TRAINING MODULE FOR COMMUNITY NUTRITION WORKER

NUTRITION CARE FOCUSSING ON FIRST 1000 DAYS OF LIFE

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ABBREVIATION

Abbreviation	
ASHA	Accredited Social Health Activist
AWC	Anganwadi Centre
AWW	Anganwadi Worker
ANC	Ante Natal Care
ANM	Auxiliary Nurse Midwife
BCC	Behaviour Change Communication
BMO	Block Medical Officer
CM&HO	Chief Medical & Health Officer
CDR	Child Death Review
CDPO	Child Development Project Officer
CS	Civil Surgeon
CPR	Couple Pretention Rate
CBR	Crude Birth Rate
EIBF	Early Initiation of Breast Feeding
EBF	Exclusive Breast Feeding
EDD	Expected Date of Delivery
FADU	Frequency, Amount, Density, Utilization
IYCF	Infant and Young Child Feeding
IMR	Infant Mortality Rate
IEC	Information Education Communication
ICDS	Integrated Child Development Services
INP	Integrated Nutrition Project
IQ	Intelligence Quotient
IDD	Iodine Deficiency Disorders
IDA	Iron Deficiency Anaemia
IFA	Iron Folic Acid
JSY	Janani Suraksha Yojana
KMC	Kangaroo Mother Care
LAMA	Leave Against Medical Advise
LBW	Low Birth Weight
NRC	Malnutrition Treatment Centre
MDR	Maternal Death Review
MMR	Maternal Mortality Rate
MO	Medical Officer
MOIC	Medical Officer In-Charge
NHM	National Health Mission
NRHM	National Rural Health Mission
NUHM	National Urban Health Mission
NRC	Nutrition Rehabilitation Centre

Abbreviation	
ORS	Oral Rehydration Solution
PRI	Panchayati Raj Institution
PHC	Primary Health Centre
PEM	Protein Energy Malnutrition
SAM	Severe Acute Malnutrition
THR	Take Home Ration
TT	Tetanus Toxoid
VPD	Vaccine Preventable Disease
VHNSC	Village Health Sanitation and Nutrition Committee
VHSND	Village Health Sanitation and Nutrition Day
VAD	Vitamin A Deficiency

INSTRUCTIONS TO THE TRAINERS

This training module has been prepared to assist you in conducting the training of the community level Health and Nutrition workers and other ground level health and nutrition functionaries. The purpose of this training programme is to equip the trainees with necessary knowledge and skills to carry out their expected role effectively. The focus of the module is on direct nutrition interventions such as improvement in mother and child health care practices, health and nutrition care across the life cycle, as well as on timely and effective use of available health and nutrition services.

The training package comprises trainers' module, a handbook for the workers and set of flip-book. The training should be designed to ensure effective usage of handbook and flip book by community health and nutrition workers.

This training module for trainers has five main sections. A five-day residential training session is recommended so that practical field level exercises are conducted and adequate discussions on case studies are held to enhance the capacity of workers to perform their tasks effectively. Each batch should not have more than 25-30 trainees. A team of two trainers per batch is recommended to facilitate in the training including management of the participatory sessions, as well as the fieldwork and group exercises.

As Trainers you should:

- Concentrate on the essential facts, skills and attitudes. It is neither possible nor desirable to teach everything.
- Focus on health, nutrition and childcare problems of the community and on the tasks your trainees are expected to do.
- Plan lessons and sessions to encourage and help the trainees to assess and analyse the problems in the local situations and take appropriate actions.
- Use terms that caregivers can understand.

You are expected to go through the entire module and prepare yourself to conduct the training. The first part provides you with the framework of the entire 5-day training programme.

Following this, each section and each session therein for each day is detailed out. Make sure that you have read the day's session before the start of training session. You will also need to plan and manage the time at your disposal so that all sessions are given the required time and input.

Remember that this 5-day training is only a beginning. It is expected that the trainees continue to be trained in future to refresh the learning and develop greater understanding on specific themes.

Ensure that:

- All your participants know well in advance about the training (timings, venue, etc.)
- There are not more than 30 participants per training batch
- The training room/hall is airy, clean and there is sufficient light.
- There is sufficient space for hanging charts, demonstrations, and for group work
- The projector, laptop (in case presentations are to be made) etc. are checked in place
- There is proper arrangement for food and water for the participants

SECTION 1 : OVERVIEW OF THE NUTRITION INDIA PROGRAMME

Session 1.1: Background

India has the largest population of under-5 children in the world and contributes nearly 2million under-5 deaths, highest for any nation, globally. Malnutrition is India's silent emergency, which contributes to over 50% of the child deaths, the greatest human development challenges. Although India has seen strong economic growth over the past 20 years, malnutrition in children under five years of age continues to be among the highest in the world.

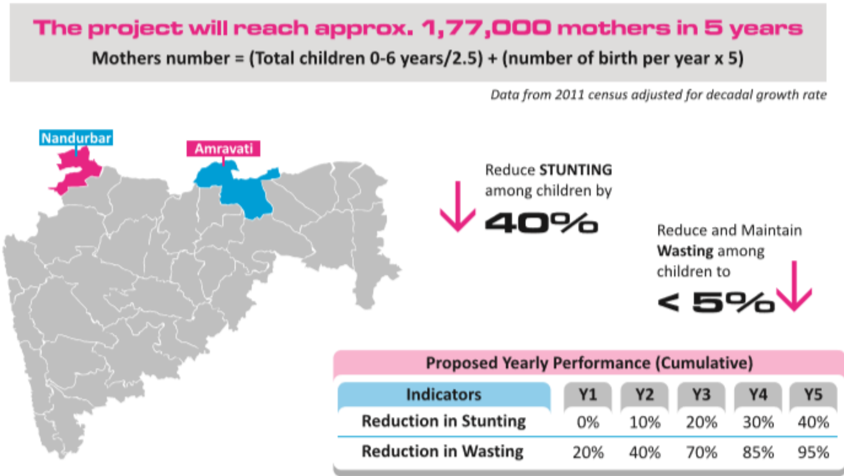
India: Situation of Young children

- 158.7 million Children below 6 years of age i.e. 15% of the total population
- 42 per cent children are underweight (National Family Health Survey-III)
- Child sex ratio(0-6 years) has lowered from 927 in 2001 to 914 in 2011

Malnutrition affects children's chances of survival, increases their susceptibility to illness, reduces their ability to learn, increases their chances of dropping out early from school, and makes them less productive in later life. Much of this undernourishment happens during pregnancy and in the first two years of a child's life and, without appropriate interventions, the damage to brain development and future economic productivity is largely irreversible. Considering which Nutrition India programme has been launched.

Session 1.2: Programme, Goal, Objectives

This program aims to intervene in 1000 day window period of child and mother to improve their nutritional indicators through demonstrating strategic sustainable interventions models.



Multiple iterative models will be designed and piloted in first 200 villages based on ethnographic research to unravel the underlying challenges in understanding ng the importance of nutrition among the target group, their perceptions, practices, knowledge and behaviours that impact nutritional practices in these villages.

With these insights, program team will work towards developing sustainable, scalable interventions models, implement these models and support, and generate evidence, learnings from these models for replication. Together, these activities will improve complementary feeding practices, nutritional diversity and access to improved health services in the time span of 1000 days for a pregnant mother and under 2 child.

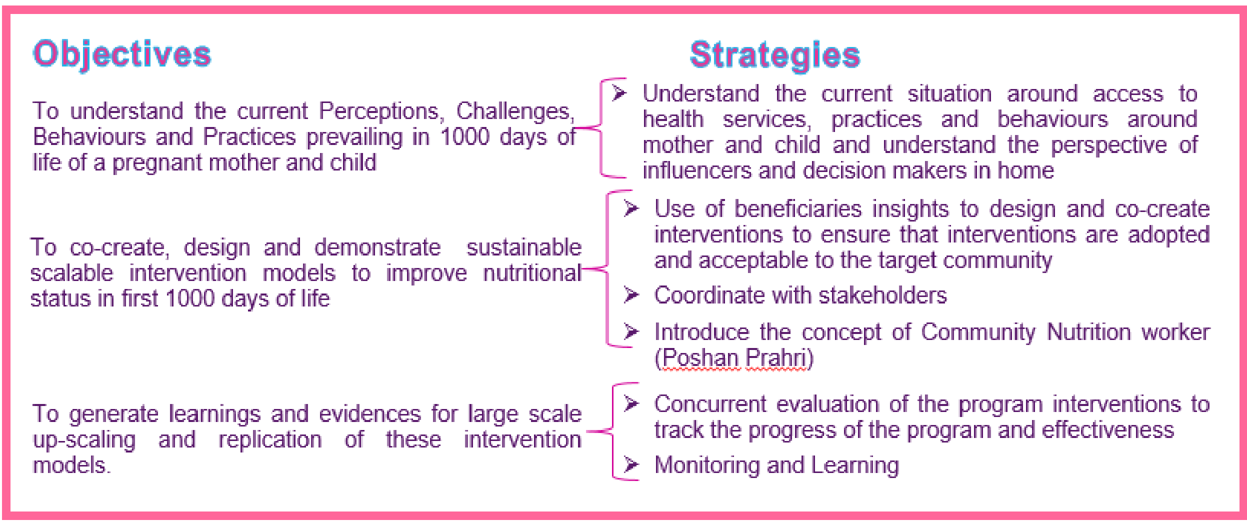
Nutrition India programme is a collaborative effort, led by **RB** and driven by **Plan India**, **Vihara Innovative Network** and **Village Social Transformation Foundation** (VSTF), Maharashtra to transform the nutritional status of children across 1000 villages in the Nandurbar and Amravati district of Maharashtra.

Goal: The project will improve nutritional status during first 1000 days of life to reduce **stunting** by **40%,** reduce and maintain childhood **wasting** to less than **5%**.

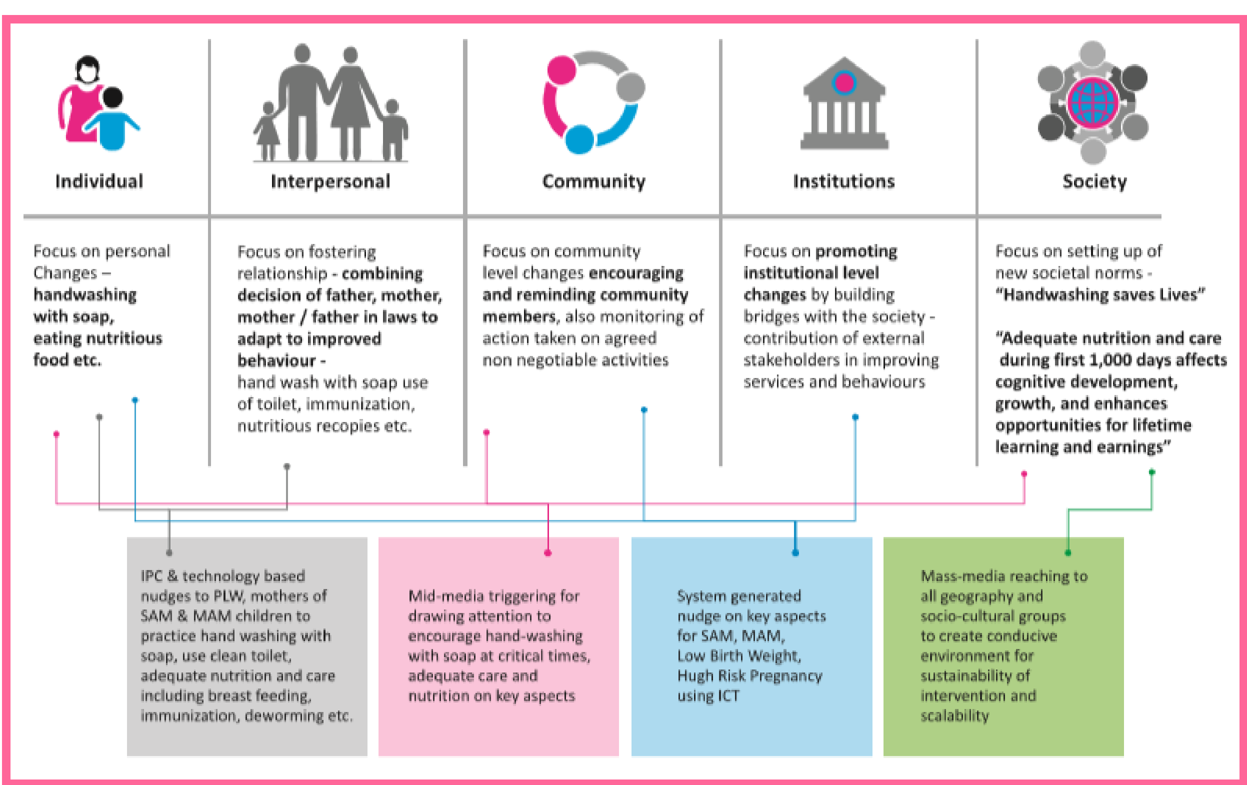
Table 1: Proposed Yearly Performance (Cumulative)					
Indicators	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**
Reduction in Stunting	0%	10%	20%	30%	40%
Reduction in Wasting	20%	40%	70%	85%	95%

Objectives and Strategies:

The programme objective and strategies are:



Session 1.3: Project Social Behaviour Change Communication Strategy



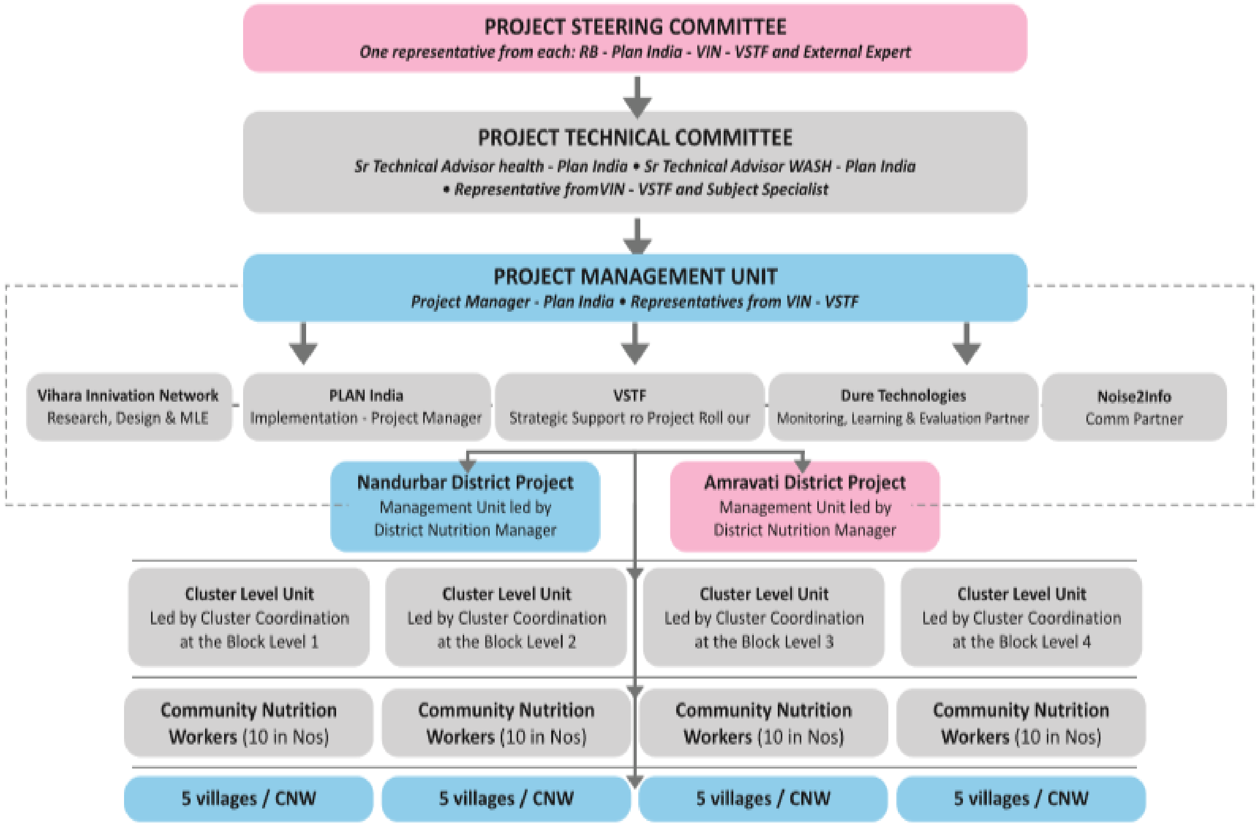
Session 1.4: Consortium Partners

Consortium partners and their roles are tabulated below.

Table 2: Roles and Responsibilities of Consortium Partners

Partner	Roles & Responsibilities
RB	Foundation- RB have put together a high-quality consortium to design and implement the RB - Maharashtra Nutrition Program
Plan India	Implementation Partner, along with local partners act as catalyst and facilitate smooth implementation
Vihara Innovative Network	Research Partner, support project for research and concurrent evaluations.
Village Social Transformation Foundation	Strategic Partner & On-Ground Support for creating enabling environment
Dure Technologies	Monitoring, Learning & Evaluation Partner, support project for developed MIS and its online reporting, creating dash board for review of progress.
Noise2oinfo	Communications Partner

Session 1.5: Programme Governance Structure



Session 1.6: Programme Steering & Technical Committee

Steering and Technical Committee

To drive the **RB-Maharashtra Nutrition Program** and take strategic and technical directions, a core committee was created comprising of Steering and Technical Committee.

