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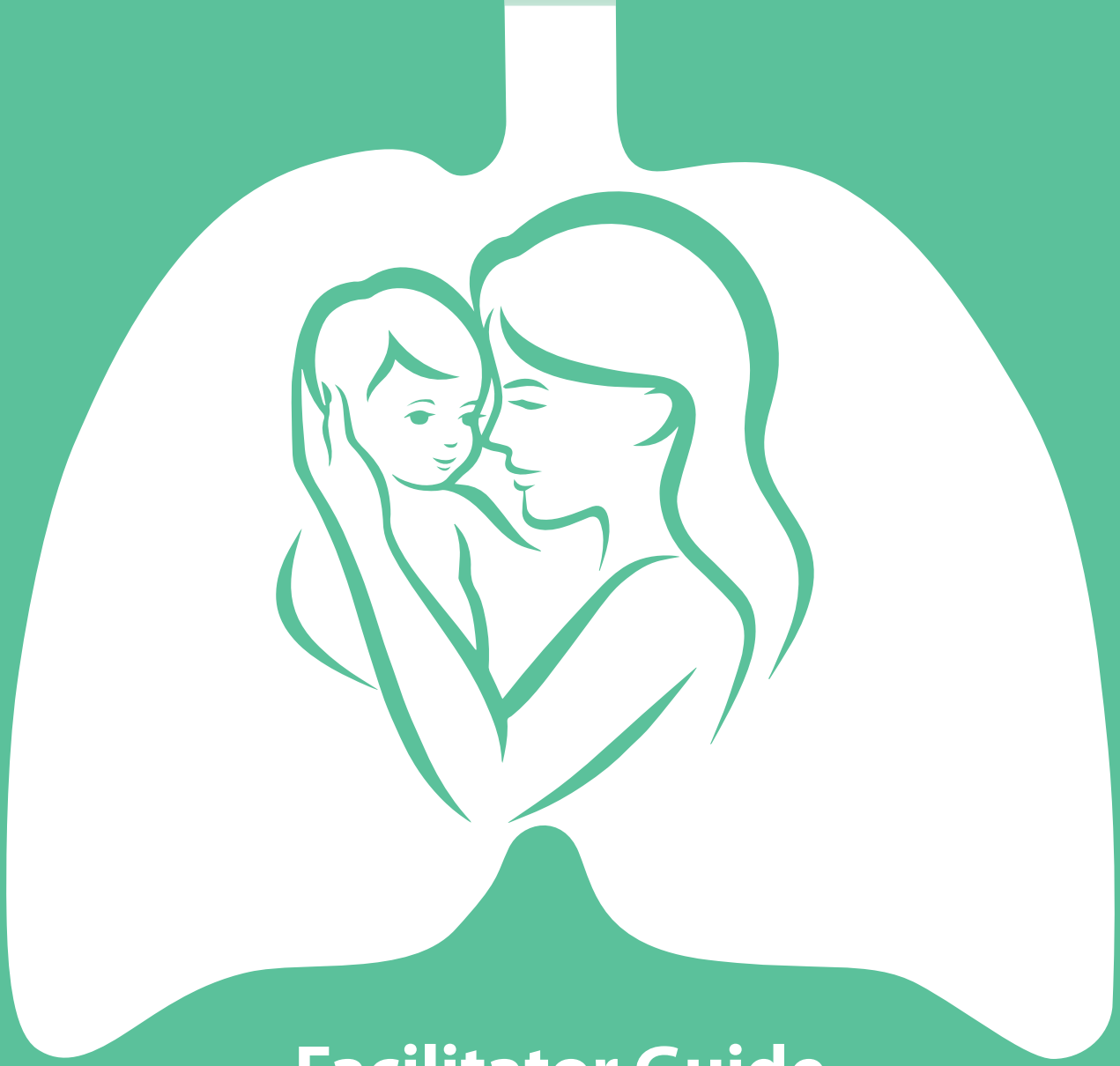

Facilitator Guide

Pneumonia Management

For Community Health Officers, ANMs & ASHAs

Ministry of Health & Family Welfare,
Government of India, New Delhi

April 2020

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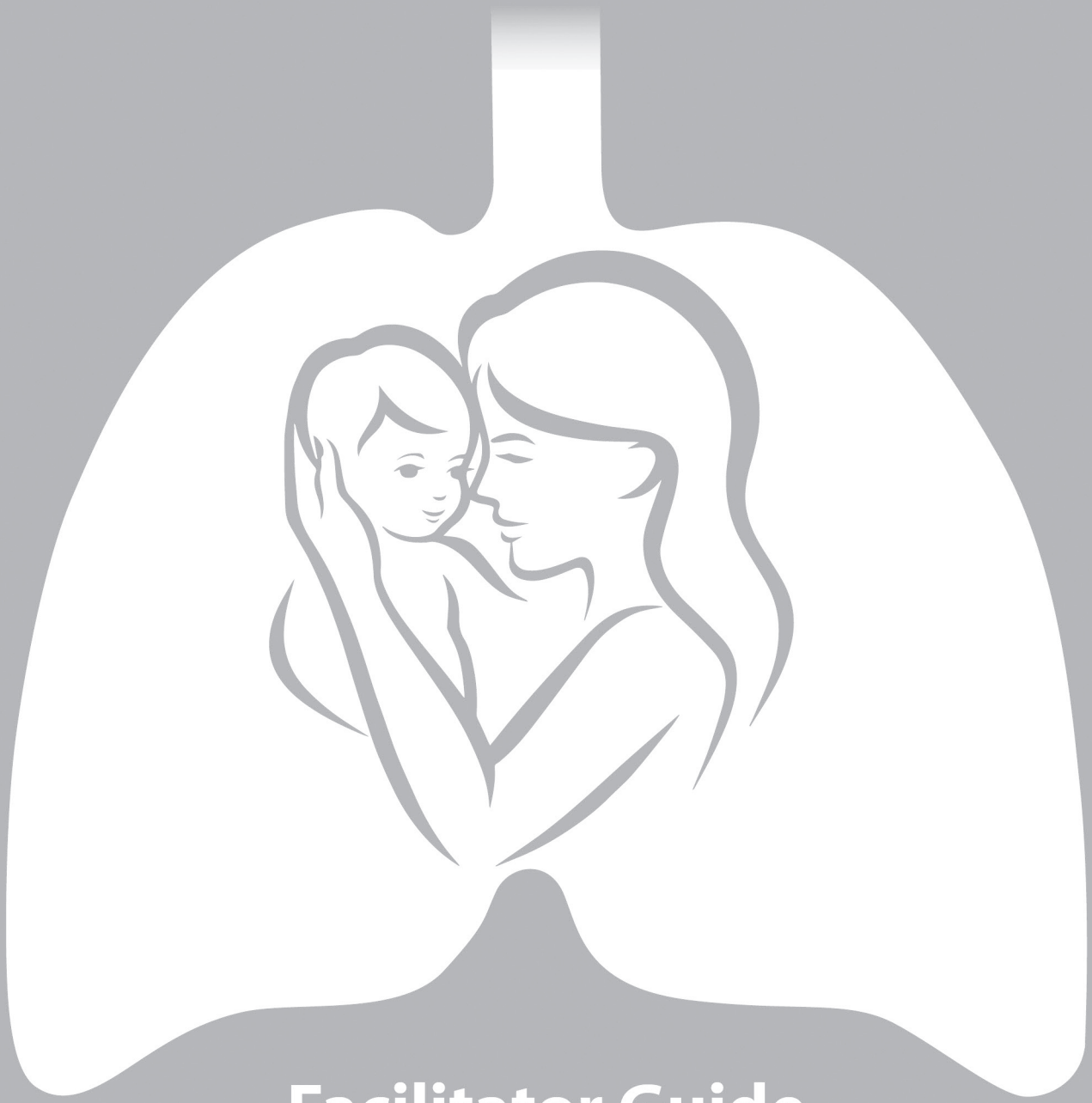

