, refer for assessment.
• Any general danger sign or
• Clouding of cornea or
• Deep or extensive mouth ulcers
SEVERE COMPLICATED MEASLES*
➤ Give first dose of Vitamin A.
➤Give first dose of injectable chloramphenicol (If not possible give oral amoxycillin).
➤ If clouding of the cornea or pus draining from the eye, apply tetracycline eye ointment.
➤ Refer URGENTLY to hospital #
• Pus draining from the eye or
• Mouth ulcers
MEASLES WITH EYE OR MOUTH COMPLICATIONS*
➤ Give first dose of Vitamin A.
➤ If pus draining from the eye, treat eye infection with tetracycline eye ointment.
➤ If mouth ulcers, treat with gentian violet.
➤ Follow-up in 2 days.
• Measles now or within the last 3 months
MEASLES
➤ Give first dose of Vitamin A.
*This cutoff is for axillary temperature; rectal temperature cutoff is approximately 0.5°C higher.
** Other causes of fever include cough or cold, pneumonia, diarrhoea, dysentery and skin infections.
*** Other important complications of measles - pneumonia, clinical diarrhoea, ear infection, and malnutrition - are classified in other tables.
# If referral is not possible, see the section Where Referral is Not Possible in the module Treat the Child.

Does the child have an ear problem?

IF YES, ASK:

- Is there ear pain?
- Is there ear discharge?
- If yes, for how long?

LOOK AND FEEL:

- Look for pus draining from the ear.
- Feel for tender swelling behind the ear.

Classify EAR PROBLEM

• Tender swelling behind the ear.	**MASTOIDITIS**	➤ *Give first dose of injectable chloramphenicol (If not possible give oral amoxycillin).* ➤ *Give first dose of paracetamol for pain.* ➤ *Refer URGENTLY to hospital#.*
• Pus is seen draining from the ear and discharge is reported for less than 14 days, or • Ear pain.	**ACUTE EAR INFECTION**	➤ *Give Amoxycillin for 5 days.* ➤ Give paracetamol for pain. ➤ Dry the ear by wicking. ➤ Follow-up in 5 days.
• Pus is seen draining from the ear and discharge is reported for 14 days or more.	**CHRONIC EAR INFECTION**	➤ Dry the ear by wicking. ➤ Topical ciprofloxacine ear drops for 2 weeks. ➤ Follow-up in 5 days.
• No ear pain and No pus seen draining from the ear.	**NO EAR INFECTION**	No additional treatment.

*# If referral is not possible, see the section **Where Referral is Not Possible** in the module **Treat the Child**.*

THEN CHECK FOR MALNUTRITION

LOOK AND FEEL:

- Look for visible severe wasting.
- Look for oedema of both feet.
- Determine weight for age.

Classify NUTRITIONAL STATUS

• Visible severe wasting or • Oedema of both feet.	**SEVERE MALNUTRITION**	➢*Give single dose of Vitamin A.* ➢*Prevent low blood sugar.* ➢*Refer URGENTLY to hospital #* ➢*While referral is being organized, warm the child.* ➢*Keep the child warm on the way to hospital.*
• Severely Underweight (<-3 SD)	**VERY LOW WEIGHT**	➢ Assess and counsel for feeding - If feeding problem, follow-up in 5 days ➢ Advise mother when to return immediately ➢ Follow-up in30 days
• Not Severely Underweight (≥ -3SD)	**NOT VERY LOW WEIGHT**	➢ If child is less than 2 years old, assess the child's feeding and counsel the mother on feeding according to the FOOD box on the COUNSEL *THE MOTHER* chart. - If feeding problem, follow-up in 5 days. ➢ Advise mother when to return immediately

THEN CHECK FOR ANAEMIA

LOOK:

- Look for palmar pallor. Is it
  - Severe palmar pallor?
  - Some palmar pallor?

Classify ANAEMIA

• Severe palmar pallor	**SEVERE ANAEMIA**	➢*Refer URGENTLY to hospital #.*
• Some palmar pallor	**ANAEMIA**	➢*Give iron folic acid therapy for 14 days.* ➢ Assess the child's feeding and counsel the mother on feeding according to the FOOD box on the COUNSEL *THE MOTHER* chart. - If feeding problem, follow-up in 5 days. ➢Advise mother when to return immediately. ➢Follow-up in 14 days.
• No palmar pallor	**NO ANAEMIA**	➢ *Give prophylactic iron folic acid if child 6 months or older.*

THEN CHECK THE CHILD'S IMMUNIZATION *, PROPHYLACTIC VITAMIN A & IRON-FOLIC ACID SUPPLEMENTATION STATUS

IMMUNIZATION SCHEDULE:

AGE	VACCINE
Birth	BCG + OPV-0
6 weeks	DPT-1+ OPV-1(+ HepB-1**)
10 weeks	DPT-2+ OPV-2(+ HepB-2**)
14 weeks	DPT-3+ OPV-3(+ HepB-3**)
9 months	Measles
16-18 months	DPT Booster + OPV
60 months	DT

PROPHYLACTIC VITAMIN A

Give a single dose of vitamin A:

100,000 IU at 9 months with measles immunization
200,000 IU at 16-18 months with DPT Booster
200,000 IU at 24 months, 30 months, 36 months, 42 months, 48 months, 54 months and 60 months

PROPHYLACTIC IFA

Give 20 mg elemental iron + 100 mcg folic acid (one tablet of Pediatric IFA or IFA syrup / IFA drops) for a total of 100 days in a year after the child has recovered from acute illness if :

➢The child 6 months of age or older, and
➢Has not received Pediatric IFA Tablet/syrup/drops for 100 days in last one year.

* A child who needs to be immunized should be advised to go for immunization the day vaccines are available at AWSC/PHC
** Hepatitis B to be given wherever included in the immunization schedule

ASSESS OTHER PROBLEMS

MAKE SURE CHILD WITH ANY GENERAL DANGER SIGN IS REFERRED after first dose of an appropriate antibiotic and other urgent treatments.
Exception: Rehydration of the child according to Plan C may resolve danger signs so that referral is no longer needed.

*# If referral is not possible, see the section **Where Referral is Not Possible** in the module **Treat the Child**.*

F-IMNCI

Facility Based IMNCI

- F-IMNCI is the integration of the Facility based Care package with the IMNCI package, to empower the Health personnel with the skills to manage new born and childhood illness at the community level as well as at the facility. Facility based IMNCI focuses on providing appropriate skills for inpatient management of major causes of Neonatal and Childhood mortality such as asphyxia, sepsis, low birth weight and pneumonia, diarrhea, malaria, meningitis, severe malnutrition in children

- This training is being imparted to Medical officers, Staff nurses and ANMs at CHC/FRUs and 24x7 PHCs where deliveries are taking place. The training is for 11 days

C-IMNCI

C-IMNCI: Community and Household IMNCI:

- Community IMNCI is basically 3rd Component of the IMCI Package
  - It aims at improving family and community practices by promoting those Practices with the greatest potential for improving child survival, growth and development
  - C-IMCI seeks to strengthen the linkage between health services and communities, to improve selected family and community practices and to support and strengthen community based activities

Conclusion

- IMNCI is a combined management of illness of under five children and taking care of their nutrition, immunization and health promotion activities
- IMNCI Strategy focus on the diseases of the childhood that causes the greatest global burden
- The key elements are assess, classify, identify and treat the sick child age up to 5 years
- A systemic approach to plan and implement


Thank You