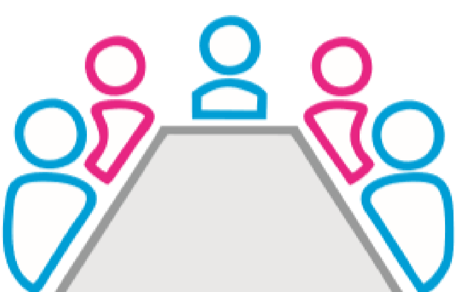
Objectives of the Steering Committee

- Strategic direction to the program
- Overall monitoring of success
- Guidance on larger dissemination of outputs
- Creating strategic connect with public / private stakeholders and funding agencies

Objectives of the Technical Committee

- Provide technical input on various criteria, aspects of nutrition, hygiene and sanitation.
- Inputs on data collection protocol and sources
- Commenting on efficacy of investments
- Review regular progress of the program

Timeline
The Steering Committee meets on **half-yearly** basis and provides strategic direction and critical inputs for the project.



Timeline
The Technical Committee meets **quarterly** to monitor the progress and takes key functional decisions on the project.

SECTION 2: INTRODUCTION TO TRAINING OBJECTIVES AND METHODOLOGY

DURATION 60 minutes

EXPECTED OUTCOME

The trainees approach the training with clear understanding and maximize the learning through active participation

LEARNING OBJECTIVE

By the end of the sessions, the trainees are-

- Relaxed and able to appreciate the importance of participatory learning
- In a position to understand the scope and expectations of the 5-day training
- Get an idea about their current knowledge on topics related to maternal and child health and nutrition

KEY SESSIONS

Session	Session topic	Duration
1	Introduction to training, its objectives and methodology	40 minutes
2	Pre-test	20 minutes

Session 2.1: Introduction to the Training, its Objectives and Methodology

Items required

Board cards for writing and pasting on board, pens, markers, adhesive tape, name-tags, training-plan handouts

Learning objective

At the end of the session,

- Trainees know one another and can easily interact.
- Understand the objective and methodology of the training
- Express their expectations from the training programme
- Trainees are familiar with the training plan.

✓ **After all the trainees have gathered at the training venue, welcome them to the training programme.**

✓ **Introduce yourself and briefly share your background with the trainees**

✓ **Provide each one of them a name-tag. Ask them to write their name on the tag and tape it on their shirt or dress**

✓ **Encourage trainees to move around and introduce themselves to each other**

ACTIVITY 1. 'LETS GET TO KNOW EACH OTHER'

Method: Group exercise

- Ask the trainees to form groups with five members each
- Give participants 5 minutes to memorize the names of fellow group members
- When the allotted time is up, ask each member to name her or his neighbour
- Ask each trainee to also introduce themselves—their name, the name of their village and the experience (how they have been involved and their level of interaction with the community)
- Thank the trainees for sharing their experiences.
- Request the trainees to take back their seats.

ACTIVITY 2: 'WHAT ARE YOUR EXPECTATIONS?'

Method: Group Discussion

- Give a small piece of chart paper to all the participants.
- Request each individual to answer the following question: "What do I expect to learn from this training?" and write the answer on the piece of paper
- Collect the pieces of paper and pin/stick them on the Flip Chart
- Summarize the expectations of the trainees.
- Explain to the group that the expectations listed will be covered during coming 5 days.
- Tell the group that you will refer to their expectations again at the end of the workshop to see to what extent have they been met.

ACTIVITY 3: 'LETS UNDERSTAND THE TRAINING OBJECTIVES AND METHODOLOGY'

Method: Presentation using PPT/ chart

What is the objective of this training?

✓ **Present the chart/ slide of the presentation and explain to the group-**

- The overall objective of the training is to equip the trainees with necessary knowledge and skills to develop a clear understanding of their roles/responsibilities and carry out their expected/ assigned role efficiently.
- In order to achieve this larger objective, the training programme has been designed in a manner so as to ensure that the trainees-
  - Understand their roles and responsibilities as change agents
  - Equip themselves with the technical knowledge about the health and nutrition care of mother and children along the life cycle, with a special focus on first 1000 days of life
  - Possess the required skills to reach and be able to effectively communicate the messages for appropriate actions by caregivers
  - Possess knowledge and skills to mobilize caregivers/mothers to acquire timely government services and specific entitlements.
  - Monitor actions at home level regarding nutrition and health practices followed by caregivers at family level optimum use of health and nutrition services and social benefit entitlements.

What methodology will be used to impart the training?

✓ **Present the chart/ slide of the presentation and explain to the group-**

- Training methodology will focus on ensuring maximum participation from the learners in order to make the exercise a two-way learning process.
- In addition to lectures, hands-on practice will be the focus of the training, with emphasis on counselling skills and the effective use of counselling tools.
- The course will employ a variety of training methods, including the use of counselling materials (set of flip-books, handbook), audio-visual aids, demonstrations, group discussion, case studies, and hands-on practice sessions.
- Case study discussion, exercises, practice sessions etc., form an integral part of all the sessions in order to avoid monotony and maximize learning 'by doing'.
- While working in groups, care will be taken to encourage each and every member of the group to participate rather than a few who dominate others
- Stress upon the importance of using participatory approach for training:
    - What I hear, I forget
    - What I see, I remember
    - What I do, I understand"

ACTIVITY 4: "LETS STUDY THE TRAINING PLAN AND FORMULATE GROUND RULES"

Method: Presentation, discussion, brainstorming

- Provide to the trainees, handouts with details of the training plan of five days.
- Briefly run through the plan.
- Inform the participants that the programme is tightly structured, requiring everyone's presence and active participation

✓ **Explain to the trainees:**

- During the workshop each participant will be asked to share their views and perspectives with others. In this way, everyone (including the facilitators) will be 'equal participants'.
- In this workshop there are NO teaching sessions; we all learn from each other.
- There are some basic ground rules that would be followed throughout the workshop.

✓ **Now ask the participants to brainstorm and formulate ground rules for the workshop and keep writing them on a flipchart, then match with the following:**

- Stress that adherence to these rules will help to ensure an effective and enjoyable learning environment.
- Paste the chart on "Ground Rules" on a wall so that it can be referred to throughout the workshop.

Ground rules for the training

- ❖ Treat everyone with respect at all times, irrespective of sex or age
- ❖ Ensure and respect confidentiality
- ❖ Agree to respect and observe time-keeping and to begin and end the sessions on time
- ❖ Speak one by one-making sure that everyone has the opportunity to be heard
- ❖ Accept and give critical feedback, taking care not to hurt anyone's feelings
- ❖ Draw on the expertise of facilitators and the participants in difficult situations
- ❖ Keep mobile phones in silent mode

SESSION 2.2: PRE-TEST

Items required

Pre-test forms

Learning Objective

By the end of this session, the trainers will be able to-

- Assess the participants' level of current knowledge regarding health and nutrition care among mothers and children especially during the first 1000 days of life

✓ **Explain to the trainees**

- The purpose of this test is pre-training evaluation of knowledge & attitude of participants.
- It does not matter if they do not know the answers to some questions. Their answers will help the facilitators to know their existing knowledge and the gap in knowledge. Based on this information, more emphasis can be given to topics that have shown to have gaps.

ACTIVITY:1

- Give each participant a pre-test form (Annexure 1: Pre-Test)
- Tell the trainees to circle the word 'pre-test' from the phrase 'pre-test/ post-test' mentioned at the top of the form.
- Explain to the participant that they have to complete the Pre-test form in 30 minutes.
- Ask the participants to respond to the questions on their own and not discuss them with their co-participants

✓ **Correct the Pre-test forms using the Answer sheet and give scores.**

✓ **Make note of the subject areas /issues that need to be addressed (the questions that most of the participants could not answer or answered incorrectly)**

✓ **Ensure that these gap areas are addressed and emphasized during the conduction of the relevant sessions.**

SECTION 3: UNDERSTANDING MALNUTRITION / UNDERNUTRITION

DURATION 4 hours

EXPECTED OUTCOME

The trainees are equipped with both, knowledge as well skills, to identify children with malnutrition for timely corrective actions

LEARNING OBJECTIVE

At the end of the session the participants should be able to-

- Understand what is meant by the term "malnutrition" and undernutrition and the types of undernutrition
- Understand the multiple determinants of undernutrition and its damaging effects
- Understand the methodology to assess undernutrition

KEY SESSIONS

Session	Session topic	Duration
1	Understanding undernutrition: meaning, types	45 minutes
2	Factors contributing to undernutrition and the critical period of first 1000 days	1 hour
3	Damaging effects of undernutrition	30 minutes
4	Assessing undernutrition	1 ½ hours
5	Summarize	15 minutes

Session 3.1: Understanding Malnutrition / Undernutrition

Items required

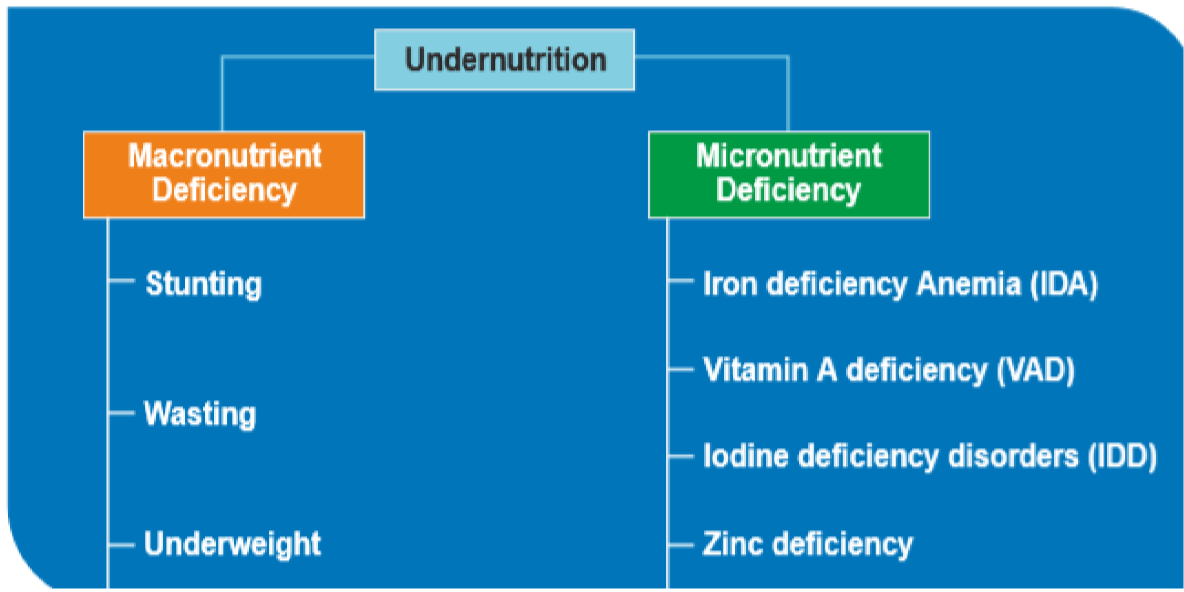
Presentation slides, Flip chart, bold markers

ACTIVITY 1: UNDERSTANDING MALNUTRITION/ UNDERNUTRITION AND ITS TYPES

Method: Presentation and Discussion

- ✓ **Ask the participants: What do you understand by the term Malnutrition?**
- ✓ **Write the key points on a flip-chart and add missing points/ information**
- ✓ **Present the following information to the trainees using the PPT/chart.**

Figure No. 3.1: Reasons of Undernutrition



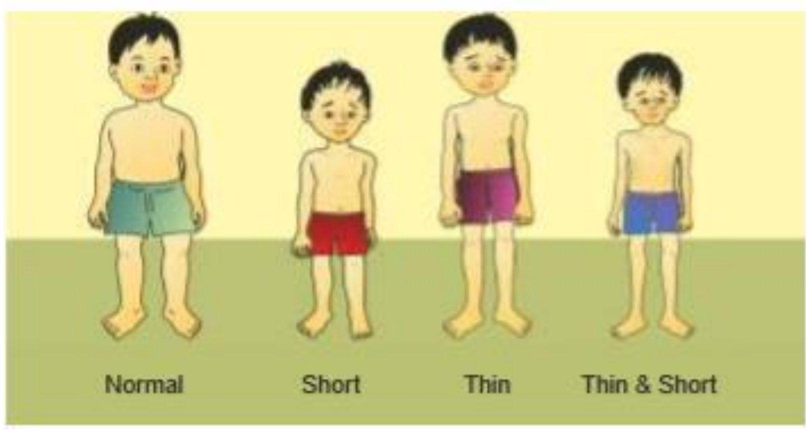
- Malnutrition is a broad term referring to both Undernutrition and over nutrition. The term "Malnutrition" is often alternatively used for "Undernutrition" and is acceptable.
- Undernutrition occurs when body does not get adequate amount of essential nutrients such as energy, proteins, fats as well as vitamins and minerals. These nutrients are required for optimum physical and mental development. This can be due to inadequate consumption of nutrients from the food compared to what the body requires. Besides poor dietary intake of these nutrients, poor absorption or loss of nutrients due to illness such as diarrhoea, fever, cold and upper respiratory infections and worm infestation can also result in undernutrition.
- Over nutrition occurs when body gets more than the amount of energy required by the body and results in problems of overweight and obesity.

Note: The training will deal with undernutrition and not over nutrition. The term 'undernutrition' will be used throughout the module.

✓ **Ask the participants: What are the types of Undernutrition?**
✓ **Write the key points on a flip-chart and add missing points/ information**
✓ **Present the following information to the trainees using the ppt/chart.**

- Each form of undernutrition depends upon what nutrients are missing from the diet, for how long and at what age. The most basic kind is called **"Protein Energy Malnutrition (PEM)".**
- PEM results from a diet lacking in energy and protein because of a deficit in all major macronutrients (nutrients which are required by the body in large quantities), such as carbohydrates, fats and proteins. This results in any of the following three conditions-

- **Stunting:** The child has low height/length according to his/her age. This indicates 'chronic' malnutrition, i.e. the child is malnourished for a long period of time.



- **Wasting:** The child has low weight according to his/her height. This indicates 'acute' malnutrition, which is caused by short-term malnourishment, insufficient dietary intake, frequent infections, etc.

- **Underweight:** The child has low weight according to his/her age. This is a composite indicator, which means it tells you an overall picture of the child's nutritional status, unlike the above two, which are precise in nature.

- Undernutrition, which occurs due to deficiency of minerals and vitamins, is referred to as **Micronutrient deficiency**. The 'micro-nutrients, though required in a very small amount, play a critical role in the overall well-being and its deficiencies can influence physical growth parameters such as underweight, stunting and wasting.

- Micronutrient deficiency primarily includes-

Iron deficiency Anaemia (IDA):

- How is IDA caused? This is caused by inadequate Iron in the body. Iron ensures development of normal red blood cells, which carries oxygen to the entire body. There is increased need for Iron during rapid growth of infancy, adolescence and pregnancy. Menstruation in women in reproductive age results in increased loss of iron.
- How can it be addressed? IDA can be addressed by consuming Iron rich diet- animal foods, green leafy vegetables, pulses etc. However, Iron from vegetarian diet is not as well absorbed as iron from animal flesh food. In case of severe deficiency, Iron supplementation is required to address IDA.

Vitamin A deficiency (VAD):

- How is VAD caused? This is caused by inadequate Vitamin A in the body. Vitamin A helps in fighting diseases and lowering the severity of illness. It also contributes to the normal functioning of the visual system. Lack of vitamin in diet can cause blindness.
- How can it be addressed? VAD can be prevented by consumption of vitamin A rich diet, including- red and orange fruits and vegetables (papaya, mango, pumpkin, tomato, carrots), green leafy vegetables.

Iodine deficiency disorders (IDD):

- How is IDD caused? Iodine is not found in sufficient quantities in our daily diet sources. This is primarily because the soil is depleted of iodine, resulting in poor iodine levels in food items. Lack of iodine results in brain damage of fetus, lowering of IQ levels etc.
- How can it be addressed? As a national policy, edible salt is fortified with iodine and is advised to be used daily to meet the diet deficit of iodine.

Zinc deficiency:

- How is zinc deficiency caused? Zinc deficiency is mainly caused due to poor intake or absorption of zinc from the food or increased zinc excretion. Zinc is needed for the proper growth and maintenance of the human body.
- How can it be addressed? Food sources of Zinc should be included in the diet. Zinc is normally found in animal foods.