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List of Abbreviations

ANM	Auxiliary Nurse Midwife
ARI	Acute Respiratory Infection
ASHA	Accredited Social Health Activist
ALRI	Acute Lower Respiratory tract Infection
BCM	Block Community Manager
BPM	Block Program Manager
CHO	Community Health Officer
DCM	District Community Manage
DPM	District Program Manager
DPT	Diphtheria, Pertussis and Tetanus
EBF	Exclusive Breast Feeding
EIBF	Early Initiation of Breast Feeding
GAPPD	Global Action Plan for the Prevention & Control of Pneumonia and Diarrhea
HIV	Human Immunodeficiency Virus
HWC	Health and Wellness Center
IAPPD	India Action Plan for the Prevention & Control of Pneumonia and Diarrhea
IPC	Inter Personal Communication
IM	Intramuscular
IMNCI	Integrated Management of Neonatal & Childhood Illness
IV	Intra Venous
IYCF	Infant and Young Child Feeding
JSSK	Janani Shishu Surakshaa Karyakaram
KMC	Kangaroo Mother Care
MO	Medical Officer
MDI	Metered Dose Inhaler
RR	Respiratory Rate
WASH	Water, Sanitation and Hygiene

Section1: Introduction

This guide is built on the principle that good facilitation is often the result of careful preparation. Learning through module reading, videos, skill stations, case studies & group work allows people to become actively involved. This facilitator guide describes a sequential process for identification, referral and management of children suffering from pneumonia. This facilitator module will also help the trainers to plan the training session as well as to conduct skill stations.

1.1- Objectives of the training

1. To familiarize the trainees with standard protocols for identification, referral and management of children suffering from pneumonia
2. To increase awareness regarding prevention and control measures for Pneumonia
3. To strengthen pneumonia management practices

1.2- Guidance for the training

- **Duration of training:** The workshop will be skill based for one day

- **Venue of training:** The training venue should have adequate space for sitting arrangement of participants and facilitators as well as for installing work stations to practice key skills as per the training module. There should be functional facilities for PowerPoint presentation (PPT), audio-visual (AV) display and working on white board / flip chart during conduction of training sessions

  The seating arrangement should not be classroom style. It should be group style

- **Number of trainee per batch**: Maximum 30 per batch

- **Cadre of trainees:** Health workers (CHO,DPM, DCM, BPM, BCM, ANM, ASHA, ASHA Facilitator and other)

- **Number of facilitators per batch:** 4-5 facilitators per batch

- **Training methodology:** Each training is a one-day training designed to provide theoretical knowledge, skill stations, Audio-visual learning aides like videos, demonstrations, case discussions and visits to the nearest Pediatric Health facility for hands on case discussions, case identification, case management and referral support

  Note: So, it is a "learning by doing" methodology for this training

- **Training material:** The following training materials will be used
  - Facilitator Guide
  - Participant manual
  - Videos
  - Handouts
  - Skill Stations

- **Training Agenda:** Training agenda is given at Annexure 1

- **Prior Preparation and Training Logistics:** For successful conduction and completion of the training, it is desirable to start working well in time ensuring all preparations and arrangements of requisite training logistics. For this purpose, the finalized Training Agenda, with assignment of various training sessions to the facilitators, should be circulated to all concerned facilitators for their information and preparing their session plans

  Before actual commencement of the training (and not later than the second half of the day immediately before the starting date of the training), a facilitators' meeting should be held for internal discussion, review of preparedness and finalizing the training strategy/session plans

1.3- Who is a Facilitator?

A facilitator is a person who helps the participants learn the skills presented in the course. The facilitator spends much of his time in discussions with participants, either individually or in small groups

As a facilitator, you need to be very familiar with the material being taught. It is your job to give explanations, do demonstrations, answer questions, talk with participants about their answers to exercises, conduct role plays, lead group discussions, organize and supervise clinical practice in outpatient clinics, and generally give participants any help they need to successfully complete the course. You are not expected to teach the content of the course through formal lectures. (Nor is this a good idea, even if this is the teaching method to which you are most accustomed)

1.4- Role of Facilitator

As a facilitator, you do 3 basic things:
1. You INSTRUCT
2. You MOTIVATE
3. You MANAGE

To prepare yourself for each module, you should
- Read the module and *work the exercises*,
- Read in this *Facilitator Guide* all the information provided about the module,
- Plan exactly how work on the module will be done and what major points to make,
- Collect any necessary supplies for exercises in the module, and prepare for any demonstrations or role plays,
- Think about sections that participants might find difficult and questions they may ask,
- Plan ways to help with difficult sections and answer possible questions,
- Think about the skills taught in the module and how they can be applied in participants' own facilities,
- Ask participants questions that will encourage them to think about using the skills in their health facilities

1.5- Checklist for training

S.no	Item/ resource required	Quantity
1.	Print outs (Pre & Post assessment test, Training feedback form, case recording forms- young infant and child- 4 for each participant)	As per number of participants
2.	Colored Handouts for standard management protocols for pneumonia	As per number of participants
3.	Banner	2
4.	Mannequins for skill stations (Respiratory rate counting and Injection Technique)	2
5.	Laptop	1
6.	Projector and screen	1
7.	Attendance Sheet	2
8.	• Participant packets/folders – containing agenda, note book, pen, participant manual • Facilitator packet/folders – containing agenda, note book, pen, participant manual, facilitator guide	As per number of participants As per number of facilitators
9.	Flipchart	30
10.	Markers	10
11.	Vehicles (to and fro movements of participants from venue to visualize real cases to participants (CHC/District Hospital)	As per number of participant (6 Innova's @ 6 persons per vehicle)
12.	Logistics for skill stations	Amoxicillin syrup bottle with measuring cap – 4 bottles Amoxicillin dispersible tablets 250 mg- 40 tablets Inj. Gentamicin pediatric vials- 4 Syringe 1ml, 2 ml, 5 ml-10 Needles 23 or 25 G- 10 Teaspoon, droppers PSBI treatment card-4 Oxygen Cylinder with all attachments Oxygen Concentrator, Nasal Prongs and Nasal Catheters, Tabletop Pulse Oximeter, Nebulizer, Salbultamol, MDI with spacer, Salbutamol respules and solution, Cotton swab Table and chairs- 4 Hub cutter-2 Coloured Disposal bags Water running, soap or bucket and water dispenser 10-20 MCP Cards
13.	Weighing machine- baby infant and adult	1each
14.	Certificate both for participants & facilitators (signed prior)	As per number of trainees
15.	Transparent tapes	2
16.	Printer with one bundle of A4 size papers	1
17.	Scissors	1
18.	Stapler with pins	1
19.	Posters on Pneumonia	3 sets
20.	Video on Pneumonia and PSBI	3 sets

Section 2: Conducting session

For each session, the concerned facilitators/co-facilitators should get ready by going through the relevant training content such as section of participant manual, video, handout, exercise & its answer, and session plan. Preparedness for all relevant logistics and other items required for the session should also be reviewed beforehand.

In general, the facilitators involve all the participants and keep the group motivated. After covering a topic or a sub-topic, the facilitators should ask the participants if they have any query or doubt; and all such relevant questions should be answered to the participants' clarity and understanding. Many-a-times, some participants may highlight issues and constraints related to their block/district-specific operational and/or policy matters; they should be dealt with judiciously so as not to go beyond the scope of this training. The facilitators should convey key messages and guidelines for good practice in pneumonia management.

An outline of suggested session plans for various sessions of this training (based on the suggested training agenda, as mentioned earlier) is given below. In order to address any specific needs of a batch, the concerned facilitators may do subtle revision in some of these session plans, wherever required.

09:00-09:15 – Registration

Time (Min)	Activity/Task	Material
15	Registration	Registration sheet, attendance sheet, training kits (with each kit containing the modules, handouts, the training agenda and stationaries)

Methodology

- Set up a registration desk at the training venue
- Record the registration and the attendance of nominated participants
- Give the training kit to each registered participant
- Do TA/DA related formalities (such as distribution of TA forms, query solving, if any)
- Ask / guide the registered participants for taking seats in the training hall
- In the training hall, display / convey necessary training rules **(such as putting mobile phone on silent mode, raising hand to indicate intention to speak out, speaking out individually (one by one), emphasizing moderator's role, and appreciating that each person's (trainee's/trainer's) input is important)**

09:15-09:30 – Pre-test

Time (Min)	Activity/Task	Material
15	Pre-training evaluation	Pre-test Questionnaire *(Annexure 2)*

Methodology

- Distribute the handout of Pre-test questionnaire to all registered participants
- Ask the participants to attempt the questions given in the questionnaire and mark their responses therein, within an allotted time period of 15 minutes
- Ensure that participants attempt the questions on their own and do not take help from others (including the facilitators)
- After 15 minutes, collect the filled-up questionnaires from the participants

09:30-10:00 – Introduction of participants, expectation from training and roles of participants

Time (Min)	Activity/Task	Material
30	To discuss the participants' expectation from the training, roles and responsibility of participants and discussion on plan of the training	Sticky notes, flip chart

Methodology

- Introduce yourself as a facilitator of this course and write your name on the blackboard or flipchart. Ask the Co-facilitator to introduce and write his/her name on the blackboard or flipchart. Leave the list of names in a place where everyone can see
- Hold a round of introduction by asking the participants to introduce themselves (by name, designation and place of work) and write on the blackboard/flipchart
- Distribute sticky notes to all participants
- Ask the participants to write down one or two expectations that they may have from this training to share the problem the participants have experienced in diagnosing or treating children with Pneumonia.
- Request the participants to stick their responses on the flip chart provided (or, the facilitators may collect and stick these responses)
- Read out all the expectations recorded and enumerate what all will be covered during the training
- Discuss the role and responsibilities of participants and the plan of the training (in brief)
- Give adequate time for this discussion. Give importance to all listed job responsibilities for protective, preventive, treatment and early identification and referral
- Also talk about the roles and responsibilities of other staff for working in coordination

10:00-12:00 – Pneumonia assessment, classification and management protocol for children (2-59 months)

1) Reading and discussion on Section 1(Introduction) of the module

Time (Min)	Activity/Task	Material
15	Participants read Section 1: Introduction Discussion by facilitator	Module

Methodology

Participants read the Section 1: Introduction (15 minutes)

When all the participants have read the section 1, briefly lead a discussion on:

- Burden of pneumonia in India and its contribution to under five mortality
- Discuss the Protect, Prevent and Treat framework of GAPPD/IAAPD and highlight key interventions under each. Also mention the close linkages with Diarrhea management

Tell the participants about the color code-

- Pink- indicates severe illness and requires referral to a hospital or sent to the doctor
- Yellow – means the disease should be treated with medicines at home with home care advice
- Green – means the disease can be treated with home care without the use of medicines

Inform the participants that pneumonia management will be discussed for two age groups:

- Management of young infants age up to 2 months (0 to 59 days old)
- Management of sick children 2 months up to 5 years (2 to 59 months)

- If the child is not yet 2 months of age, the child is considered a young infant
- "Up to 5 years" means the child has not yet had his fifth birthday
- Be sure that participants understand "up to" means up to but not including that age.

2) Reading and Discussion on Section 2 (2.1 & 2.1.1) of the module

Time (Min)	Activity/Task	Material
15	Participants read Section (2.1 & 2.1.1) What is pneumonia and Outpatient case management of Pneumonia in children (2-59 months) up to classify cough or difficult breathing	Module

Methodology

Participants read Section 2: Ask the participants to start reading section 2.1 & 2.1.1 (15 minutes)

After all the participants have read discuss:

- What is pneumonia? Mention the terms ARI (Acute Respiratory Infection) and pneumonia are used interchangeably
- Highlight the need for checking for danger signs in all sick children. Tell the participants that they will see video on general danger signs
- Stress on two important signs fast breathing and chest indrawing

3) Video session on identification of the signs of Pneumonia

Time (Min)	Activity/Task	Material
40	Video on signs of pneumonia in children	Video

Methodology

Conduct Video session on identification of the signs of Pneumonia (40 minutes)

- General danger signs
- Respiratory rate counting
- Chest indrawing

When all the participants are ready, arrange for them to move to where the video will be shown.

To show the video:

- Introduce participants to the procedure for video exercises in this course. Explain that during video exercises they will:
  - See videotaped demonstrations on general danger signs and signs of pneumonia
  - Record their answers in their notepad
  - Check their own answers to exercises with those on the video
- Ask if participants have any questions before you start the video. When there are no additional questions, start the video
- Show the video. Follow the instructions given in the video. Pause the video and give explanations or discuss what the participants are seeing as needed to be sure the participants understand how to assess these signs
- At the end of the video, lead a short discussion. If the participants are not clear about the assessment of any signs, rewind the video and show the relevant portions again
- Make sure that all the participants can identify these signs, you may have to pause the video and talk through with the participants how to count breathing or where to look for chest indrawing

4) Reading and Discussion on Section 2.1.2 & 2.1.3 of the module

Time (Min)	Activity/Task	Material
20	Participants read Section 2.1.2 & 2.1.3 Classify Cough or Difficult Breathing, and Treat Pneumonia Demonstration by facilitator	Module Enlarged printouts of Classification boxes for each category of health staff and Treatment tables 1 and 2

Methodology

Participants read Section 2: Classify Cough or Difficult Breathing, Treat Pneumonia (20 minutes)

Ask the participants to start reading further till Home Care for child with cough or cold. Once everybody has completed the reading:

- Using a job aid or enlarged poster, demonstrate to each category of participants the process of classification. There are 3 classifications available- **Severe Pneumonia or Very Severe Disease** if child has a general danger sign or Chest indrawing. If child does not have this classification go down and see if child has fast breathing. If yes classify as **Pneumonia** otherwise classify as **No pneumonia-cough or cold**. The child can have only one classification- for example a child with severe pneumonia cannot also have pneumonia
- Practice with the participants to determine the exact dose of amoxicillin and gentamicin according to age &/or weight as pre-referral dose. Also discuss situations where referral is refused or not possible, and the need for completing 7 days of treatment with daily monitoring and motivating the caregivers to go to hospital
- Practice with the participants to determine the exact dose of amoxicillin according to age &/or weight in case of Pneumonia

5) Reading and Discussion on Section 2.1.4 of the module

Time (Min)	Activity/Task	Material
15	Participants read Section 2.14: Home care for Child with Cough and Cold Discussion on safe home remedies	Module Flip Chart and Pens MCP cards

Methodology

Participants read Home Care for Child with Cough and Cold (15 minutes)

- Briefly discuss suitable home remedies and why not to use cough syrups. Write on the flipchart possible safe home remedies
- Conduct discussion on need for identifying danger signs and the importance of counselling caregivers and community on these signs using MCP card
- Highlight delay in identification of these signs and delay care seeking by parents and caregivers as one of the key challenges in pneumonia management

12:00-13:00 – Community/Outpatient case management of Pneumonia/ Possible Serious Bacterial Infection (PSBI) in young infants (0-59 days)

6) Reading and Discussion on Section 2.2 of the module

Time (Min)	Activity/Task	Material
20	Participants read Section 2.2: Community/Outpatient management of Pneumonia/PSBI in young infants (0-59 days) Demonstration	Module Enlarged poster on Community & OPD management of young infants