Summarize key points

- Undernutrition is of 2 types- Protein energy malnutrition, and micronutrient deficiency
- Undernutrition occurs when body does not get enough nutrients required for optimum physical and mental growth.
- Protein Energy malnutrition may result in – Underweight (low weight for one's age), Stunting (low height for one's age; represents chronic malnutrition) or Wasting (low weight for one's height; represents acute malnutrition)
- Iron deficiency often results in Anaemia. Measurement of haemoglobin levels is used for assessing status of anaemia. IDA is reported in all age groups. Seven out of 10 preschool children suffer from IDA.
- Vitamin A is required for improved immunity and eye functions
- Iodine is critical for baby's mental and cognitive development

Session 3.2: Factors Contributing to Undernutrition

Items required

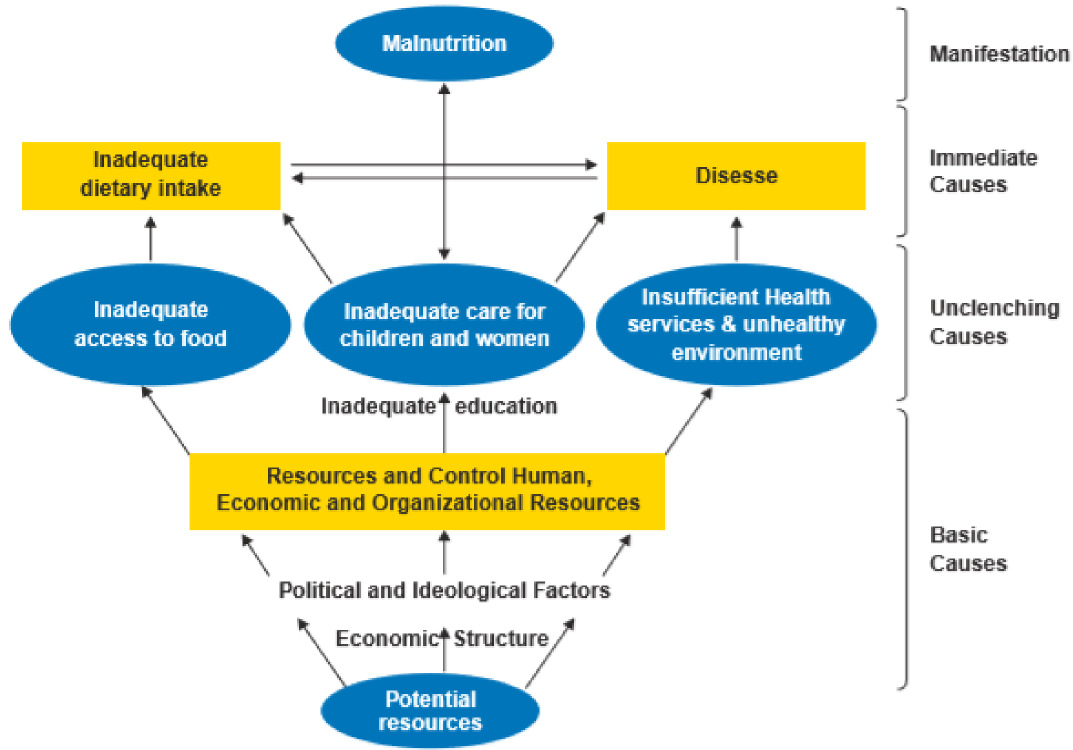
Presentation slides, Flip chart, bold markers

ACTIVITY 2 UNDERSTANDING THE MAIN CAUSES OF UNDERNUTRITION

Method: Presentation and Discussion

- ✓ **Ask the participants: What according to you are the main causes of undernutrition?**
- ✓ **Write the key points on a flip-chart [the points may be categorized into basic, underlying and immediate causes per the figure below]**
- ✓ **Refer to the fig… on your ppt/chart and present the following information to the trainees.**

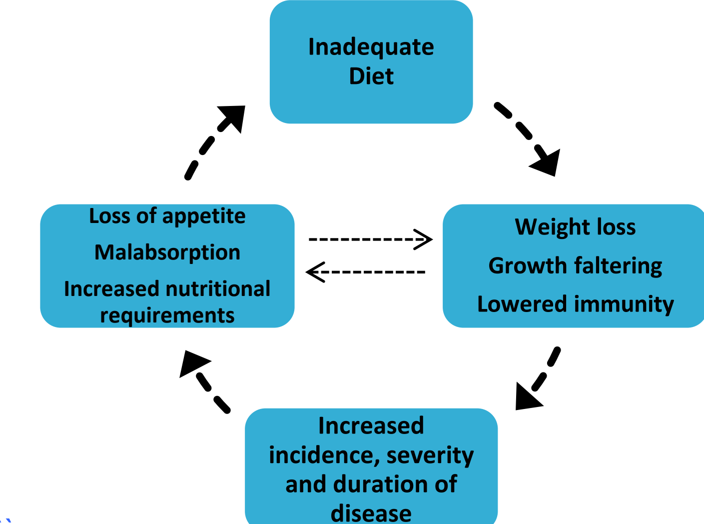
Figure No. 3.2: Conceptual framework of Undernutrition



- Undernutrition among children is considered is a far more complex problem involving interplay of factors, of which food intake is only one. Lack of knowledge about nutritional needs during infancy and childhood, inadequate choice, preparation and storage of food, and effects of repeated infectious diseases are equally important.

- **Immediate causes**: The immediate cause of undernutrition is a result of a lack of dietary intake, or disease, or both. This can be caused by consuming too few nutrients or due to an infection that can increase requirements, and prevent the body from absorbing the nutrients consumed.

Figure No. 3.3: The infection- Undernutrition Cycle



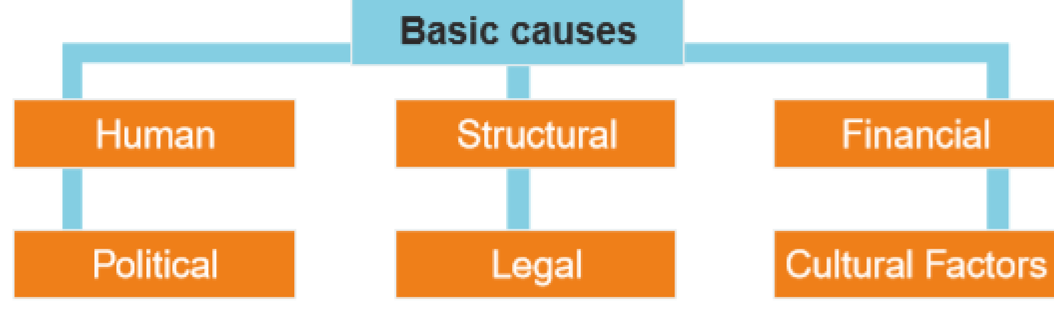
- Inadequate diet/Poor nutrition can result in reduced immunity to infection.
- This can increase the likelihood of an individual getting an infection or increase its duration and/or severity.
- Infection can result in loss of appetite, increased nutrient requirements and/or decreased absorption of nutrients consumed.
- This triggers further weight loss and reduced resistance to further infection

- **Underlying causes:** Whether or not an individual gets enough food to eat or whether s/he is at risk of infection is mainly the result of factors operating at the household and community level. The underlying causes can be grouped into three broad categories:
  - Household food insecurity [Food not available and/or affordable; also encompass both quantity and quality of food]
  - Inadequate care [Child care practices such as IYCF, hygiene, etc.]
  - Unhealthy household environment and lack of health services (poor public health) [access to basic health services, clean & safe water and sanitation, etc.]

- **Basic causes:**

  The basic causes refer to what resources are available (human, structural, financial) and how they are used (the political, legal and cultural factors). These may be thought of as the real reasons behind the underlying causes. This also includes lack of women care and empowerment, social taboos and practices such as early marriage and pregnancy, large family size, etc.

Figure No. 3.4: Basic Causes of Undernutrition



ACTIVITY 3: UNDERSTANDING THE IMPORTANCE OF FIRST 1000 DAYS OF LIFE

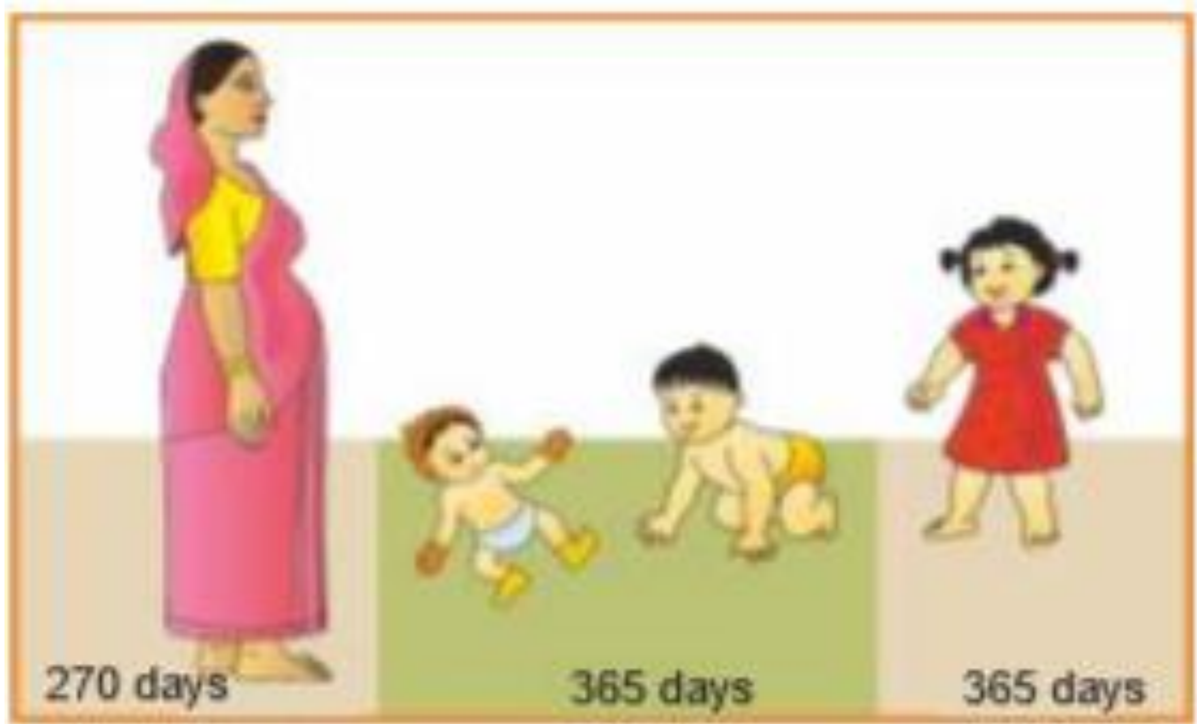
Method: Presentation and Discussion

- ✓ **Ask the participants: What do you understand by the term 'first 1000 days of life'?**
- ✓ **Write the key points on a flip-chart**
- ✓ **Referring to the fig… in the ppt, explain to the trainees**

'First 1000 days' refer to 270 days (9 months) of the pregnancy, and 365 days each for the first 2 years of an infant after birth.

- ✓ **Ask the participants: Why do you think are first 1000 days critical?**
- ✓ **Write the key points on a flip-chart**
- ✓ **Add the missing points while presenting the following information using the ppt**

Figure No. 3.5: First 1000 days of life



- The first 1000 days are the most critical period for taking actions to prevent undernutrition, due to following reasons-
  - Pregnancy [9 months]: Poor care during pregnancy can impact the healthy growth and mental development of the fetus. It also contributes to maternal and infant morbidity and mortality. New-borns, despite being born at the right time may be low birth weight/LBW. The LBW children do not pick up growth in height at a desirable speed and have a high chance of being stunted. This is largely irreversible.

  - First year of child's life [365 days]: The first year is most critical due to the importance of key stages- correct new-born care, timely and optimal feeding practices, exposure to infections especially diarrhoea and vaccine preventable diseases. During this period, a child cannot eat on his/her own and depends on the caregivers to be fed semi-solid food.

  - Second year of child's life (365 days): The second year of life is crucial as this is the time to strengthen the feeding practices according to child's rapid growth, ensuring complete immunization, protecting children from infections and diseases by preventable means.

Summarize key points

- First 1000 days of life most critical for prevention of undernutrition and optimal development
- Inadequate maternal and young child feeding practices, frequent infections are the main causes of malnutrition
- Inadequate dietary intake and infections operate in vicious cycle
- Malnutrition perpetuates across generations
- Iodine is critical for baby's mental and cognitive development

Session 3.3: Damaging Effects of Undernutrition

Items required

Presentation slides, Flip chart, bold markers

✓ **Ask the participants: What damaging effect does undernutrition have on our lives?**
✓ **Write the key points on a flip-chart**
✓ **Add the missing points while presenting the following information using the ppt**

- The adverse impact of undernutrition, especially during the critical 1000 days, can last a lifetime. Undernutrition in early childhood affects child's physical and mental well-being and increases the chance of dying before reaching the age of 5 years.
- It also translates into increased expenditure on health care for the entire family due to child's frequent illnesses, thus affecting the family economically.
- Poor nutrition adversely influences concentration at work and in school, as well as school performance.

Table 3.1: Damaging effects of undernutrition are presented in the table below:

Deficiencies	Impact during pregnancy	Impact during childhood
Iron	• Increased risk of premature deliveries and LBW babies • Increased neonatal mortality • Irreversible brain damage	• Reduced physical stamina • Poor cognitive development, low IQ, learning ability • Low concentration and attention span leading to poor school performance
Iodine	• Spontaneous abortions, stillbirths and infant deaths • Interference with brain development of the fetus • Birth of low IQ babies	• Low IQ • Impaired mental and cognitive functions, leading to poor school performance • Muscular disorders, speech and hearing defects • Manifests as Goitre
Vitamin A	• Eye disorders ranging from night blindness to permanent blindness	• Eye disorders ranging from night blindness to permanent blindness • Increased risk of diarrhoea, ARI, measles
Zinc		• Growth failure and weakened immunity • Linked to a higher risk of death from diarrhoea and pneumonia among children.

Summarize key points

- Undernutrition in pregnancy can lead to poor pregnancy outcomes and damaging effects on the fetus
- In children, undernutrition results in poor physical and mental growth and development
- Iron deficiency in children leads to- poor physical & cognitive development, poor school concentration and performance.
- Iron deficiency during pregnancy increases chances of LBW, maternal and neonatal mortality
- Vitamin A deficiency leads to poor immunity, increased risks of infections, eye disorders
- Iodine deficiency interferes with brain development of the child

Session 3.4: Assessing Undernutrition

Items required

Presentation slides, Flip chart, bold markers, Growth Charts, pencils

ACTIVITY 4: ASSESSING PEM

Method: Presentation, discussion, practical exercise

- ✓ **Ask the participants: How can you assess PEM?**
- ✓ **Write the key points on a flip-chart**
- ✓ **Add the missing points while presenting the following information using the ppt**

- It is difficult to assess whether a child is undernourished or not just by looking at him/her. A child's nutritional status can be assessed by measuring the two key measurements, weight and height, and comparing them against the desired weight or height for that age of a child. These measurements are known as "anthropometric measurements". The three indicators to assess nutritional status of a child are-
  - Weight of a child against age (Weight for Age) OR Underweight
  - Height of a child against age (Height for Age) OR Stunting
  - Weight of a child against height (Weight for height) OR Wasting

✓ **Explain to the trainees**

We will first learn how we can assess Weight for age. This is also because it is most commonly and widely used indicator to monitor the growth of a child.

✓ **Present the following information**

Assessing Weight for Age

- Children grow very rapidly in weight during the first year of life. Starting from birth till the age of five years, monthly increase in weight of a child should be as depicted in table….
- Tracking the indicator for underweight- weight for age- is the most commonly used method of growth monitoring. This is because of the feasibility at the field level and more importantly since no other measurement provides more accurate picture of child's growth, than his/her weight.
- The tools that are used to monitor the growth of a child are called Growth Charts. These graphs can be used for assessing the nutritional status of a child at birth up to 5 years.
- There are separate charts for boys (blue chart) and girls (pink chart) (fig below) (full page chart to be provided during training).

- By weighing the child regularly and checking against the growth chart, even small change can be observed and helps in identifying whether child is gaining or losing weight or is stable. This can enable timely corrective actions to improve the growth of a child.

Table 3.2: Age wise weight increase

Age	**Increase in weight/month**
Birth to 6 months	600-800 grams per month
7 months to 12 months	300-400 grams per month
1 year to 3 years	150-200 grams per month
3 years to 5 years	125 grams per month

- The method of regular weighing is termed as Growth Monitoring. The indicator of Weight for Age is used in the ICDS programme for assessing the nutritional status of children 6 months-5 years.