Methodology

Participants read 2.2: Community/Outpatient case management of Pneumonia/PSBI in young infants (0-59 days) (20 minutes)

Once all the participants have read section 2.2

- Discuss about the difficulty in differentiating pneumonia from other illnesses. Recap the steps of counting the breathing rate and the cut off for labelling fast breathing. Also, clarify that only severe chest indrawing is to be considered as sign of pneumonia/PSBI in sick young infant
- Conduct a demonstration on classification process for PSBI using an enlarged poster or Job aid. Follow the classification process as done for a child in previous section. Remember presence of any one sign is enough to classify the sick young infant as PSBI
- Practice with the participants to determine the exact dose of amoxicillin and gentamicin according to age &/or weight. Highlight to participants that urgent referral and hospitalization is the ideal step, Discuss situations where referral is refused or not possible, and the need for completing 7 days of treatment with daily monitoring and motivating the caregivers to go to hospital
- Using enlarged poster on Community & OPD management of young infants with Pneumonia/PSBI demonstrate the steps of the management process

7) Video session on identification of the signs of Pneumonia/PSBI

Time (Min)	Activity/Task	Material
40	Video on signs of pneumonia/PSBI in young infants	Video

Methodology

Conduct Video session on identification of the signs of PSBI and use of amoxicillin and gentamicin (40 minutes)

To show the video:

- Explain that during video session they will:
  - See videotaped demonstrations on signs of PSBI
  - Video on Injection Gentamicin administration
  - Video on Oral Amoxicillin administration
- Ask if participants have any questions before you start the video. When there are no additional questions, start the video

- Show the video. Pause the video and give explanations or discuss what the participants are seeing as needed to be sure the participants understand how to assess these signs
- At the end of the video, lead a short discussion. If the participants are not clear about the assessment of any signs or drug administration, rewind the video and show the relevant portions again
- Make sure that all the participants can identify these signs, you may have to pause the video and talk through with the participants

13:00-13:15 – Case studies

Time (Min)	Activity/Task	Material
15	Case studies for pneumonia management	Module

Methodology

- Participants read the Case studies for pneumonia management
- Introduce the case studies to participants
- Ask the participants to answer the questions as mentioned in the case study (allot 10 minutes for this activity)
- Facilitators to check the answers and make corrections for each participant individually
- Ensure all the participants have understood the management process. Remove any doubts the participant have (See annexure 4 for answers)

13:15-13:30 – Role play on advising Home Care for a Child with Cough or Cold

Time (Min)	Activity/Task	Material
15	Role Paly– Advising Home Care for a Child with Cough or cold	Baby doll Copies of role paly description for both participants

Objective

1. To practice communication skills in advising home care in a child with cough or cold with special emphasis on homemade cough remedy

Case Scenario for the Mother

A mother brought her 7-months-old girl Tina who had cough for 4 days. The health worker assessed Tina and found that she has no general danger sign, no chest indrawing and no fast breathing. The health worker classified her as having No Pneumonia: Cough or Cold.

The health worker decided to give home care to Tina. The mother has travelled 10 kms to reach the clinic. This is her first child and she is worried that this cough may 'become' pneumonia. She wants the health worker to give some medicine in a bottle which relieves the cough. Tina's nose is blocked.

Give a copy of description to both the persons performing role play

Tips for the health worker

1. Praises the mother for having travelled so far to consult her
2. Assures her that Tina does not have pneumonia and the cough will most probably not lead to Pneumonia if she follows the advice given to her
3. Determines what she has given to treat cough in the past. Explains that cough medicines, though available in the market, are not safe in children
4. Discusses with her how to make a local safe cough remedy at home to soothe the throat. Checks with her if she has all the ingredients available at home or within her village
5. Determines whether the mother will be able to give the safe cough remedy
6. Advises her and demonstrates how to clear the nose using saline nose drops (water in which salt is dissolved - a medicine which can be prepared at home). This will also help the child eat well
7. Explains all the signs on when to return immediately

What the participants should check while watching the role play?

1. Did the health worker praise the mother for bringing Tina?
2. Was he/she able to convince the mother regarding the role of home made safe cough remedy and the harmful effects of most cough medicines purchased from the market?
3. Did he/she ask the mother about the safe cough remedy used by her in the past at home?
4. Did he/she explain how to clear the nose and how to prepare saline drops?
5. Did the health worker explain to the mother regarding when to return immediately?
6. Were checking questions asked?
7. Was the mother convinced and satisfied?

14:00-15:30 – Skill station demonstrations

Objectives

1. To familiarize the steps involved in use of Oxygen and Inhalation therapy (Nebulizer and MDI)
2. To familiarize and train the trainee to calculate and dispense correct dose and duration of amoxicillin and gentamicin treatment
3. To familiarize the steps involved in respiratory rate counting and use of Pulse Oximeters
4. To familiarize and train the participants on steps of handwashing

Time (Min)	Activity/Task	Material
15	Oxygen delivery system	Oxygen cylinder with attachments Oxygen concentrator Nasal prongs, catheter, oxygen hood
15	Inhalation therapy (Nebulizer and MDI)	Nebulizer Salbutamol MDI Spacer Salbutamol solution/respules
15	Calculating Amoxicillin and Gentamicin dose, method of administration and duration	Amoxicillin bottles with measuring cap and dispersible tablets (250 mg) Pediatric Inj. Mannequin/ doll for simulating IM Injection Gentamicin vials Syringes with needles- 1ml, 2ml, 5ml Teaspoon, dropper Cotton swabs Hub cutter
15	Respiratory rate counting	Wrist watch, child or mannequin on which inspiration and expiration can be shown
15	Pulse Oximetry	Pulse Oximeter (Tabletop)
15	Hand Washing with Soap and Water	Wash Basin, Water (running), soap, or bucket & water dispenser Big clothes pieces/handkerchief to blind fold the participants, Pairs of gloves and coloring agent for hand washing demonstration like tincture iodine

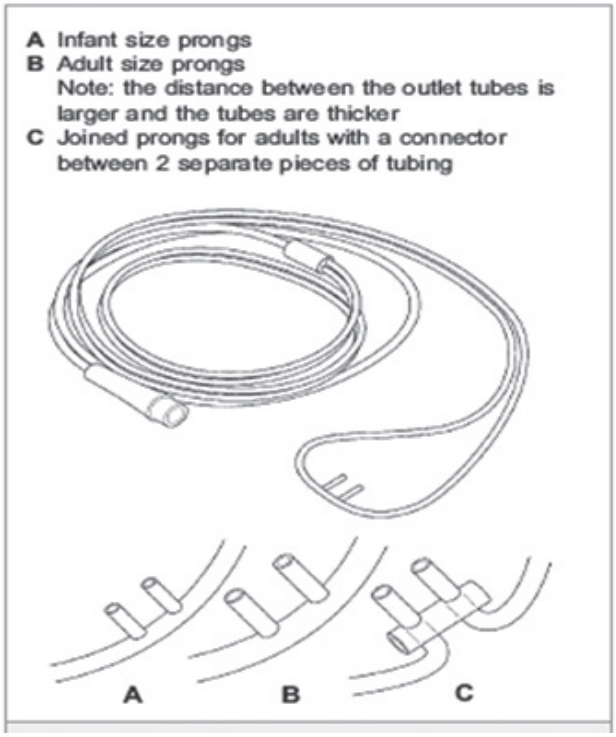
Methodology

- Introduce the participants to the idea of skill stations and the need to practice and refresh acquired skills
- Tell them the following skill stations have been set up:
  - Oxygen delivery systems- Oxygen Cylinder and Oxygen Concentrator
  - Inhalation therapy (Nebulizer and MDI)
  - Amoxicillin and Gentamicin dose calculation, administration and duration
  - Respiratory rate counting
  - Pulse Oximetry
  - Hand washing
- Divide the participants in smaller groups of 3-4 per group
- Each skill station should have at least one facilitator and co-facilitator with all the necessary supplies and charts required at that skill station

- Ask the participants to move in their allotted subgroups from one station to next station after the allotted time (15 minutes). Ask one of the support staff to be the time keeper
- At each skill station the facilitator will demonstrate all the steps using the equipment and necessary charts. Facilitator will answer the questions raised by the participants
- Ensure that all the participants have had the chance to visit all the skill stations and understand the correct steps

1. Oxygen delivery systems

Oxygen cylinder



1. Ensure all the parts are available (oxygen cylinder, concentrator, hood, nasal prongs, mask, nasal catheter etc.)
2. Ensure oxygen cylinder is secured on flat surface on a trolley
3. Attach the regulator
4. Attach flow meter to the regulator to set the flow rate. Ensure the flow meter is vertical
5. Attach humidification bottle to the flow meter. Fill clean water up to the mark level on the bottle
6. Attach oxygen tube to the humidifier
7. Using a spanner/Key opens the cylinder. Set the desired flow rate on the flow meter. Ensure that there is no leak
8. Connect oxygen tube to the nasal prongs/ oxygen hood/ face mask/ or catheter / to deliver oxygen to the patient
9. Place the nasal prongs just inside the nostril and clear the nose if blocked
10. Secure the nasal prongs by taping along the cheek
11. Severely ill children with signs of obstructed breathing, central cyanosis, severe respiratory distress or signs of shock or who are unconscious should receive oxygen initially by nasal prongs at a standard flow rate (0.5 to 1 liter/min for neonates and 2-4 L/min for older children) or through an appropriately sized mask (>4 L /min) to reach a peripheral capillary oxygen saturation ≥ 94 %
12. Monitoring of progress: When the child is stable and improving take the child off oxygen for 15 min, if the SpO_2 reading in room air remain ≥ 90 %, discontinue oxygen, but check again 30 min later and every 3 hrs thereafter on the first day without oxygen to ensure that the child remains stable
13. Nasal prong
    a. It is used for delivering oxygen to baby
    b. Has two port holes, O2 inlet and baby port
    c. Delivers FiO2-90% with ports closed, 60% with one port opened and 30% with both ports opened
    d. Nasal prong is disposable

Oxygen concentrator

1. Plug in the power cable. A green light indicating “power on” comes on
2. Switch on the concentrator. Once the concentrator is switched on, a red/ yellow light will come up
3. Check the distilled water level in the humidifying jar and ensure that it is filled up to the marking
4. Adjust the oxygen flow as per need. The red/yellow light will be on till the desired concentration of oxygen is achieved
5. Place the nasal prongs inside the baby’s nostrils and fix it with a tape, ensuring that it fits snugly

Key points to remember

1. Coarse Filter- ensure it is dust free and is washed daily
2. Zeolite granules- change every 20,000 hrs. or as per manufacturer’s recommendation
3. Bacterial filter- change every 1 year or as per manufacturer’s recommendation

Monitoring during oxygen therapy

Monitor the child at least every 3 hours to identify and correct any problem including:

- Oxygen saturation using pulse oximeter
- Position of nasal prongs
- Oxygen flow rate
- Leaks in oxygen delivery system
- Airway obstruction by mucus (clear the nose with a moist wick or gentle suction)

2. Inhalation Therapy- Metered Dose Inhaler (MDI) and Nebulizer

Metered Dose Inhaler

1. Remove the cap from the inhaler and shake the inhaler well
2. Ask the patient to take a few deep breaths and then breathe out gently
3. Ask the patient to immediately place the mouth piece inside the mouth with lips forming a seal
4. Instruct the patient to press the inhaler and at the same time begin a slow, deep breath and continue to breathe slowly and deeply over 3 - 5 seconds. Hold the breath for 10 seconds and then resume normal breathing
5. Advise to repeat the above steps when more than one puff is prescribed
6. Advise to wait 1 minute between actuations (puff); this may improve penetration of the second actuation into lung airways
7. Ask the patient to recap the MDI

Metered Dose Inhaler with spacer

If correctly used, MDI with Spacer is as good as a nebulizer

1. Remove the cap from the inhaler and shake the inhaler well
2. Attach the mask to the mouthpiece of the spacer
3. Insert the inhaler mouthpiece into the slot of the spacer (the inhaler should fit snugly and without difficulty)
4. Place the mask over the child’s nose and mouth so that it makes a seal with the face
5. Press down on the inhaler canister to spray one puff of medicine into the spacer
6. Hold the mask in place and allow the child to breathe in and out slowly for five breaths
7. If child needs another dose, waits for 2-3 minutes, shake the inhaler and repeats steps 4 to 7

Note:

- Inhalation by MDI spacer needs four puffs at 2-3 minutes interval to get an equivalent dose for a single salbutamol nebulization
- If spacer is being used for the first time, it should be primed by 4-5 extra puffs from the inhaler

Spacers can be made in the following way

1. Use a 500 ml/1 litre drink bottle or similar
2. Make a hole in the base of the bottle in same shape as mouthpiece of the inhaler so that the inhaler fits well. You can use a sharp knife to make the hole
3. Cut the bottle between upper quarter and lower ¾ and disregard the upper quarter of the bottle
4. Make a small V shaped cut in the upper rim of the bottle so as to fit to the child's nose, soften the edges of the rim of the bottle by flaming with a candle or lighter
5. Alternatively, commercial spacers can be used if available

Cleaning the spacer

Wash with a mild soap/detergent solution every month. Allow to drip dry. Do not use a cloth to wipe. This minimizes the static charge and thus, reduces drug deposition on the spacer wall

Nebulizer

1. Wash hands thoroughly before using a nebulizer
2. Makes sure the equipment is clean
3. Measure the correct dose of medication to be administered and pour into the nebulizer chamber (cup) and add saline solution to make the volume to 3 ml. The dose of Salbutamol is 2.5 mg (i.e. 0.5 ml of the 5 mg/ml nebulizer solution). This can be given 1-4-hourly initially, reducing to 6-8 hourly once the child's condition improves. If necessary in severe cases, it can be given more frequently
4. If the medicine is in single-use vials, twist the top off the plastic vial and squeeze the contents into the nebulizer cup
5. Connect the mouthpiece, or mask to the T-shaped elbow (face mask for smaller children and mouthpiece for older children)
6. Connect the nebulizer tubing to the port on the compressor. Turn the compressor on and check the nebulizer for misting
7. Hold the nebulizer in upright position to avoid spillage, while using mask ensure that it is fitting well. In older children ask the patient to keep the mouthpiece inside the mouth and close lips around it
8. Ask the patient to take slow deep breaths and if possible hold the breath for up to 10 seconds before exhaling. Occasionally, tap the side of the nebulizer to help the solution drop to where it can be misted

Post-procedure cleaning of equipment

Disconnect the nebuliser set from tubing and flow meter. Take nebuliser chamber apart, so that the three components are separated from each other. Ensure any residual solution is discarded since any residual solution left in the chamber will rapidly become colonised with bacteria from environmental sources.

Wash the three parts of chamber in warm soapy (neutral detergent/washing up liquid) water. Chlorhexidine-based or other soap products are not suitable. Washing the chamber ensures no residual drug is left in nebuliser set, avoiding subsequent re-administration with the next nebuliser. Rinse all three parts well. Remove excess water. Leave the nebuliser parts in a clean area to air dry (away from any area where water may splash on it to reduce the risk of contamination).