✓ **Present the fig below to the trainees and explain in detail about the growth chart**

- The horizontal axis of the weight for age chart is the 'month' axis. It indicates age of a child starting from the date of birth up to 5 years of age.
- The weight of a child is in the vertical axis or the 'weight' axis.
- On the extreme top left, is a box where personal details about the child, such as name, father's/ mother's name, birth weight, etc. is to be filled

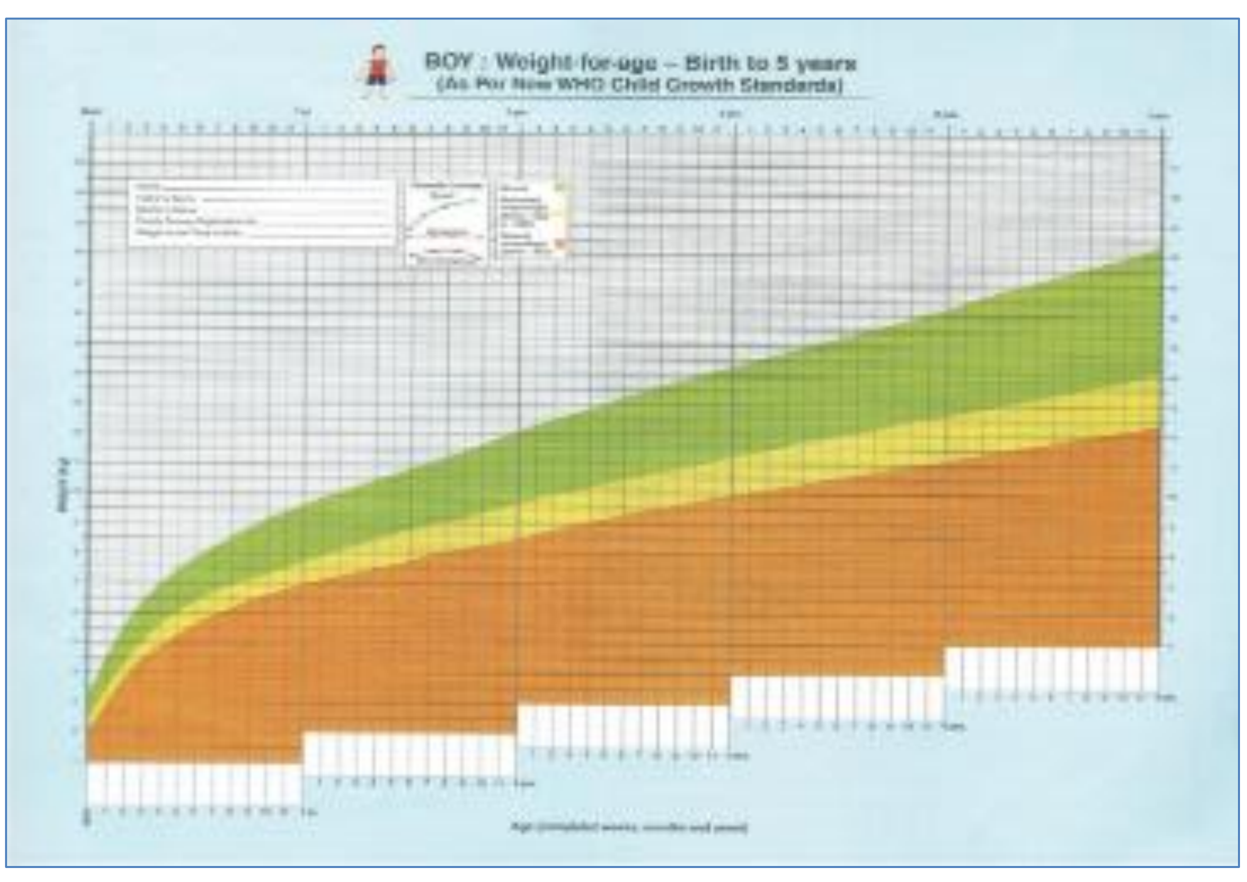
✓ **Ask the trainees to volunteer and explain how can measurements (weight, height) be plotted in the chart?**

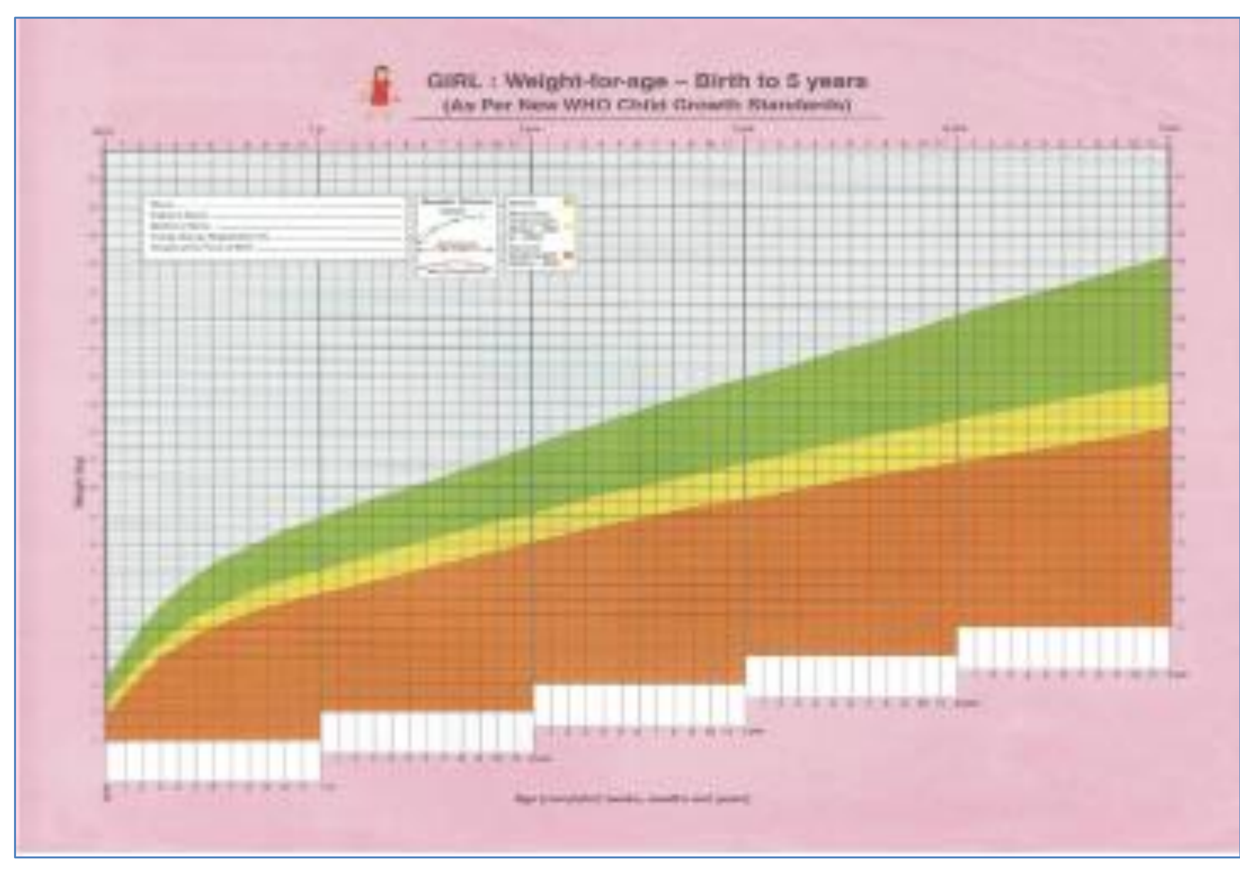
✓ **Encourage the volunteer.**

✓ **Add the missing points by showing the figure (growth chart of Naveeda, duly filled for first 7 months) and explaining the following**

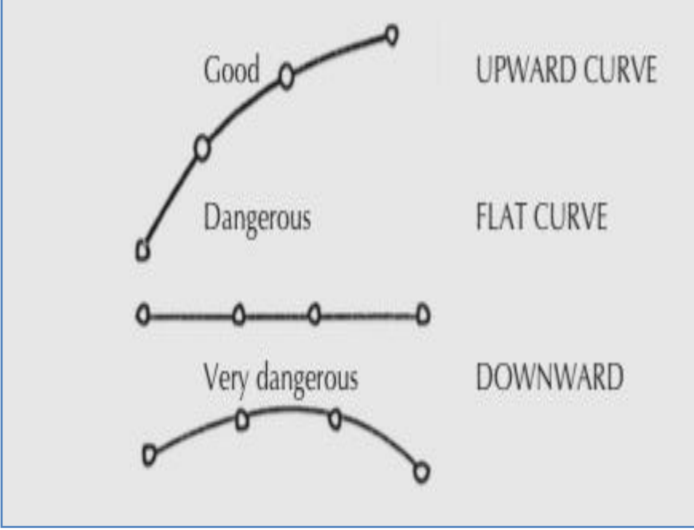
  - Plotting has to be done on the lines of the completed weeks/months on the 'month' axis
  - Identify the month line and extend it upward vertically till the plotting of actual weight of the child
  - Identify the horizontal line which indicates the present weight of the child to the nearest 0.1 kg e.g. 6.2 kg
  - Follow this horizontal line on the 'weight axis' to the point where it intersects with the line which you had extended from the vertical line from 'month box' indicating the present age of the child
  - Write the weight next to the nearest 100 grams below the 'month box', which indicates the present age of the child
  - Put a dot on the line where the two lines intersect. Draw a circle around the dot.

- The status of the child will be based on the colour-zone that the dot falls in:
  - **Category I: Normal nutritional status (Green zone):** If a child's weight falls in this category, then the child is normal and is not underweight for the age.
  - **Category II: Moderate malnutrition (Yellow zone):** The weight of all children, with moderate degree of malnutrition, falls in this category.
  - **Category III: Severe malnutrition (Red zone):** All children, whose weight falls in this category, are severely malnourished. These children require urgent medical attention as they are at high risk of infection and death.


BOY : Weight-for-age – Birth to 5 years
(As Per New WHO Child Growth Standards)


GIRL : Weight-for-age – Birth to 5 years
(As Per New WHO Child Growth Standards)

- ✓ **Present the fig to the trainees and ask them: 'What do each of these curves/lines on a growth chart signify?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while presenting the following information using the ppt**



- The dots for subsequent months when joined, forms the Growth line/curve. The growth line represents the trend in the growth of a child during the last few months.
  - The growth line of a normally growing child moves upwards, indicating that the weight of the child is increasing normally.
  - If the growth line is straight/flat, it indicates that a child is not gaining weight and is not growing adequately. This is a condition of concern since it is not normal for a child not to gain weight.
  - If the line goes downwards, then it indicates weight loss and is a very dangerous situation. Such a child requires urgent medical attention and referral services.

Learning by doing' exercise # 1

- ✓ **Provide one growth chart (pink, for girls) to each of the trainees**
- ✓ **Present the table #.... to the trainees, which indicates the weight of three children- Ritu, Rashmi and Sita for past 6 months.**

RITU		RASHMI		SITA	
Age (months)	***Weight (kg)***	***Age (months)***	***Weight (kg)***	***Age (months)***	***Weight (kg)***
At birth	2.5	14	7.5	24	9.3
1 m	3.3	15	7.8	25	9.6
2 m	4.2	16	8.3	26	10.0
3 m	4.7	17	8.7	27	10.3
4 m	5.3	18	8.9	28	10.6
5 m	5.4	19	8.9	29	10.9
6 m	5.4	20	8.4	30	11.4

- ✓ **Ask each trainee to:**
  - Plot the weights for all 3 children in the growth chart
  - Identify which category (nutritional status) each of these children falls, presently.
  - Mark the growth curve and explain the growth pattern or trend.

- ✓ **Explain to trainees:**
- The other measures that are used for assessing malnutrition in children are
  - Measurement of height for age (stunting) and
  - Weight for height (wasting)

✓ **Present the following information**

Assessing Height for Age

- Stunting in children is measured using height for age. This measure identifies 'chronic' malnutrition. It is associated with a number of long-term factors including long-term insufficient energy and protein intake, frequent infections, sustained inappropriate feeding practices and poverty.
- This index is not commonly used for the purpose of monitoring, since, unlike weight for age, there is difficulty in measuring height by community worker.

Assessing Weight for Height

- Wasting in children is measured using the index of weight for height. This measure identifies 'acute' malnutrition, which is associated with short-term factors- recent episode of infection/ diarrhoea, recent weight loss, etc. A child who is severely wasted is diagnosed as suffering from severe acute malnutrition (SAM).
- Weight for height is used at the facility level (for e.g. in Malnutrition Treatment Centres or Nutrition Rehabilitation Centres) to confirm severe wasting among children.

ACTIVITY 5: ASSESSING MICRONUTRIENT DEFICIENCIES

Method: Presentation, discussion

✓ **Ask the participants: How can you assess micronutrient deficiencies?**
✓ **Write the key points on a flip-chart**
✓ **Add the missing points while presenting the following information using the ppt**

- A child who is normal weight for age (in green zone of the growth chart) very often may be suffering from deficiencies of micronutrients such as iron, vitamin A, iodine or zinc.
- Assessment of micronutrient deficiencies is complex and can be assessed by measuring levels of these vitamins and minerals in blood or urine (biochemically). Only in cases when deficiencies of micronutrients are in severe form, clinical signs (clinically) may be noted.

VAD and IDD:

- Both VAD and IDD are assessed biochemically, i.e. in blood and urine respectively.
- In case of severe deficiency, some of the clinical signs can be observed. For example, in severe Vitamin A deficiency, night blindness and white spot in corner of eye (Bitot's spot) may be noted. In case of severe Iodine deficiency, presence of Goitre may be noted.

Iron deficiency Anaemia (IDA):

- The IDA is assessed biochemically by assessing the levels of Haemoglobin in blood. Anaemia is a result of inadequate availability of iron for haemoglobin formation.
- Anaemia is classified as mild, moderate and severe based on the levels of haemoglobin measured in blood. This classification, set by the WHO, is presented in the table below-

Table 3.3: Anaemia measured by haemoglobin (g/dl)

Age Group	Anaemia	Mild	Moderate	Severe
Children 6-59 months& Pregnant women	<11.0	10-10.9	7-9.9	< 7

- The IDA also manifests itself in form of clinical signs and symptoms such as paleness of eye/ nails/ palm, lethargy and fatigue, lack of concentration, learning ability in school, etc.

Magnitude of the problem

India-

- One in every third malnourished child lives in India
- About 2 out of 5 under-five children in rural India are stunted or malnourished.
- 50% of mortality below under-five children happens due to malnourishment
- About 3 out of 5 children in India are Anaemic
- About 62% under-five children suffer from vitamin A deficiency

Maharashtra-

- 4 out of 10 under-five children are stunted
- 26% under-five children are wasted; 36% under-five children are under weight
- 5 out of 10 children under-five children are Anaemic
- In the target area-
  - In target blocks of Nandurbar, about 5 in 10 under-five children are stunted
  - In target blocks of Amravati, about 4 in10 under-five children are stunted

Session 3.5: Taking Anthropometric Measurements

Items required

Weighing scale (Salter), length, board, a baby dummy

ACTIVITY 5.1: MEASUREMENT

Method: Demonstration, practical exercise

✓ **Present the following case to the trainees:**

Meena, the community health/nutrition worker and the AWW are jointly visiting Vimla. Vimla has a daughter who will be completing 8 months this week. During their scheduled home visit to Vimla's house, the community health/nutrition worker and AWW counselled her about appropriate complementary feeding practices, hygiene and sanitation, etc. During the conversation, Vimla told both didis "I am always concerned about my child's health and wellbeing. I always follow your advice, but I feel my daughter does not look as healthy as other children her age. I mean... how can I be sure whether she's growing well or not?"

✓ **Ask the trainees: What should be the response of community nutrition worker and AWW? What should they do to see how the child is actually growing?**

✓ **Brainstorm, discuss and write the emerging points on a flip-chart.**

✓ **Add the missing points, while explaining to the trainees:**

- As discussed in previous sessions, the best way to monitor a child's growth is by measuring his/her weight and, height, and assessing the nutritional status using any or all the indicators- weight for age, height for age, weight for height/ SAM.
- The basic requirement to do the assessment is by measuring weight and height.
- Let us learn how we can take these measurements accurately.

Measuring Weight:

- A spring balance, also called the ‘Salter Scale’ is used for measuring the weight of children under two years old.
- In children over two years, a digital electronic scale can be used if you have one available.

Measuring Length:

- Length is measured for children < 2 years old, while height is measured for children above 2 years of age.
- A wooden measuring board (length board) is used for measuring the length to the nearest mm. measuring the child lying down always gives readings greater than the child’s actual height by 1-2 cm.

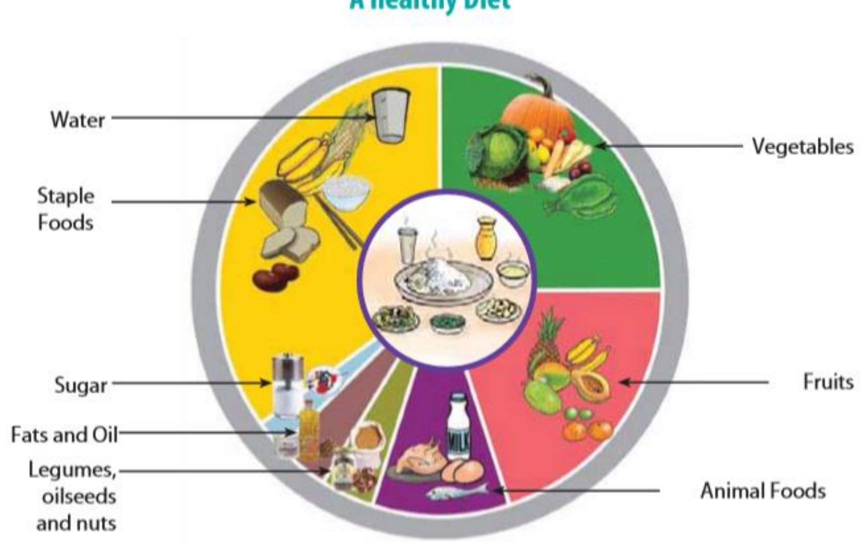
Figure 3.1 Measurement of Length

Measuring Height

- Height is measured with the child in a standing position, on a Stadiometer.
- The head should be in a position where the line passing from the external ear hole to the lower eye-lid is parallel to the floor during measurement; also the shoulders, buttocks and the heels should touch the vertical stand.