Regularly, review the integrity of the nebuliser set. Discard the chamber and tubing if either shows any signs of the following:

- Discolouration
- Stickiness
- Cracking of the chamber

3. Amoxicillin & Gentamicin (Dose, duration and administration)

Amoxicillin

1. Start by getting an accurate weight of the child
2. Tell the mother the reason for giving the drug to child
3. Amoxicillin comes in powder for suspension, dispersible tablets and capsules
4. Dispersible tablets are preferred
5. Determine the dose of the tablet using the dosage chart
6. Demonstrate to the mother how to dissolve the drug in 1-2 teaspoons of breast milk or clean drinking water. Wait for the tablet to dissolve completely
7. Now ask the mother to practice preparing the first dose and give to the child
8. Always label the medicine with: the name of the baby, the name of medicine and the dosage, how much medicine to give the baby, how often to give it, and for how many days
9. Explain the label to the mother and instruct her to use all the tablets to finish the course of treatment, even if the child gets better
10. Check mother's understanding before she leaves the health facility

If using amoxicillin powder to prepare syrup-

1. Check the dosage chart: to make the suspension
2. Add clean water up to the mark according to the directions on the bottle and shake the bottle well
3. Demonstrate to the mother how to measure the dose using measuring cup provided with the bottle. If not available, teach her how to measure the exact dose using a teaspoon (5 ml), dropper or a syringe
4. Now ask the mother to practice preparing the first dose and give to the child. Encourage the mother to breastfeed young infant after giving the medicine so that baby will swallow the whole medicine
5. Remind her to shake the bottle before giving each dose

Injection Gentamicin

1. Start by getting an accurate weight of the child
2. Tell the mother the reason for giving the drug to child
3. Wash your hands
4. Gather Gentamicin vial, 1 ml syringe, thin needle (23-25 G) and cotton balls
5. Check the expiry date of Gentamicin vial and its strength (concentration of drug in the vial). 80 mg per 2 ml vial is preferred for pediatric use
6. Determine the dose of the injection Gentamicin using the dosage chart
7. Use syringe to draw the correct amount of drug. First, draw air into the syringe equal to the dose you need. Then inject the air into the vial. Now turn the vial upside down to draw the desired dose keeping the tip of the needle in the fluid. Tap the syringe gently to let any air bubbles rise to top and clear them by pushing the plunger
8. Check that you have the right dose
9. Baby's upper outer thigh is the safest place to give IM injection in a baby
10. Ask the mother to hold the baby still in correct position
11. Clean the skin with alcohol swab. Put a second cotton swab nearby to the site of injection
12. Then with one quick motion, insert the needle at a 90-degree angle straight into the outer thigh muscle and inject steadily. Withdraw the needle and apply gentle pressure with cotton
13. Dispose of syringe and needle safely as per guidelines

4. Respiratory rate counting

1. Tell the mother that you are going to count the respiratory rate of the child and Take the watch with second hand or digital watch with second display in it (If required, ask mother to lift the child clothes so that chest may be visible, but keep the child comfortable & warm with a blanket or cloth while counting RR)
2. Ask mother for trying to keep child quiet and stable, if the child is sleeping there is no need to wake him/her
3. If the child is, irritable/fearful/crying then rest till he/she become stable
4. Hold watch at such a place that both chest and watch are visible in one sight
5. Wait the second hand to come at 12 and start counting RR
6. If you are doubtful that counting is not rightly done or child is unstable then restart the counting
7. Since in young infants breathing is often irregular, it is advisable to repeat the count if first count is elevated (60 breaths per minute or more) and second count is taken as final
8. In infants (2-12 months) and children (12-59 months), repeat the count if first count is 50 and 40 breaths per minute respectively. **Second count is taken for classification**

5. Pulse Oximetry

Pulse Oximetry is a non-invasive method that enables rapid measurement of the oxygen saturation of haemoglobin in arterial blood. Pulse Oximetry can rapidly detect changes in oxygen saturation, thus providing an early warning of hypoxaemia (insufficient oxygen content in the blood).

1. Tell the mother that you are going to check the baby with the equipment
2. Ask mother for trying to keep child quiet and stable, if the child is sleeping there is no need to wake him/her. If the child is, irritable/fearful/crying then rest till he/she become stable
3. A pulse oximeter consists of the monitor containing the batteries and display, and the probe that senses the

Tabletop Pulse Oximeter

pulse. The oximeter probe consists of two parts, the light emitting diodes (LEDs) and a light detector (called a photo-detector). Probes are designed for use on the finger, toe or ear lobe. Probes are carefully designed so that they can shine light through the finger and detect it on the other side. Probes are fragile and must be used carefully

4. Turn the pulse oximeter on: it will go through internal calibration and checks
5. Select the appropriate probe with particular attention to correct sizing and where it will go (usually finger, toe or ear). If used on a finger or toe, make sure the area is clean
6. Connect the probe to the pulse oximeter
7. Position the probe carefully; make sure it fits easily without being too loose or too tight
8. Allow several seconds for the pulse oximeter to detect the pulse and calculate the oxygen saturation. Look for the displayed pulse indicator that shows that the machine has detected a pulse. Without a pulse signal, any readings are meaningless
9. Once the unit has detected a good pulse, the oxygen saturation and pulse rate will be displayed.
10. Like all machines, oximeters may occasionally give a false reading - if in doubt, rely on your clinical judgement, rather than the machine. The function of the oximeter probe can be checked by placing it on your own finger
11. Adjust the volume of the audible pulse beep to a comfortable level. Always make sure the alarms are on
12. If no signal is obtained on the oximeter after the probe has been placed on a finger, then check the following
    - Is the probe working and correctly positioned? Try another location
    - Does the patient have poor perfusion? Check for low cardiac output especially due to hypovolemia, cardiac problems or septic shock. If hypotension is present, resuscitation of the patient is required immediately. The signal will improve when the clinical condition of the patient improves
    - Check the temperature of the patient. If the patient or the limb is cold, gentle rubbing of the digit or ear lobe may restore a signal

Possible sources of error

- **Light transmission:** Barriers or obstruction, e.g. nail varnish, dirt, foreign objects, bright or fluorescent room lighting
- **Pulse detection:** Low perfusion state which reduces peripheral blood flow (cold digits):Hypotension, Hypovolemic shock, Cold weather/house, Cardiac failure
- Carbon monoxide poisoning may give a falsely high saturation reading
- Wrong size of probe is used when carrying out the procedure e.g. using an adult probe on a child

Handling of Pulse Oximeter

- Keep the battery fully charged
- When the probe gets dirty clean it gently with a damp cloth or alcohol swab
- Position safely to avoid dropping or damage from spillages
- When disconnecting and connecting probe, grip the plug firmly and not the cable. If the cable is pulled, small wires inside will break. When not in use, always coil the lead and position the probe where it cannot be damaged. Too tight a coil will damage the lead. Leaving the lead dangling will result in damage.

Pulse oximetry does not give an indication of haemoglobin so if the patient is profoundly anaemic then their oxygen saturation may be normal but they may still be hypoxic

6. Hand Washing

Explain how germs can be spread with the following demonstration:

1. Blind fold the participants
2. Make them wear surgical gloves
3. Pour some coloring agent like tincture iodine etc. on their hands (gloves)
4. Ask them to perform the steps for hand washing
5. Remove the blind folding
6. Show them the area which was deprived of hand washing or where infection may still persist by showing the area that is not coloured in gloves
7. Tell them the steps involved in correct hand washing
8. Ask them to redo the hand washing steps with all demonstrated steps

15:30-17:00 – Hospital visit

Venue: Pediatric OPD and Ward

Objectives

1. To identify sign and symptoms of Pneumonia
2. To learn the steps for Respiratory rate counting and identify chest indrawing
3. To learn the OPD management of pneumonia in young infants and children

Time (Min)	Activity/Task	Material
90	Visit to a hospital to practice case assessment and management process	Sick young infant and children in OPD and admitted in Paediatric ward Case recording forms

Methodology

- Take the participants to the hospital for visualization of real cases and identification of signs and symptoms of pneumonia
- Facilitators to start the session by introducing the participants to case recording forms for child (2-59 months) young infant (0-59 days). Instruct the participants to fill the child form till Cough and cold box and young infant form till PSBI box and write the management plan on the back of the forms
- Facilitators can also demonstrate the process of filling one child and young infant form using patients and process of counselling the parents
- Divide the participants in 2-3 groups of nearly equal participants with pre-nominated group leader and a facilitator so as to rotate between OPD and Pediatric ward/emergency room. Trainees to collect the information in the case recording form
- Facilitators to identify few young infants with PSBI and severe pneumonia cases in children admitted in pediatric ward. These cases can be shifted to a room for conducting the indoor session if possible. Allot the cases to participants in pairs and ask them to assess, classify and write management plan in the case recording forms. The facilitator can also utilize the opportunity to demonstrate use of pulse oximeter, oxygen delivery and nebulizer therapy in the ward
- Participants to practice assessment, classification and management of sick young infants and children with cough and or difficult breathing in the OPD and ward individually or in pairs
- Each case to be presented to the facilitator in front of the whole group. Instruct the participants to counsel the parents in front of the facilitator. Facilitator will keep a record of the cases and a list of signs seen by the participants

17:00-17:15 – Post-test

Time (Min)	Activity/Task	Material
15	Post-training evaluation	Post-test Questionnaire *(Annexure 2)*

Methodology

- Distribute the handout of Post-test questionnaire to all registered participants
- Ask the participants to attempt the questions given in the questionnaire and mark their responses therein, within an allotted time period of 15 minutes
- Ensure that participants attempt the questions on their own and do not take help from others (including the facilitators)
- After 15 minutes, collect the filled-up questionnaires from the participants

17:15-17:30- Wrap-up and Closing

Time (Min)	Activity/Task	Material
15	Open house discussion, feedback, vote of thanks, certificate distribution	Participants feedback form Signed certificates for participants and facilitators

Methodology

- Conduct final discussions on doubts or suggestions on training with the participants
- Ask the participants to fill the training feedback forms individually
- Revise take home messages
- Distribute the certificates and close the training workshop with vote of thanks

Annexures

Annexures1: Training agenda

Time	Session	Methodology
09:00-09:15	Registration	Registration
09:15- 09:30	Pre-test	
09:30-10:00	Introduction of participants, expectation from the training	Discussion by Facilitator
10:00- 11:00	Assessment, Classification of Pneumonia in children 2 months up to 5 years	Reading, Discussions, Videos
11:00-11:15	Tea Break	
11:15-12:00	Management of Pneumonia in children 2 months up to 5 years-continued	Reading, Discussions
12:00-13:00	Assessment, Classification & Management of PSBI/ Pneumonia in young infants 0 – 2 months	Reading, Discussion, Videos
13:00-13:15	Case studies (0-2 months and 2-59 months)	Discussions
13:15-13:30	Role play	
13:30-14:00	**LUNCH**	
14:00-15:30	Skill stations • Oxygen delivery systems- Oxygen Cylinder and Oxygen Concentrator • Inhalation therapy (Nebulizer and MDI) • Calculating Amoxicillin and Gentamicin dose, method of administration and duration • Respiratory rate counting • Oximetry • Hand washing	Demonstration and hands on practice
15:30 -17:00	Hospital Visit with rotation of groups	Demonstration and Discussion
17:00-17:30	Post-test, Wrap-up and Closing (Awarding certificates, vote of thanks)	

Annexure-2: Pre and post assessment test

✓ **Please Note: please tick the correct answer to the question in front of the number**

1.Which of the following symptoms is not characteristic for pneumonia?

1. Cough ( )
2. Difficulty in breathing ( )
3. Decreased respiratory rate ( )
4. Fever ( )

2. What percentage of under-five deaths are due to Pneumonia in India?

1. 10% ( )
2. 15% ( )
3. 20% ( )
4. 22% ( )

3.What is pneumonia?

1. Acute inflammation of the lung ( )
2. Acute inflammation of the bronchial mucosa ( )
3. Acute inflammation of the pleural membranes ( )
4. Acute inflammation of the pharyngeal mucosa ( )

4.Pneumonia is infection caused by:

1.Bacteria ( )
2.Viruses ( )
3.Fungi ( )
4.Either of above ( )

5.The two commonest bacteria causing pneumonia in children are:

1.Klebsiella and Streptococcus pneumonae ( )
2.Streptococcus pneumoniae & Haemophilus influenzae type b ( )
3.Haemophilus influenzae type b and E. Coli ( )
4.None of the above ( )

6.Protect interventions for pneumonia include:

1.Exclusive breastfeeding for 6 months ( )
2.Adequate complementary feeding ( )
3.Zinc supplementation ( )
4.1 and 2 ( )

7.Prevent interventions for pneumonia include all except:

1.Vaccination ( )
2.Hand washing with soap ( )
3.Reduce household air pollution ( )
4.Oral Amoxicillin ( )

8.Treat interventions for pneumonia include all except:

1.Case management at community level ( )
2.Case management at health facility level ( )
3.Continued feeding ( )
4.Vitamin A ( )

9.Vaccines available for prevention against pneumonia include all except:

1.Measles ( )
2.PCV ( )
3.Hib (Pentavalent) ( )
4.Rotavirus ( )

10.The IAPPD goal is to reduce pneumonia deaths by 2025 to:

1.Less than 1 per 1000 live births ( )
2.Less than 2 per 1000 live births ( )
3.Less than 3 per 1000 live births ( )
4.Less than 5 per 1000 live births ( )

Annexure-3: Pre-test & Post-test answers

1. Which of the following symptoms is not characteristic for pneumonia?

Decreased respiratory rate

2. What percentage of under-five deaths are due to Pneumonia in India?

15%

3. What is pneumonia?

Acute inflammation of the lung

4. Pneumonia is infection caused by:

Either of above

5. The two commonest bacteria causing pneumonia in children are:

Streptococcus pneumoniae and Haemophilus influenzae type b

6. Protect interventions for pneumonia include:

1 and 2

7. Prevent interventions for pneumonia include all except:

Oral Amoxicillin

8. Treat interventions for pneumonia include all except:

Vitamin A

9. Vaccines available for prevention against pneumonia include all except:

Rotavirus

10. The IAPPD goal is to reduce pneumonia deaths by 2025 to:

Less than 3 per 1000 live births

Annexure-4: Case studies - Answers

Case 1- Subodh

- Classification- PSBI
- Management-
  - Give first dose of oral Amoxicillin- 4 ml of syrup (125mg/5ml) and intramuscular Gentamicin (0.5 ml)
  - Continue Breastfeeding to prevent low blood sugar
  - Advise mother how to keep the young infant warm on the way to the hospital
  - Refer urgently to hospital

Case 2: Mamta

- Classification- Pneumonia
- Management-
  - Give oral Amoxicillin- 1 ½ dispersible tablet of 250 mg twice a day for 5 days
- Advise parents on home care for cough and cold:
  - The parents are advised to properly clothed the child and keep the child warm
  - The mother is advised to continue feeding the child during the illness. Breast-feeding should be continued
  - Parents are advised to give home available fluids as much as the child would take. This would help in the relief of cough
  - The parents are advised to give the child a safe homemade soothing cough remedy if the child is more than 6 months of age like Honey, tulsi, ginger, herbal concoctions and other safe local home remedies. Avoid cough syrups
  - The parents are advised to keep the nose clean by putting in nasal drops (boiled and cooled water with salt mixed in it) and by cleaning the nose with a soft cotton cloth. They can also prepare saline nasal drops at home by adding ½ teaspoon of common salt (2.5 gm) to 250 ml (1 glass) of clean drinking water. Fresh solution should be prepared daily
- Parents should look for Danger Sign of illness like:
  - Child becomes sicker,
  - Not able to drink or breastfeed,
  - Fast breathing,
  - Difficult breathing, or
  - Child develops fever
- If any of these signs appear, parents should immediately contact ASHA or ANM
- Follow up in 2 days

Annexure-5: Training feedback form

Instructions: Please complete the following evaluation of the training in which you just participated. Completer all sections of the evaluation form to indicate your opinion of the course components. Your response will let us know how to improve future training and provide us with information about what other topics you would like to see addressed:

Please circle the choice that best reflects your evaluation of the training.