Session 3.6: Healthy Diet

A healthy diet has a variety of foods from different food groups. We should eat a variety of foods every day so that your body gets enough energy and everything it needs to be active, to grow and be protected against illness.



A healthy diet is important because it:

- keeps the body and mind healthy
- gives the body energy to be active and function well
- helps the body to grow and repair itself
- helps the body to fight infections and illness
- makes children grow well
- makes pregnant women produce healthy babies

Staple foods

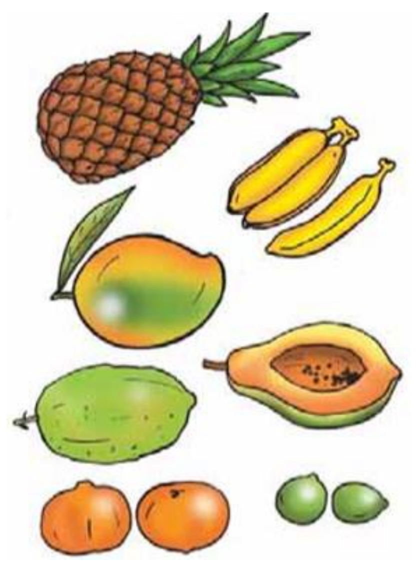
- Cereals: e.g. maize/cornmeal, perl millet (bajra), sorghum (Jowar), wheat flour, rice
- Starchy roots: e.g. potato, sweet potato, yam, , plantain

Legumes, oilseeds and nuts

- Legumes: e.g. Chick pea (Kabuli Chana), Groundnut (Mumphali), Pigeon pea (Arhar or Tur), Green Gram (Mung), Bengal gram (Chana) , Red lentil (Masur)
- Oilseeds: e.g. soybean, pumpkin, sunflower seed, sesame, melon seed
- Nuts: e.g. chestnut, walnut, hazelnut, macadamia, almonds

Fats and oils

- Fats: e.g. butter, fat from meat, ghee
- Oils: e.g. coconut oil, sunflower oil, groundnut oil, red palm oil, maize oil, oilseeds



Vegetables and fruits

- Vegetables: e.g. tomato, pumpkin, carrot, spinach and other leaves, orange sweet potato, sweet pepper, eggplant
- Fruits: e.g. mango, papaya, orange, pineapple, banana, jackfruit, musk melon, custard apple, dates

Animal foods

- Meat, off al, poultry and fish: e.g. goat, sheep, pork, liver and other off al, chicken
- Milk, eggs and dairy products: e.g. fresh cow milk, fresh goat milk, eggs, curds, cheese

Sugars e.g. sugar cane, honey, jam

Eat a colourful diet

A healthy diet has a lot of colours. Especially colourful are vegetables and fruits.

- red : e.g. tomato, red pepper, red plums, red watermelon, beets
- orange : e.g. carrots, mangoes, oranges, papaya, pumpkin, sweet potato
- yellow : e.g. corn, grapefruit, lemon, pineapple
- green : e.g. green beans, peas, spinach
- white : e.g. bananas, garlic, potatoes

SECTION 4: CARE OF NEWLYWEDS AND ADOLESCENT

DURATION 3 hours

EXPECTED OUTCOME

The families with adolescent girls and/or newly-weds are identified and counselled regarding health and nutritional care, correct age of marriage and conception, and family planning.

LEARNING OBJECTIVE

At the end of the session, the participants-

- Understand the significance of the relationship of health and nutritional status of adolescent girls with undernutrition in children.
- Aware of the problem of anaemia in adolescent girls and measures to be taken for preventing anaemia
- Understand the correct age of marriage and conception
- Importance of child spacing and Child-spacing methods

KEY SESSIONS

Session	Session topic	Duration
1	Case study and Discussion	1 hour
2	Growth and nutrition requirements during adolescence	30 minutes
3	Early marriage, conception and its adverse effects	45 minutes
4	Planning the family and child spacing	30 minutes
5	Summary	15 minutes

Session 4.1: Case study and Discussion

Items required

Hand-outs of Case study, chart papers, bold markers

ACTIVITY 1: CASE STUDY AND GROUP EXERCISE

Method: Group exercise, presentation and discussion

- ✓ **Divide the participants in 4-5 groups.**
- ✓ **Provide the handout of case study along with chart paper, bold marker/s to each group**
- ✓ **Ask each group to carefully read the case study**

Case Study

In the village Nanduri, there is a family of four members- mother Champa, father Birju and four children. Sita, aged 14 yrs, is the eldest of three daughters and one son, the youngest being 9 yrs of age. Birju is a marginal farmer and earns only to hardly meet both ends. Managing a family of six is extremely challenging. Sita does not go to school and helps her mother at home. Sita has been going to a government school till she was about 12 years of age, but dropped out due to frequent illnesses, including lethargy and weakness. At 14 yrs, she weighs about 34 kgs and very often feels weak and tiresome.

One day, her friend Tara takes her to the AWC/ Balwadi in her village to meet the AWW didi. She told her about the benefits of regularly going to the AWC. At the centre, AWW assessed Sita's health and advised her to eat well and take IFA tablets once weekly, regularly. Sita starts taking the tablets but discontinued after a few days when some adverse symptoms started to appear. She stopped visiting the AWC/Balwadi also, even after repeated counselling by AWW.

Birju considers her 3 daughters as huge liability and is already looking for a groom for Sita. Sita gets married when she is 16 years old.

✓ **Ask the trainees to respond to the questions presented below-**

- State 5 key facts about the health and nutritional status of Sita.
- Comment about the family size of Champa and Bhagirath.
- Why do you think adolescent girls often suffer from anaemia? Give two reasons.
- How many girls in your community get married before18 years of age? Give an estimate out of 10 girls.
- What according to you are the adverse effects of marriage before 18 years?

✓ **Advise each group to select a presenter who would be assigned the task of presenting the responses (on chart paper) to the questions on behalf of the group.**

✓ **Following the presentation by each of the six groups, organize a discussion on the various emerging issues.**

Session 4.2: Growth and nutrition requirements during adolescence

ACTIVITY 2: UNDERSTANDING THE NUTRITIONAL REQUIREMENTS DURING ADOLESCENCE

Method: Presentation and discussion

✓ **Ask the participants: Why do you think is Adolescence period critical?**

✓ **Write the responses on the flip-chart**

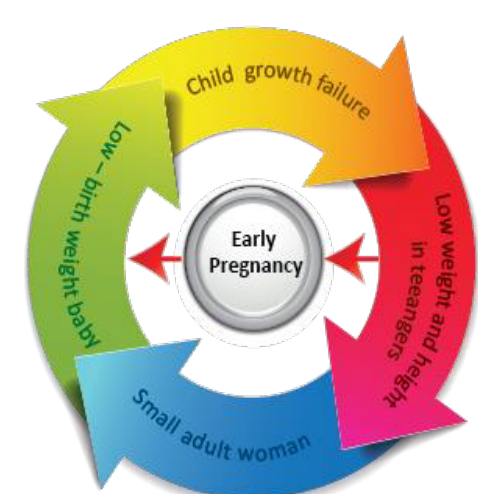
✓ **Add the missing points while explaining the following points using presentation**

- Adolescence is a period between 10-19 years of age. During adolescence, there is rapid growth of bones and rapid increase of height. This is the period when a girl starts menstruating resulting in monthly loss of blood and iron from the body.

- During this period of rapid growth, adolescent girls require additional nutrients such as energy, protein, iron, folic acid for optimum growth and prevention of anaemia.
- A girl who consumes adequate nutrients during adolescence has a higher chance of being healthy during pregnancy, having good iron store at the start of pregnancy and giving birth to a baby who is healthy and not low birth weight

Inter-generational cycle of malnutrition

- The cycle of malnutrition perpetuates across generations (fig early pregnancy).
- Young girls who conceive early grow poorly and become stunted women. Such women with poor height and weight are more likely to give birth to LBW infants.
- If these infants are girls, they are likely to continue the cycle by being stunted in adulthood.
- Adolescent pregnancy (below 18 years) heightens the risk of low birth weight and breaking the cycle becomes difficult.



✓ **Ask the participants: What are the measures to prevent Anaemia among Adolescent girls?**

✓ **Write the responses on the flip-chart**

✓ **Add the missing points while explaining the following points using presentation**

- Anaemia occurs due to low intake of iron and folic acid (required for forming blood) against the high requirements of these nutrients during the period of adolescence. Poor intake of these nutrients result in low haemoglobin levels in blood or Anaemia.
- The measures to prevent Anaemia include-

1. Diet rich in Iron:

- The dietary intake of iron and folic acid can be increased by consumption of-
  - Animal source of food, if culturally and economically feasible
  - Sprouted dals or pulses,
  - Green leafy vegetables such as spinach, leaves of cauliflower etc.
  - Food with squeezed lemon juice (it increases the absorption of Iron from food)
  - Avoid consumption of tea /coffee soon after meals as this interferes with absorption

2. IFA supplementation:

- More often, the predominantly Indian vegetarian diet lacks good source of iron such as animal food or iron rich fruits and vegetables. Weekly IFA tablet consumption is therefore recommended. Under the government initiative, all adolescent girls in school and out of school are provided, free of cost, one big tablet of iron per week.
- In order to ensure compliance, all adolescent girls are instructed to take IFA tablet on a fixed day of the week.
- For increasing compliance, benefits of weekly IFA supplements need to be explained to adolescent girls and their parents. The benefits include prevention of anaemia, improved energy levels and concentration in daily work and in school activities.
- Following should be kept in mind while consuming IFA tablets:
    - Consume the IFA on full stomach i.e. after a meal and just before retiring to sleep at night.
    - It should not be taken with milk and milk products, tea and coffee
    - It should not be taken ‘with’ food or immediately after food
    - It is a good practice to consume it along with citrus foods like lemon water
- All girls must be informed that stools are rather black in colour on consumption of IFA tablets.

3. Deworming:

- Worm infestation commonly causes poor nutrition and anaemia in adolescent girls since worms cause loss of nutrients from the body.
- As per the government policy, all school and out of school adolescent girls 11-19 years are administered Deworming tablets (Albendazole 400mg) at six monthly intervals

Session 4.3: Early marriage, conception and its adverse effects

ACTIVITY 3 UNDERSTANDING THE ADVERSE EFFECTS OF EARLY MARRIAGE AND CONCEPTION

Method: Presentation and Discussion

✓ **Ask the participants: What according to you can be the adverse effects of early marriage and conception?**

✓ **Write the responses on the flip-chart**

✓ **Add the missing points while explaining the following points using presentation**

- The correct age of marriage is 18 years and that of first conception is 20 years. Marriage of a girl below the age of 18 years is not permissible legally.
- A girl who gets married before reaching 18 years of age has a higher chance of becoming pregnant during the adolescence period itself.
- Girls who become pregnant during adolescence are not able to attain their optimum height. They remain stunted. Their reproductive organs are also not fully developed.
- The adolescent pregnant girls have a much higher risk of complications, including death, during child-birth. These women also have a higher chance of giving birth to babies with low birth weight (LBW).
- Thus, it is important that the Community Nutrition Workers identify:
    - potential houses of child marriage and counselled them on delaying the age of marriage
    - newlywed couples wherein the bride is less than 20 years of age, the couple and their family should be counselled about the dangers of conception prior to 18-20 as part of promotion of safe pregnancy.

Session 4.4: Planning the family and child spacing

ACTIVITY 4 WHY IS FAMILY PLANNING CRUCIAL?

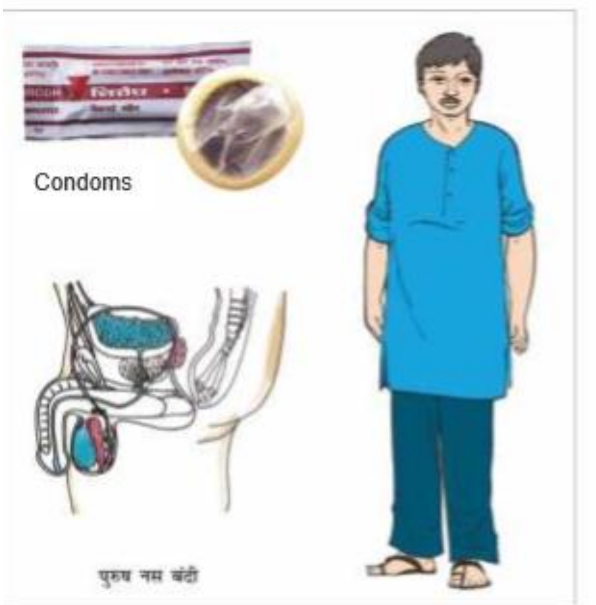
Method: Presentation and Discussion

✓ **Ask the participants: In the case study above, what will you counsel Sita after she got married?**
✓ **Write the responses on the flip-chart**
✓ **Add the missing points while explaining the following points using presentation**

- It is important that the 'newly-weds' plan their family. The birth of the first child should be delayed till the newly married girl is at least 20 years.
- The decision to start the family should take into consideration the health and nutritional status of the girl, and her emotional readiness to take care of the child
- There are various ways to have the child at right age and also avoid having too many children. Couples can decide to space their children so that there is a minimum gap of 3 years between births.
- Child spacing methods include:

- *Condoms:* Easy to use, but not too favoured by men. It may sometimes split and is not completely safe. It is most commonly and cheaply available.
- *Copper-T:* Needs a doctor/ANM to insert it, but once in, it gives little trouble. In some cases, it causes a bit of discomfort at first, but it usually subsides. If copper-T comes out of itself, refer the woman back to the PHC to get a new one fitted.
- *Oral pills:* Very easy to use, but also as easy to forget. It may have some side-effects such as tiredness or little bleeding, headaches, swelling of legs, etc. but these may soon go away.

✓ **Ask the participants: What are the disadvantages for a couple with too many children?**
✓ **Write the responses on the flip-chart**
✓ **Add the missing points while explaining the following points using presentation**



- There are many disadvantages for a couple with too many children.
  - The mother becomes weak through frequent pregnancies (her body has not built enough strength and nutritional reserve after the previous pregnancy), so there is more risk of her having weak, LBW babies
  - The first child does not get good care if next one is born too soon after
  - The parents have less time and money to care for all their children
  - The mother does not have time, energy and money to take care of her own health and nutritional needs
  - It is more expensive to feed, educate and clothe a large family

Summarize key points

- Adolescence is a period of rapid growth and increased nutritional needs
- A girl who consumes adequate nutrients, including Iron, during adolescence has a higher chance of being healthy during pregnancy, having good iron stores at the start of pregnancy and giving birth to a baby who is healthy
- Measures to prevent Anaemia include- Iron-rich diet, IFA supplementation, Deworming
- Correct age of marriage is 18 years and that of first conception is 20 years
- Early marriage can lead to early conception, complications during pregnancy and birth of LBW babies
- Newly wed couples should be counselled regarding family planning methods and importance of child-spacing

SECTION 5: CARE DURING PREGNANCY

Duration **4.5 hours**

Expected Output-

All pregnant women are identified, registered and counselled on optimal care during pregnancy and empowered to seek services from government programmes- health and ICDS

Learning Objective

By the end of the session, the trainees are-

- Aware of criticality of the period of pregnancy
- Informed of health and nutrition care during pregnancy
- Informed of the package of health and nutrition services and entitlements; including ANC, supplementary feeding, etc.

Key sessions

Session	Session topic	Duration
1	Case study and discussion	1 hour
2	Pregnancy- a critical period	30 minutes
3	Maternal Nutrition and Health Care	
3.1	Early Registration	1 hour
3.2	Diet during pregnancy	
3.3	Personal hygiene and environmental sanitation	30 minutes
3.4	Ante Natal Care Visits	1 hour
3.5	Preparation for Breastfeeding	
4	Common myths and misconceptions	30 minutes

Session 5.1: Case Study and Discussion

Items required

Hand-outs of Case study, chart papers, bold markers

ACTIVITY 1: CASE STUDY

Method: Group exercise, presentation and discussion

- ✓ **Divide the participants in 4-5 groups.**
- ✓ **Provide the handout of case study along with chart paper and bold marker/s to each group**
- ✓ **Ask each group to carefully read the case study**

Case Study: It has been 4 months of Sita's marriage. Sita now stays in village Deemapur with her husband Motilal and mother-in-law Roopa. She is still very thin and lean. She is always very shy before her mother-in-law, husband and hesitates to eat unless asked to. She weighs approximately 40kg. The following year, she became pregnant. Her husband is a small marginal farmer. He goes to the field or for daily wage labor. Sita and Roopa remain at home. Sita informed her mother-in-law about her pregnancy after about 3 months. Her mother-in-law advised her to inform her if she faced any problem. The time passed slowly. Even after Sita was six months pregnant, she was not registered and nor did she have any physical examination, but she often felt tired and lethargic. She started complaining about breathlessness and lack of appetite. Therefore, she often went to sleep without taking food. When Sita was eight months pregnant, her feet got swollen. During the household chores, she got very tired soon. Incidentally, one day the ASHA and AWW visited her house, and advised Sita to go and visit the PHC for pregnancy registration and ANC.

When Sita visited the PHC for ANC services, the ANM informed Sita that she was anaemic. Sita was given IFA tablets and she started to take it. But soon she felt nausea, stomach irritation and did not want to take it anymore. However, Sita remembered some information that was given by the AWW at the group session and decided to continue.

Sita in her last trimester weighed only 45kg, whereas she should have weighed more. She was also advised to eat more, at least one additional meal every day, and THR was handed to her by AWW.

Session 5.2: Pregnancy- the Critical Period

Items required

Presentation slides, flip-chart, bold markers

ACTIVITY 2: UNDERSTANDING THE CRITICALITY OF PREGNANCY

Method: Presentation and discussion

- ✓ **Ask the participants: Why do you think is pregnancy period critical?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**
- Care during pregnancy helps in prevention of anaemia in mothers, ensuring adequate weight gain, proper growth of the fetus and birth of a healthy child
- Care during pregnancy is also crucial from the point of view of the mother who, on receiving good care, is healthy enough to deliver her baby without any complications to her own life or the life of her baby. Moreover, good care during pregnancy helps a woman to be a healthy mother and in condition to take appropriate care of the new-born.
- It is also a perfect period to start educating women about correct new-born care practices and the relevant infant and young child feeding practices.
- ✓ **Ask the participants: How can nutrition care be promoted during pregnancy?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**
- Proper nutrition and health care during pregnancy consists of -
  - Proper diet and 10-12 kg weight gain,

- Adequate rest, including day rest
  - ANC services (at least 4 ANC contacts, regular consumption of IFA tablets, TT vaccine, IFA supplementation, deworming)
- If these are taken care of, then it increases chances of new-borns having optimum brain development, proper physical development and to be born healthy.
- A mother needs to eat well during pregnancy so that her baby gets enough nutrients and grows well in the womb. If a mother is not eating well, she does not gain adequate weight of minimum 10-12 kg. This results in the growing fetus being deprived of nutrients. These babies are in danger of not growing optimally, physically or mentally, and remain undernourished even later in life.

✓ **Ask the participants: Are you aware of the government entitlements for pregnant women?**

✓ **Write the responses on the flip-chart**

✓ **Add the missing points while explaining the following points using presentation**

- Considering the importance of pregnancy in the overall health and nutritional status of children, many government programs focus on this critical period and have rolled out schemes that benefit women during pregnancy.
  - Health Department: Under the Janani Surksha Yojna (JSY) of the NRHM programme, financial support is provided for institutional delivery. ASHA is primarily responsible for the task of promoting institutional delivery at the village level, with active support from AWW.
  - ICDS Department: Every pregnant woman is entitled to the food supplement, also called the "Take Home Ration" or THR, provided under the ICDS programme

Summarize key points

- Care during Pregnancy is important for facilitating positive birth outcome, health of mother as well as physical and mental well- being of a child
- Proper diet, adequate rest and appropriate antenatal care are key to satisfactory weight gain of 10-12 kg, prevention of tetanus and management of anaemia.
- In absence of good care, the chances of a child being born LBW increases (<2.5kg)
- Government entitlements during pregnancy include- financial support for institutional delivery (under the JSY scheme), and daily food supplement from AWC

Session 5.3: Maternal Nutrition and Health Care

Items required

Presentation slides, Flip chart, bold markers, Growth Charts, pencils

ACTIVITY 3 WHY REGISTER EARLY?

Method: Presentation, discussion

- ✓ **Ask the participants: When should a pregnant woman register herself at AWC and health centre and why?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**
- A pregnant woman should register herself with the AWC and health department as soon as she doubts or comes to know of her pregnancy. It is a common practice among the village community not to disclose the pregnancy for initial 3 months, because of some myths and superstitions. This should be discouraged.
- Early registration helps pregnant woman to avail benefits of the schemes rolled out by the government under health and ICDS departments (as discussed above).
- The community based health workers should support pregnant women in getting registered under the government benefit schemes.

ACTIVITY 4 DIET OF A PREGNANT WOMAN

Method: Presentation and discussion

- ✓ **Ask the participants: What should be the Diet of a pregnant woman?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**
- A pregnant woman during her entire pregnancy period should gain minimum 10-12 kg weight. The total food intake of the woman should be increased as compared to what was being taken before pregnancy. Advise her to take one additional meal every day.

- Pregnant mothers may find it difficult to eat large meals at one sitting as pregnancy advances and/or there is feeling of fullness and discomfort. Advise her to therefore eat not two big meals, but 4-6 smaller meals in a day.
- Encourage pregnant women to consume foods that are traditionally prepared, such as panjiri or laddoos. These foods are rich in energy, protein and other nutrients.
- Pregnant women should also acquire THR from the ICDS centres and consume the food item every day.

✓ **Lets talk about the right composition of diet…**

- Diet during pregnancy should be balanced, comprising of all food groups - cereals, pulses, vegetables, dairy products, green leafy vegetables, fruits, fats and oils, etc.
- Encourage a pregnant woman to eat plenty of seasonal vegetables. Regular consumption of green leafy vegetables provide iron, folic acid (type of a vitamin), vitamin C and vitamin A which are essential for preventing anaemia, strengthening immunity to fight diseases and for the overall health of baby and mother.
- If a family can afford, encourage family to provide to the pregnant woman 1-2 glasses of milk every day.
- Encourage consumption of eggs, meat, fish, etc., if these food items are eaten traditionally and only if a family can afford it. These animal food items are rich sources of good quality protein, iron, zinc and other nutrients.
- Daily consumption of iodized salt is very important and must be encouraged.
- The ICDS supplementary food should be consumed efficiently-
- The ICDS food supplement is in form of ready to eat preparations and is referred as "Take Home Ration" /THR. THR food requires very little effort in preparation and is ready to be consumed merely by mixing hot water/milk.

- A week's ration is provided to the mother on a pre-decided day of the week. About one seventh or 125 grams of THR food must be consumed daily by mothers. It is a good practice to divide the weekly ration into seven portions by the mother for daily consumption.
- THR food is recommended for 'supplementing' family food. It should therefore be consumed over & above the routine family food.
- The ICDS food supplement is provided to meet the additional requirements of energy and various nutrients during pregnancy and lactation.
- Counsel the mother to consume the THR herself and not share the food supplement with the family members.

Summarize key points

- A pregnant woman should register herself with AWC and health centre as soon as she is confirmed of her pregnancy, to avail all services of government schemes
- A pregnant woman should gain at least 10-12 kgs additional weight during pregnancy
- A pregnant woman should eat 4-6 times a day, and one additional meal every day
- Diet of the pregnant woman should be balanced, comprising of all food groups
- Seasonality/availability, affordability should be taken into consideration while advising the diet to a pregnant woman
- Iodized salt should be consumed every day in the diet
- The ICDS food supplement should only 'supplement' the family food and not substituted and should not be shared with family members.

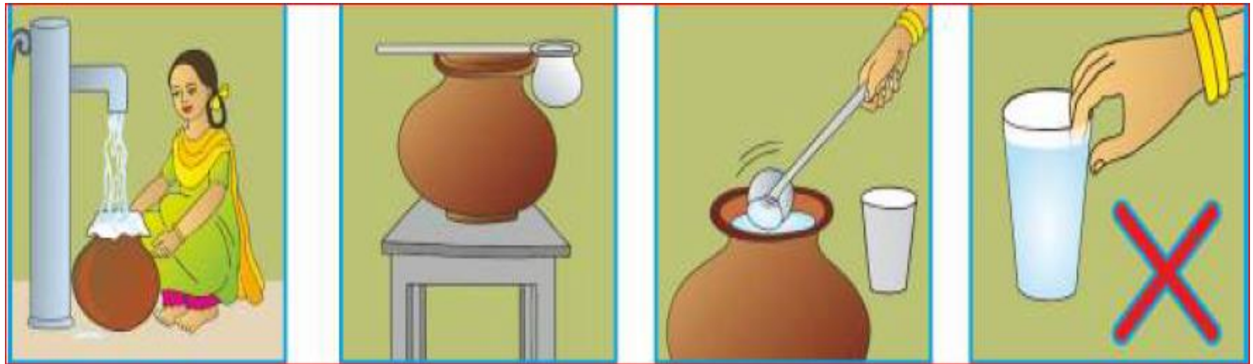
ACTIVITY 5: ENSURING PERSONAL HYGIENE AND ENVIRONMENTAL SANITATION

Method: Presentation and discussion

It is important that proper hygiene and sanitation is ensured at every stage of life. Explain to the mother the importance of hygiene and sanitation in the overall health of a baby.

Food Hygiene: Hygienic practices are essential for ensuring food safety or safety from germs and hence from infections. Food safety measures need to be taken during each of the following steps- food preparation for cooking, cooking process, food storage and child or family feeding. Tell mother/caregiver to observe following practices-

- **Use clean and safe water**:
  - Get water for drinking or for washing uncooked foods from a safe source, such as piped water, tube-wells and hand pumps
  - If no safe source is available, filter using water filter or boil the water (rolling boil for 7 to 10 minute) or use chlorine tablets before drinking or using the water. These tablets are readily available at the village with the ASHA.
  - Collect water in clean vessel; the inside of the vessel thoroughly cleaned before storing water.
  - Wash your hands before collecting water.
  - Stored drinking water should be covered with a lid, keep it a little above the ground level, away from the reach of pets and children.
  - Never dip fingers into the water or take water out using a glass. A long handled ladle should be used to take water out of the vessel.



- **Store food safely:**
  - Buy fresh foods, such as meat or fish, on the same day you will eat them.
  - Cover foods to protect them from insects, pests and dust.
  - Store fresh food (especially food from animals) in a cool place (a refrigerator if available).
  - Always keep uncooked food being prepared for cooking (example cut vegetables, soaked dals) or cooked food covered with a lid to protect it from dust, flies, and insects.
  - Keep dry foods such as flours and legumes in a dry, cool place where they are protected from insects, rats and mice, and other pests.
  - Do not store cooked food for long. It should be fed to a child within two hours of cooking as germs start growing in the leftover food. Consumption of food, which is not fresh and clean, can cause diarrhoea, vomiting, typhoid, jaundice etc.

- Always store food covered and reheat them thoroughly until hot and steaming (bring liquid food to a rolling boil).

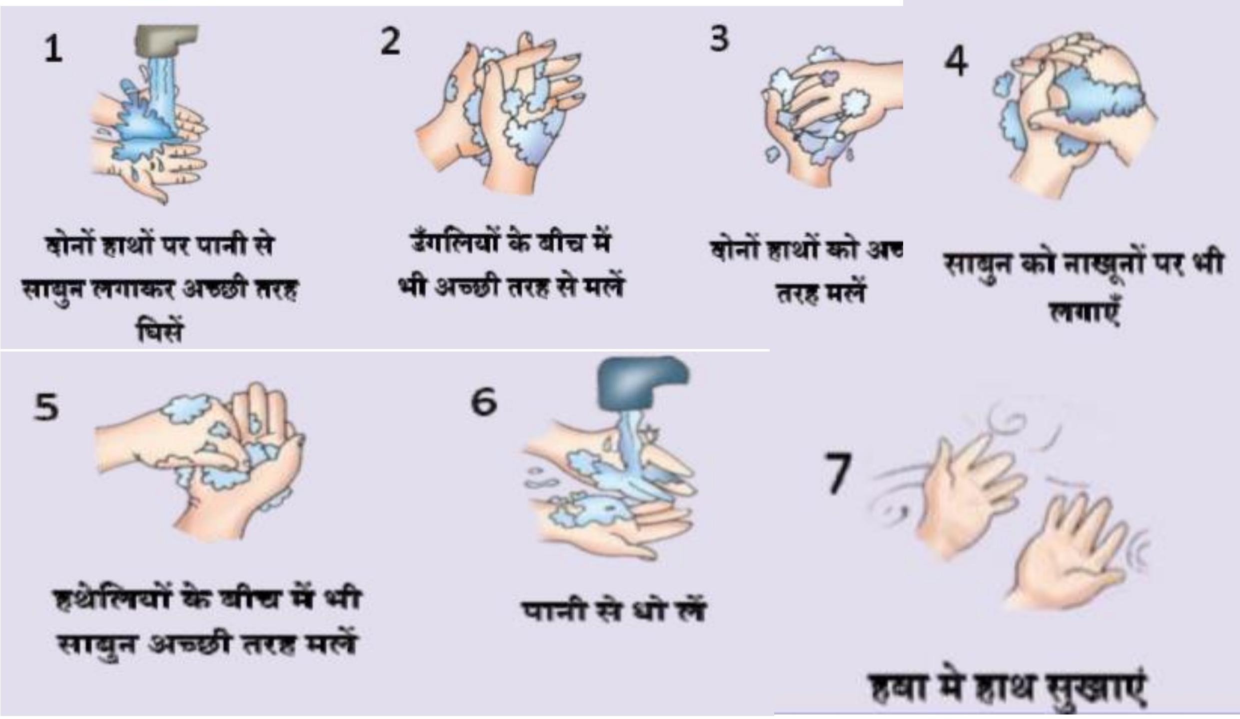
- **Prepare food in a clean and safe way**
  - Wash hands before cooking or before handling food.
  - Ensure utensils, used for cooking food or feeding are thoroughly cleaned.
  - Keep food preparation surfaces clean.
  - Use clean, carefully washed dishes and utensils to store, serve and eat food.
  - Thoroughly wash all fruits and vegetables (especially green leafy vegetables) with clean water before cutting/chopping and cooking.
  - Prevent raw meat, off al, poultry and fish from touching other foods. These foods often contain dangerous germs and worms which can easily wander to other foods.
  - Cook meat, off al, poultry and fish well. Meat should have no red juices. Hard-boil eggs.
  - Do not eat raw or cracked eggs because they can contain dangerous germs (called salmonella) that cause food poisoning.
  - Boil milk unless it is from a safe source. Soured and fermented milks may be safer than fresh milk.
  - Do not eat or use mouldy foods. They can make you very ill.
  - Cover any wounds on hands before preparing food to avoid contaminating it.
  - Do not spit near food or water.

Personal Hygiene:

✓ **Everyone should wash hands with soap following 7 steps of hand washing (figure 6.1)**

- Wet hands and apply soap. Rub palms together until soap is bubbly.
- Rub your hands with the fingers together, rub around each of your thumbs.
- Rub each palm over the back of the other hand, between your fingers on each hand.
- Rub using your finger-tips and nails
- Rub in circles on your palms and wrist
- Wash it with flowing water.
- Dry hands in air.

Figure 6.1: Hand washing steps

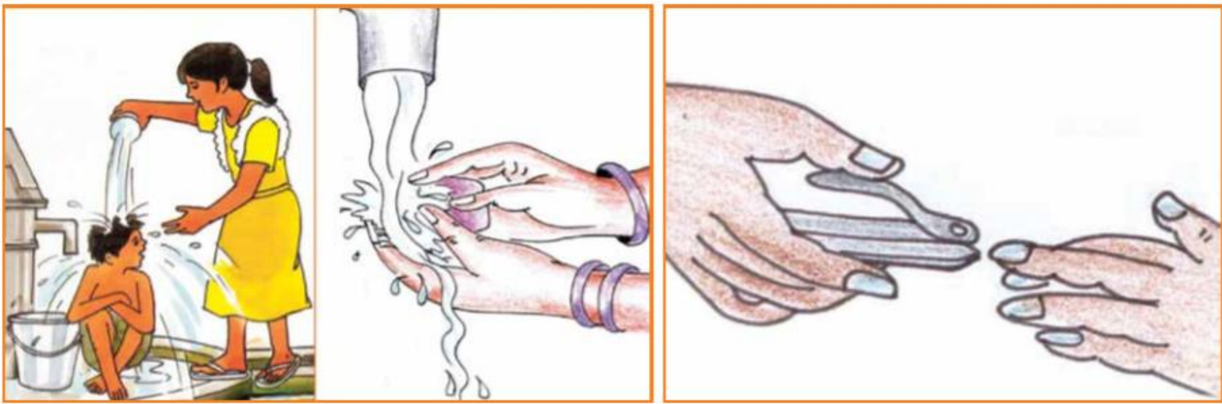


✓ **It is important to wash hands:**

Along with food hygiene, it is important that the mother practices good personal hygiene, both for herself as well as for her child, to prevent infections. Inform her-

- Wash hands with soap and water, using 7 steps of handwashing, as discussed in previous sections.
- The mother/caregiver should wash hands-
  - Before cooking and before feeding the baby
  - Before eating or handling food
  - After defecation, and after cleaning the baby post defecation,
  - After touching the animals, after disposing human and animal excreta.