A. Overall Evaluation: The training is useful.

4. Strongly Agree 3. Agree 2. Disagree 1. Strongly Disagree

B. This training has enhanced my knowledge on key messages of pneumonia management

4.Strongly Agree 3. Agree 2. Disagree 1. Strongly Disagree

C. This training helped me develop skills on pneumonia management.

4.Strongly Agree 3. Agree 2. Disagree 1.Strongly Disagree

D. Did you find the training methods helpful for your learning?

4.Very well 3.Well 2. Neutral 1.Not well

E. Do you feel confident on Pneumonia management when you go back from the training?

4. Very confident 3. Confident 2 I need more practice 1 I cannot manage pneumonia cases

F. If you have any feedback on what could have improved the training, please write:

.....

.....

.....

.....

.....

.....

.....

.....

Annexure-6: Training monitoring form

1. Venue of the training: _____

2. No. of participants present on day/s of training: _____ _____

3. Dates of training: From _____ (dd/mm/yyyy) to_____(dd/mm/yyyy)

4. Name, designation & contact details of Monitor: _____

5. Dates of monitoring: From _____ (dd/mm/yyyy) to_____ (dd/mm/yyyy)

6. Key official present in the launch of this training (name and designation):

   _____

7. Type of Participants: MO, SN, DPM, DCP, ASHA, ANM, ASHA Facilitator, BCM, BPM, Faculty, designated Trainer, staff of Partner Agency, or equivalent, or any other staff working in the programme (circle/tick mark)

   Any other, not mentioned above (Y/N): _____ (If yes, details: _____)

8. Batch size (No. of trainee participants actually registered for the training): _____

9. No. of facilitator(s):

10. Whether ALL facilitators were "trained" facilitators? (Y/N):

    If no, names/details of the facilitators not "trained": _____

    ["Trained" means having undergone training in a TOT as conducted based on the updated module]

11. Was there a Training Agenda prepared and available for this training? (Y/N): _____

12. Whether sessions were aligned with the modular sessions? (Y/N) _____

13. Whether videos were shown? (Y/N)_____

14. Whether ALL Skill stations were set up during the training? (Y/N) _____

15. Did all the participants get enough opportunity to practice the skills? (Y/N) _____

16. Hospital visit organized? (Y/N) _____

17. What were the signs observed during hospital visit?

18. Comment on overall training arrangements

    _____

    _____

    _____

19. Details of any limitation/shortcoming:

_____

_____

_____

20. Overall comments (if any):

_____

_____

_____

Name and Signature

Annexure-7

Case recording forms

Management of the Sick Child Age 2 Months Up to 5 Years

Name : _____ Age: ____ Sex: M____ F____ Weight____kg Temperature: ____ °C Date

ASK: What are the child's problems? _____ Initial Visit? ___ Follow-up Visit? ____

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

CHECK FOR GENERAL DANGER SIGNS
NOT ABLE TO DRINK OR BREASTFEED LETHARIGIC OR UNCONSCIOUS
VOMITS EVERYTHING
CONVULSIONS CONVULSING NOW

General Danger sign present?
Yes___ No ___
Remember to use danger sign
When Selecting Classification

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes____ No____

- For how long? _____ Days
- Count the breaths in one minute
  _____ breaths per minute. Fast breathings?
- Look for check in drawing.
- Look and listen for stridor.
- Look and listen for wheezing.

DOES THE CHILD HAVE DIARRHOEA? Yes____ No____

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

DOES THE CHILD HAVE FEVER? (by history feels hot/ temperature 37.5°C or above) Yes____ No____

PF predominant area: Yes No
- Fever for how long? ____Days
- If more than 7 days, has fever been present every day?
- Has the child had measles within the last 3 months
- Look or feel for stiff neck.
- Look for runny nose.
  Look for signs of MEASLES:
- Generalized rash
- One of these: cough, runny nose, or red eyes

Test POSITIVE? P. falciparum P. vivax NEGATIVE?

.....

If the child has measles now or within the last 3 months?
- Look for mouth ulcers
  If Yes, are they deep and extensive
- Look for pus draining from the eye.
- Look for clouding of the comea.

DOES THE CHILD HAVE AN EAR PROBLEM Yes____ No____

- Is there ear pain?
- Is there ear discharge?
  If yes, for how long? ___ Days
- Look for pus draining from the ear.
- Feel for tender swelling behind the ear.

THEN CHECK FOR ACUTE MALNUTRITION
- Look for oedema of both feet.
- Determine WFH/L z-score:
  Less than-3? Between -3 and -2? -2 or more?
- Child 6 months of older measure MUAC ____ mm

_____

THEN CHECK FOR ANEMIA
- Look for palmar pallor.
  Severe palmar pallor? Some palmar pallor? No pallor?

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

___ BCG	_____ HepB0	_____ Penta1	_____ Penta2	_____ Penta3	_____ MEASLES/MR	_____ DPT B-1 +OPV
_____ OPV 0	_____ OPV 1	_____ OPV 2	_____ OPV 3 +IPV	_____ VITAMIN A	_____ MEASLES/MR2	_____ DPTB—2
_____ PCV1	_____ PCV2	_____ PCV3	_____ Rota- 1	_____ Rota- 2	_____ Rota- 3	_____ IFA

Return for next immunization or vitamin A or IFA supplement on:

_____ (Date)

ASSESS CHILD'S FEEDING If child has MODERATE ACUTE MALNUTRITION or ANEMIA or is less than 2 years old
- Do you breastfeed your child? Yes___ No___
  If yes, how many times in 24 hours? ___ times. Do you breastfeed during the night? Yes___ No ___
- Does the child take any other food or fluids? Yes___ No___
  If Yes, what foods or fluids? _____
  _____
  How many times per day? ___ times, What do you use to feed the child and how? _____
  How large are the servings? _____
  Does the child receive his own serving? _____ Who feeds the child and how? _____

TREAT

Remember to refer any child who has a general danger sign and no other severe classification.

Return for follow up in: _____

Advise mother when to return immediately.

Give any immunizations, Vitamin A, Deworming or IFA supplements needed today: _____

Counsel the mother about her own health.

Feeding /practices to support child's development

Advice_____

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 (Circl all signs present) CLASSIFY

CHECK FOR POSSIBLE BACTERIAL INFECTION/JAUNDICE

- Is the infant having difficulty in feeding?
- 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 at the umbilicus. Is it red or draining pus?
- Look for skin pustules.
- 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 36.5°C but above 35.4°C (or feels cold to touch)?
- Look at young infant's movements. Movement only when stimulated or no movement at all.
- Look for jaundice. Are the palms and soles yellow?

DOES THE YOUNG INFANT HAVE DIARRHOEA? Yes____ No____

- 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 & VERY LOW EIGHT

- 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 Very Low weight (<1800 gm)___ Low weight (1800-2500 gm)___ Not low weight (>2500 gm)___

If the infant has no indication 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 suckling effectively (that is, slow deep sucks, sometimes pausing)?

no suckling at all not suckling 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

_____	_____	_____	_____	_____
BCG	HepB0	Penta1	Rota Virus	PCV
_____	_____			
OPV 0	OPV 1			

Circle immunizations needed today.
Return for next immunization on:

(Date)

ASSESS OTHER PROBLEMS:

TREAT

Return for follow up in:

_____

Advise mother when to return immediately.

Give any immunizations needed today:

_____

Counsel the mother about her own health.

Notes

Notes

Notes