Figure 6.2: Occasions Hand washing with Soap



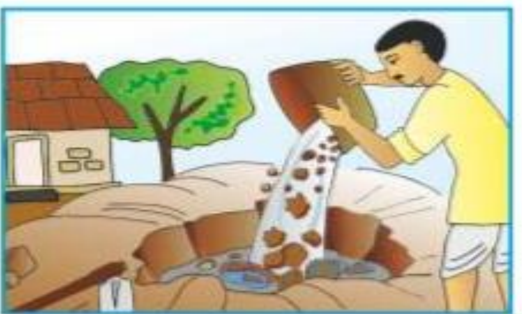
- Frequently wash baby's hands with soap and water
- Both mother and child should wear clean, washed clothes. Wash clothes frequently, especially in summers. Dry wet clothes in sunny open air.
- Cut fingernails and toenails frequently and keep them clean.
- Mother should ensure that she and the child takes bath every day

Environmental Sanitation: Poor sanitation results in high rate of infection since it increases the chances of flies carrying germs and spreading infection. Frequent illness adversely affects the growth of a child.

Poor sanitation is an important contributor of stunting among children. The Government of India, under the Swachh Bharat Abhiyaan, also stresses on keeping the environment clean and provides financial and technical support.

- Keep your house and yard clean to stop the spread of germs that carry illness

- Dispose of all faeces safely:
  - Use a toilet or latrine and keep it clean and free of flies.
  - Teach small children to use a potty.
  - Ensure immediate disposal of a child/infant's excreta using an appropriate method such as flushing excreta using latrine facility or putting excreta in a dug pit and covering the pit with soil.
  - If it is not possible to use a toilet or latrine, the faeces should be buried immediately.
- Everyone should always defecate well away from houses, paths, water sources and places where children play.
- Keep the surrounding area of the house free from animal faeces and other rubbish. Put rubbish in a covered bin, bury it, compost it or burn it, so it does not attract flies and other pests
- We should keep animal faeces away from the house, paths, wells, streams and children's play areas



ACTIVITY 6: ANTENATAL CARE

Method: Presentation and discussion

- ✓ **Ask the participants: Which services are provided to the pregnant woman under the ANC?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**
- Under NRHM, a package of antenatal care (ANC) services, are provided by ANMs on the Village Health, Sanitation Nutrition Days (VHSNDs), or at the health sub-centre as per her plan.
- A minimum of four ANC visits is recommended for appropriate ANC care.
- ANC primarily comprises of the following:

	1. Physical examination: ensuring mother is healthy and that her fetus is growing well
	2. Two injections of tetanus (TT): to prevent tetanus infection soon after delivery: (The first given as soon as the woman gets to know about her pregnancy, and the second injection after a gap of 1 month)
	3. Iron –folic acid (IFA) tablets: to prevent and manage anemia. (see details below)

	4. Weighing and monitoring for promoting adequate weight gain of at least 10-12 kg. The desired average weight gain during each trimester is as follows- 1st Trimester: ½ kg per month 2nd Trimester: 1 kg per month 3rd Trimester: 1½ to 2 kg per month
	5. Counseling on diet and rest during the day for promoting adequate weight gain by mothers as well as growth of fetus. ➢ Pregnant women should rest for about two hours during the day. ➢ Avoiding excess physical work and adequate rests helps pregnant women to conserve energy and prevent loss of weight. The overall result is gain in weight of mothers and increase in size of the growing fetus in the womb.
	6. Encouraging pregnant mothers to opt for institutional delivery.

- ✓ **Ask the participants: Why is it important to prevent and manage Anaemia among pregnant women?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**

- Anaemia is caused due to deficiency of nutrients such as iron and folic acid. During pregnancy, anaemia can adversely affect the outcome of pregnancy and contributes to infant and maternal mortality.
- IDA manifests itself in form of clinical signs and symptoms such as-
    - Paleness of eye/ nails/ palm
    - Lethargy and fatigue
    - Lack of concentration
- Two measures are needed to address anaemia.

1. IFA supplements

- Once a woman is diagnosed to be pregnant, daily consumption of IFA (100mg elemental iron and 500 ug Folic acid) is recommended
- A pregnant woman should consume minimum of 100 tablets during the entire pregnancy, starting first trimester, or as soon as she is confirmed to be pregnant.
- Explain to the pregnant women that-
  - IFA tablets should be taken 'every day' at least about an hour after the night meal and before going to sleep. Such pattern of consumption of IFA tablets helps in reducing complaints of nausea and loose motions.
  - Daily consumption of IFA helps in building iron stores in fetus and in new-borns. Such storage prevents iron deficiency and anaemia in early childhood.
  - IFA consumption may result in mild side effects such as black colouring of stools, nausea and vomiting. This is a normal effect of IFA tablets.
  - Counsel the mothers that these side effects are trivial compared to the significant benefits to the health of the mother as well as the physical and mental development of fetus and new-borns.

2. Consumption of Iron rich diet:

- Advise mothers to frequently eat green leafy vegetables, pulses which are good sources of Iron for vegetarians. However, Iron from vegetable sources is not readily absorbed in the body due to presence of inhibiting factors.
- Encourage the regular use of citrus fruits and vegetables in the diet; for e.g. use of lemon juice in the meal. Citrus fruits are rich in Vitamin C that helps in absorption of Iron present in the meal.
- Animal sources like meat, liver, etc. are all very good source of Iron. Also, Iron from animal sources is easily absorbed in the body.
- Discourage drinking of tea soon after a meal since an element present in tea prevents iron to be absorbed by the body.

Summarize key points

- At least 4 ANC visits should be made by the pregnant woman
- The ANC services comprises of- Physical examination, TT vaccination, IFA supplementation, Weighing and Counselling on diet and adequate rest
- Anaemia among pregnant women should be prevented and managed, since Anaemia can adversely affects the outcome of pregnancy
- Two measures to address Anaemia are-
  - IFA supplementation
  - Consumption of Iron rich Diet

Activity 6: Getting Prepared for Breastfeeding

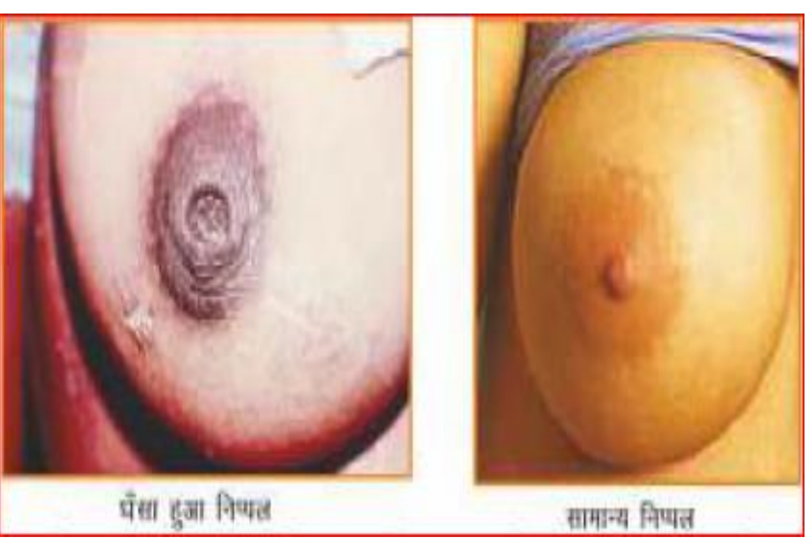
Method: Presentation and discussion

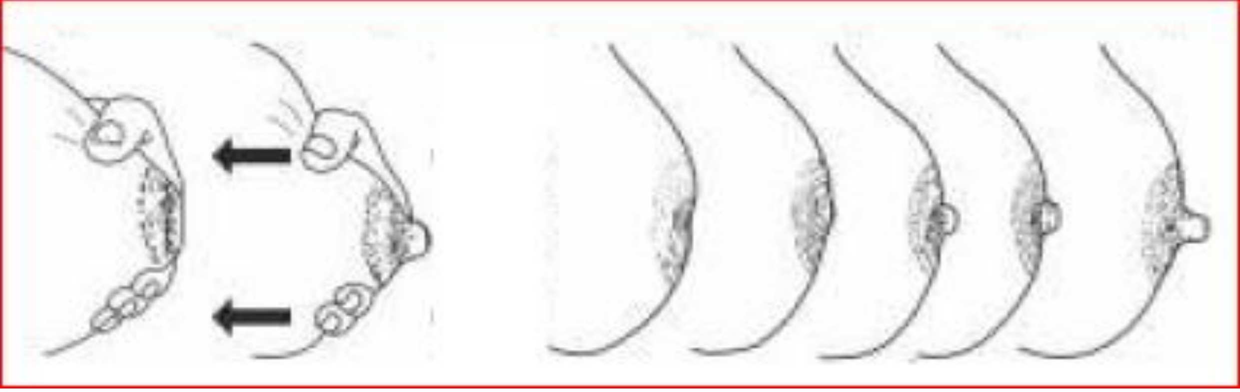
- ✓ **Ask the participants: What key messages should be imparted to the pregnant woman to prepare her for breastfeeding her baby?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**

- During contacts with pregnant women, counsel and prepare them for post-natal priorities. Explain to mothers, the importance of early initiation of breastfeeding, feeding colostrum and exclusive breastfeeding (EBF).
- In the counselling sessions, involve, not only pregnant women, but also the various elderly family members in the family such as mother-in law and other influencers present at home.

Care of breasts:

- Encourage mothers to examine the shape of the nipples. In case, the nipples are flat or
- Inverted, advice to draw out the nipple with gentle movement with thumb and finger about 10-12 times at least twice a day. [the technique has been shown in the sections ahead]
- Inform pregnant women that they should not worry about the size of breasts being small since small size breasts can produce adequate milk.





Early Initiation of Breastfeeding:

- Put new-borns to breast within one hour of birth and ensure early initiation of breastfeeding. Do not wait for the cord to be cut and directly place the new-born onto mother's breast to facilitate suckling by the baby.
- Early initiation improves immunity and contributes in reducing morbidity and mortality among new-borns. It also helps in early flow of increased quantity of breast milk as well as creates early bond with mothers.

- Do not wait for the cord to be cut and directly place the new-born onto mother's breast to facilitate suckling by the baby.
- Early initiation improves immunity and contributes in reducing morbidity and mortality among new-borns. It also helps in early flow of increased quantity of breast milk as well as creates early bond with mothers.

- Do not give foods such as honey, sugar water and milk powder to a new-born child prior to putting the child to breast. Such foods are often fed in unhygienic conditions and can cause infection and diarrhoea. Such practices can also result in inadequate production and flow of breast milk.

Reiterate the learning on initiation of breastfeeding by showing the AV to the trainees [Reference AV.

Feeding Colostrum:

- Explain to the pregnant woman the importance of colostrum for the baby
  - Colostrum is the yellowish breast milk, which is produced by the mother in the first 2-3 days after the delivery. Unfortunately, it is often considered "dirty" or "old" milk and discarded.
  - Colostrum is in fact rich in energy, protein, fat, vitamins (including vitamin A) and minerals. Colostrum contains the various nutrients needed by a new-born for the first few days of life.
  - Colostrum also contains antibodies, which gives protection from diseases. It is not merely the first high-energy food for a baby but is also the 'natural immunization'. All mothers should be counselled on not discarding colostrum and ensuring feeding of colostrum.

Exclusive breastfeeding (EBF):

- Baby should be fed only breast milk till completion of six months of age.
- No pre-lacteals, or any other food item, NOT EVEN WATER, should be fed to a baby in the first six months of life.

- Breast milk is a complete food and drink for an infant under six months. EBF implies that nutritional and water needs of an infant can be met with exclusive feeding of breast milk till the age of 6 months.

Session 5.4: Danger Signs during Pregnancy

- Bleeding.
- Severe Nausea and Vomiting
- Baby's activity level significantly declines
- Contractions early in the third trimester
- Water breaks
- A persistent severe headache, abdominal pain, visual disturbances, and swelling during your third trimester
- Flu symptoms

Summarize key points

- Encourage pregnant women to check their breasts by examining the nipples (if they are flat or inverted)
- Inform and convince pregnant women to ensure that post-delivery:
  - Initiate breastfeeding within one hour of birth, even if the umbilical cord is uncut
  - Feed Colostrum to the baby, which is considered to be the 'first natural Immunization' for the baby
  - Do not feeding ANYTHING except breast milk for the first 6 months of baby's life, NOT EVEN WATER

Common myths and misconceptions during Pregnancy:

1. *"Do not disclose the pregnancy for first 3 months… to ward off the 'evil eye'…"*

   It is advisable for the pregnant woman to get herself registered as early as possible, to be able to avail all services and government entitlements, and timely advice from the frontline functionaries regarding health and nutrition care.

2. *"The pregnant woman should eat less so as to produce a small fetus… this will aid in easy delivery"*

   The pregnant woman needs to eat more than she used to before she conceived. If she eats less, this can be harmful for both- the mother and the baby.

3. *"Do not consume Papaya, brinjal, pineapple, as it may result in abortion"*

   Anything eaten in moderation is never harmful. The pregnant woman can eat all of these foods. Papaya is especially considered to be abortion-inducing, however the fact is that the raw papaya has substances that are known to induce abortion, but fully ripe, orange-red papaya is completely safe, when consumed in moderation.

4. *"Consume saffron, as it might result in child with fairer skin"*
   Nothing but the genes decides what colour the child's skin is going to be. It is therefore a complete myth.

SECTION 6: CARE AT BIRTH

DURATION **3.5 hours**

EXPECTED OUTCOME

The expectant mothers are contacted close to the expected date of delivery (EDD) and counselled about care of the new-born immediately after birth.

LEARNING OBJECTIVE

By the end of the session, the trainees are-

- Aware and skilled to be able to put into practice correct new-born care practices
- Aware of the importance of early initiation of breastfeeding and feeding of Colostrum
- Understand ways to improve the confidence of mothers that they can produce enough milk for their new-born
- Aware about the ways to care for LBW child

KEY SESSIONS

Session	Session topic	Duration
1	Case study and discussion	1 hour
2	Correct new-born practices	1 hour
3	Care of LBW child	1 hour
4	Common myths and misconceptions	30 minutes

Session 6.1: Case Study and Discussion

Items required

Hand-outs of Case study, chart papers, bold markers

ACTIVITY 1: CASE STUDY

Method: Group exercise, presentation and discussion

- Divide the participants in 4-5 groups.
- Provide the handout of case study along with chart paper and bold marker/s to each group
- Ask each group to carefully read the case study

Case study: Sita is now close to her expected date of delivery. Throughout her pregnancy she had not been very regular with the ANC services. She feels weak, complains of lethargy and swelling in feet. She also did not register with the ANM for ensuring that the delivery is conducted in a medical facility.

10 days later, Sita had labour pains and the delivery took place at home. A baby boy was born.

Soon after the baby was born, Sit's mother-in-law fed some jaggery water to the new-born. She believed that feeding jaggery would result in baby having a good and sweet voice. She also asked Sita to wait till the 'pandit' arrives after which the mother can breastfeed. Till then, the mother-in-law advised Sita to express her milk and discard it since it is the first milk and is dirty and harmful.

Just then, the AWW, who was informed of the baby's birth by one of the community members, visited the family. In the first place, she requested the mother-in-law to not wait for the 'pandit' and rather put the child to Sita's breast and start breastfeeding immediately. She counselled the Sita and MIL to not discard the first milk or Colostrum and informed of its benefits for the baby. She also weighed the baby, who was 2.4kg. On assessing the situation, showed Sita how to keep the baby warm, by having skin-to-skin contact with the baby, which will help in easy flow of milk as well as keep the baby safe. The AWW could convince the mother-in-law and breastfeeding was initiated. The AWW also explained what the weight of the baby signifies.

✓ **Ask the trainees to respond to the questions presented below:**

1. Was the mother-in-law right in feeding jaggery water to the new-born? If yes, why? If no, why?
2. Why had the AWW advised the family to feed the first milk or colostrum?
3. Why did AWW weigh the child? What does the weight of this baby signifies?
4. Why AWW did counselled Sita to keep the baby warm through skin-to-skin contact?

✓ **Advise each group to select a presenter who would be assigned the task of presenting the responses (on chart paper) to the questions on behalf of the group.**

✓ **Following the presentation by each of the six groups, organize a discussion on the various emerging issues.**

Session 6.2: Correct new-born care practices

ACTIVITY 2.1: CORRECT NEW-BORN PRACTICES

Method: Presentation and discussion

✓ **Ask the participants: What are the practices to be followed immediately after baby's birth?**

✓ **Write the responses on the flip-chart**

✓ **Add the missing points while explaining the following points using presentation**

- The first few days following the birth of the child are extremely critical in ensuring a healthy start to life.
- Inform the mother and family members to follow correct new-born practices-

Keeping the new-born warm:

- Avoiding hypothermia among new-born's is essential as it increases morbidity and mortality.
- To prevent heat loss, the baby should be immediately wiped and wrapped in a soft, clean and dry cloth.
  - Keep the head and extremities covered.
  - Rooming-in: Do not separate the child from the mother
  - Keep the baby in close skin to skin contact with the mother
  - Do not bathe the baby at least during the first 24 hours

Weighing: Get the weight of the baby checked immediately after birth to check if the child is normal weight or LBW.

Preventing hypoglycaemia: Initiate BF immediately after birth, preferably with the umbilical cord still uncut.

Protection from infection and sepsis:

- Do not wipe off the protective layer on the skin of the baby
- Ensure proper cord care. Cord should be left as dry as possible

ACTIVITY 6.2: EARLY INITIATION OF BREASTFEEDING AND COLOSTRUM FEEDING

Method: Presentation and discussion

- ✓ **Ask the participants: What is the ideal time to initiate breastfeeding? And why?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**
- Breastfeeding should be initiated within an hour of birth. It helps in early flow of breast milk and increasing breast milk production.
- Early contact with body of the mother during breastfeeding provides warmth to the new-born
- Breastfeeding increases immunity in the body of a baby.
- Initiation of breastfeeding immediately after delivery helps to contract the uterus, expel the placenta and reduce bleeding.
- Mother who has delivered through caesarean section should also be encouraged to start breastfeeding as soon as possible.
- A mother and her baby should be kept in the same room after delivery to facilitate early initiation of breastfeeding
- ✓ **Ask the participants: What is colostrum? Why should it be fed to the new-born?**

✓ **Write the responses on the flip-chart**
✓ **Add the missing points while explaining the following points using presentation**

- Colostrum is the yellowish breast milk, which is produced by the mother in the first 2-3 days after the delivery. Unfortunately, it is often considered "dirty" or "old" milk and discarded.
- Colostrum is in fact rich in energy, protein, fat, vitamins (including vitamin A) and minerals- all the nutrients needed by a new-born for the first few days of life.
- Colostrum also contains antibodies, which gives protection from diseases. It is therefore not just child's first high-energy food, but also 'natural immunization'.

✓ **Ask the participants: What do you understand by the pre-lacteal feeds? What pre-lacteals are commonly used in your village or town area?**
✓ **Write the responses on the flip-chart**
✓ **Add the missing points while explaining the following points using presentation**

- Pre-lacteal feeds are feeds given prior to putting baby to breast and feeding breastmilk.
- New-borns are often given pre-lacteals such as jaggery, honey, ghutti, tea, etc.
- These pre-lacteals are harmful for infants.
  - Feeding of pre-lacteals delays initiation of breastfeeding.
  - Pre-lacteal food items are also often not free from germs and can lead to diarrhoea.
  - It could also reduce appetite and result in poor production of breast milk in the first few days of life.

Session 6.3: Care of Low Birth Weight babies

Items required: Mannequin, sling, Power point presentation.

ACTIVITY 3: UNDERSTAND HOW TO CARE FOR LBW BABIES

Method: Presentation, Demonstration and Discussion

✓ **Ask the participants:**
✓ **Write the responses on the flip-chart**
✓ **Add the missing points while explaining the following points using presentation**

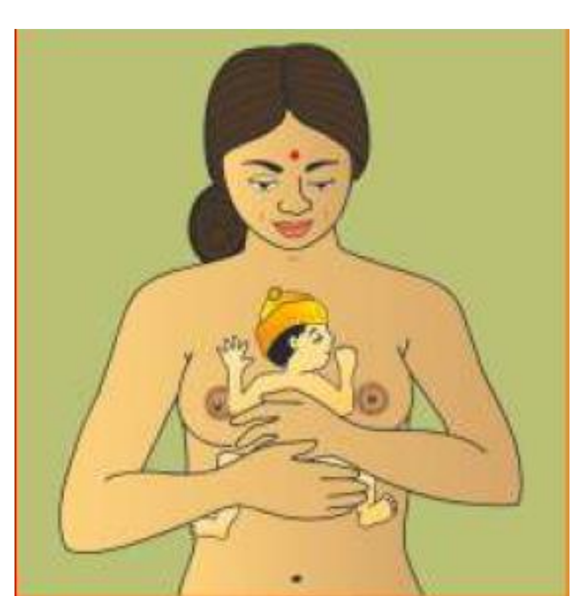
- The term low-birth-weight (LBW) means birth weight of less than 2.5 kg. This includes-
- Babies who are born premature/ preterm (who are born before 37 weeks of gestational age),
- Babies who are born at term but are LBW.
- If the child is LBW, ensure Kangaroo Mother Care (KMC).

What is KMC?

- KMC implies new-born being placed in a specific way so that the baby is in contact with mother's skin. The figure below shows the correct position of KMC.
- KMC is the most promising way to save and care for pre-term and LBW babies.
- KMC involves teaching mothers and other caregivers how to keep new-born's warm through continuous skin-to-skin contact on the mother's chest.
- KMC has been shown to prevent infections, promote breastfeeding, regulate the baby's temperature, breathing, and brain activity, and encourages mother and baby bonding.

✓ **Demonstrate to the participants how to position the baby for KMC, using the mannequin**

Step1: Place the baby between the mother's breasts in an upright position.



Step 2: Turn the head of the new-born to one side and in a slightly extended position. [This slightly extended head position keeps the airway open and allows eye-to-eye contact between mother and baby.

Step 3: The hips of new-born should be flexed and abducted in a "frog" position; the arms should also be flexed.

Step 4: Level the baby's abdomen at the level of the mother's epigastrium. Mother's breathing stimulates the baby, thus reducing the occurrence of apnea.

Step 5: Support the baby's bottom with a sling/binder

Low-birth-weight babies are at particular risk of infection, and they need breast milk more than larger babies, so that their growth can catch up.

- Many LBW babies can breastfeed without difficulty. Babies born at term suckle effectively.
- Babies who are born preterm may have difficulty suckling effectively at first. But they can be fed on expressed breast milk by tube or cup, and helped to establish full breastfeeding later.
- Mothers of LBW babies need skilled help to express their milk and to cup feed. It is important to start expressing on the first day. This helps to start breast milk to flow.
- While suckling, a LBW baby may pause during feeds quite often and for quite long periods. (For example, he may take 4-5 sucks and then pause for up to 4 or 5 minutes). It is important not to take him off the breast too quickly. Leave him on the breast so that he can suckle again when he is ready.
- The best position for a mother to hold her LBW baby at the breast is across her body, holding him with the arm on opposite side to the breasts (as shown in the image).

Common myths and misconceptions that hinder proper care at Birth

- **The mother is too tired after the labor to initiate Breastfeeding:** The best way to relieve the mother of her tiredness due to labor is to start skin –to-skin. Contact with her baby. This leads to release of Oxytocin, which helps in addressing the, tiredness as well as providing the needed stimulation for initiating breastfeeding.
- **The mother should not eat anything immediately after delivery:** After delivery mother should not be kept hungry. In some communities, practise of not giving food. Soon after the delivery is followed. Such practice result in becoming weak and unable to take care of her baby.
- **There is no milk until the second or third day after delivery:** This is incorrect and prevalent belief. Milk produced for the initial 2-3 days is not perceived as milk since it is slightly yellow or dirty and is produced in a very small amount .Even this amount of milk is enough for a newly born baby. After the initial 2-3 days of delivery, mothers starts experiencing fullness of breasts and the milk gets secreted in full flow. The milk also gets whiter in colour .Due to these reasons, mothers feel that milk, which is good for a baby, only starts secreting after 2-3 days of delivery.
- **Breastfeeding can be initiated only after the intervention of religious leaders:** It is a common belief in the community that breastfeeding can only be initiated once the pandit (religious leader of the Hindus) suggests an auspicious time or when a maulvi (religious leader of the Muslims) recites sermons in the infant's ear. Mother and the family members should be explained that if they keep waiting for such practices before putting a baby to breast, then it is possible that in such a situation a baby would remain hungry for a long period. This may also leads to hypoglycaemia in the child.

Summarize key points

- The correct new-born practices include-
  - Weighing the new-born
  - Keeping the new-born warm,
  - Preventing hypoglycaemia and
  - Protection from infection and sepsis
- Breastfeeding should be initiated immediately after birth, within 1 hour
- Pre-lacteals are harmful for the new-born and hence should not be given
- Colostrum, the first milk, should definitely be given to the new-born as it is full of nutrients and immune properties
- If the child is LBW, he/she should be ensured Kangaroo Mother Care

SECTION 7: CARE OF CHILDREN FROM BIRTH TO SIX MONTHS

DURATION 6.5 hours

EXPECTED OUTCOME

Mothers of all the children aged from birth till 6 months and identified, registered and counselled regarding appropriate health and nutritional care of their children

LEARNING OBJECTIVE

By the end of the session, the trainees will-

KEY SESSIONS

Session	Session topic	Duration
1	Case study and discussion	1 hour
2	Breastfeeding and its advantages	30 minutes
3	Good breastfeeding practices	1 hour 30 minutes
4	Overcoming common breastfeeding problems	45 minutes
5	Exclusive Breastfeeding	30 minutes
6	Preventing undernutrition through Growth Monitoring	45 minutes
7	Feeding during Illness and feeding LBW babies	30 minutes
8	Nutritional care during Lactation	30 minutes
9	Common myths and misconceptions	30 minutes

Session 7.1: Case study and Discussion

Items required Hand-outs of Case study, chart papers, bold markers

ACTIVITY 1: CASE STUDY

Method: Group exercise, presentation and discussion

- Divide the participants in 4-5 groups.
- Provide the handout of case study along with chart paper and bold marker/s to each group
- Ask each group to carefully read the case study

✓ **Ask the trainees to respond to the questions presented below:**

1. Why did AWW weigh the child?
2. Why had the AWW suggested to the family to exclusively breastfeed the child for the first six months of life?
3. How did the AWW check whether breast milk was sufficient for the baby?
4. Name three important advice from AWW to Sita and her family that helped the new born to grow well.

Case study: AWW also observed Sita while she was breastfeeding her baby. The AWW checked the way the baby was held and attached to the breast. She observed that Sita was having difficulty in positioning the baby properly as a result of which the baby was sometimes uncomfortable to suckle. The AWW corrected the positioning and encouraged Sita to continue to exclusively breastfeed the child for the first six months of age. She informed Sita and her family members that breastmilk is sufficient for the baby for first 6 months and hence the child should not be given any water. She also counselled Sita that the child was gaining adequate weight and therefore breast milk was sufficient for the baby.

The AWW also counselled the family to ensure good diet for the lactating mother and avail of the ICDS entitlement of Supplementary food.

Sita was thus convinced by AWW to feed only breast milk up to six months of age. Sita and her family also observed that the child was growing well and had no episodes of diarrhoea. (The family was well informed to keep close observation of the baby's stool every day and knew what kind of symptoms required attention as diarrhoea). The mother and the family members were therefore satisfied with the advice given by AWW and spread the word among other women about how AWW had helped their new-born to grow well.

- ✓ **Advise each group to select a presenter who would be assigned the task of presenting the responses (on chart paper) to the questions on behalf of the group.**
- ✓ **Following the presentation by each of the six groups, organize a discussion on the various emerging issues.**

Session 7.2: Breastfeeding and its Advantages

ACTIVITY 2: LEARNING THE ADVANTAGES OF BREASTFEEDING

Method: Presentation and discussion

- ✓ **Ask the participants: What according to you are the advantages of breastfeeding?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation.**

- Brain of a breastfed child is more developed in comparison to a bottle fed child. This is because the breast milk contains essential fatty acids required for baby's growing brain and eyes. These fatty acids are not present in animal milk.
- [This is because the breast milk contains essential fatty acids required for baby's growing brain and eyes. These fatty acids are not present in animal milk]
- **For Mothers:** It protects mother by helping the uterus to contract reducing bleeding and anaemia. It reduces the risk of breast cancer and ovarian cancer.

Advantages of Breast Milk & Breastfeeding

Breast Milk
- Perfect Nutrients
- Easily digested
- Efficiently used
- Protects against infection

Breastfeeding
- Helps bonding & development
- Helps delay a new pregnancy
- Protects mothers health

- ✓ **How is breast milk better than other milks?**

Human Cow Goat
Fat
Protein
Lactose

- Breast milk is easily digestible and assimilated as compared to animal milk.
- [Human milk contains just the correct amount of Protein, as against the animal milk that has more protein, which is difficult to digest, especially by baby's yet immature kidneys. Fig…]
- Quality of protein in Breastmilk ensures it is easily digestible.
- [Much of protein in cow's milk is casein. Casein forms thick curds in baby's stomach. Human milk contains more whey proteins. Whey proteins contain anti-infective proteins, which help to protect a baby against infection.]
- Breast milk does not cost any money.

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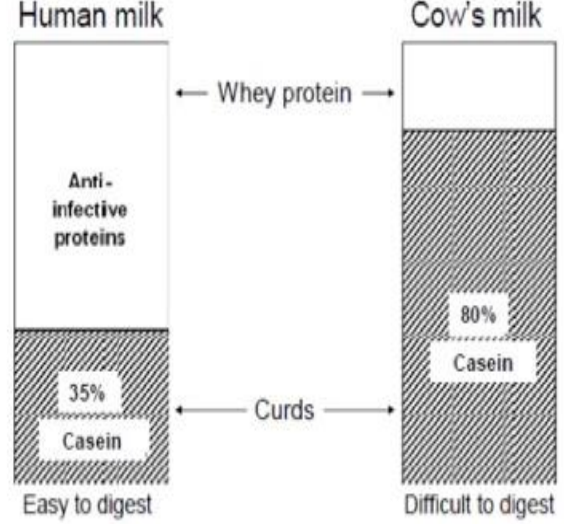


- [Breast milk is readily available, at all times! It saves the money, which is otherwise used for buying, heating the animal or tinned milk. Breast milk is also delivered to the baby in the most hygienic manner, and in turn saves the medical care cost to the family due to possible infections.]
- Breastfeeding helps the bonding between mother and child
- [Close contact from immediately after delivery helps the mother and baby to bond and helps them to feel more emotionally satisfied and secure.]
- It helps in delaying a new pregnancy and protects mothers' health
- [Breastfeeding helps the uterus to return to its previous size. This helps to reduce bleeding and may help to prevent anaemia. Breastfeeding also reduces the risk of ovarian cancer, and breast cancer, in the mother.]

- ✓ **Ask the participants: What is the difference between Colostrum and regular breast milk?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**

Colostrum is the breast milk that women produce in the first few days after delivery. It is thick and yellowish or clear in colour. It contains more protein than mature milk

Property	**Importance**
Rich in antibody & while cells	• Protects against allergy & infection
Purgative	• Clears meconium • Helps to prevent jaundice
Growth factors	• Helps intestine to mature
Rich in Vitamin A	• Reduces severity of infection

- After a few days, Colostrum changes into **mature milk.** There is a large amount of mature milk and the breasts feel full, hard and heavy. **Fore-milk** is the milk that is produced early in a feed. **Hind-milk** is the milk that is produced later in a feed.
- Hind-milk looks whiter than foremilk, because it contains more fat. This fat provides much of the energy of a breastfeed. This is an important reason why the baby should be allowed to empty one breast completely before being shifted to the second breast.
- Foremilk looks thinner than hind-milk. It is produced in larger amounts, and it provides plenty of protein, lactose, and other nutrients. Because a baby gets large amounts of foremilk, he gets all the water that he needs from it. Babies do not need water before they are six months old, even in a hot climate.

Summarize key points

- Breastmilk is the best food for the baby for first six months of life
- Breastmilk has many advantages: it is free of cost, easily digestible and assimilated, has anti-infective properties and contains nutrients that help in physical and mental growth and development.
- Hind milk is full of fats, therefore a child should be allowed to empty one breast completely before shifting to the other breast.

Session 7.3: Good breastfeeding practices:

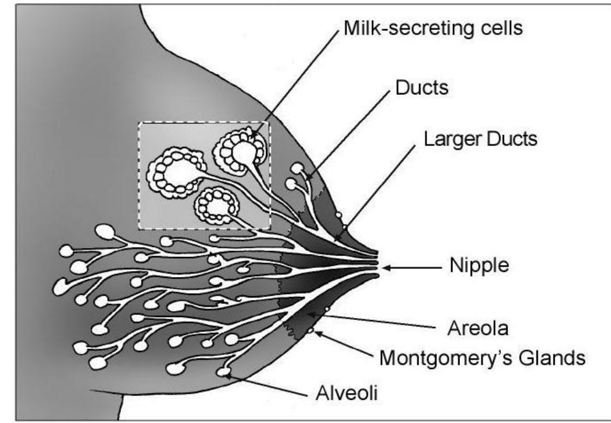
Items required: Presentation, AV aid, mannequin, flip-chart, bold markers

ACTIVITY 3: UNDERSTANDING THE 'PROCESS' OF BREASTFEEDING

Method: Presentation and discussion

- ✓ **Ask the participants: How does breastfeeding work?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Show the figure….to the trainees on the presentation and explain the following points.**

- In order to follow the correct breastfeeding practices, it is important that the mother and caregivers are explained in simple terms as to how does the breastfeeding actually works.
- This diagram shows the anatomy of the breast.



Nipple: Milk flows through the nipple. It is not where milk is stored or produced.

Areola: The dark skin, which surrounds the nipple, is called the areola. Milk is collected here. Hence areola needs to be inside the baby's mouth to draw milk.

Aveoli: Inside the breast are the alveoli, the small sacs made of milk-secreting cells.

Rest of the breast is made up of muscles and fats. **It is the fat, which differentiate a large breast from the small breast. Hence the size of the breast does not make any difference in the quantity of milk produced.**

Milk secretion Process:

When the baby suckles at the breast sensory impulses go from the nipple to the brain and secretes the hormone prolactin. This hormone makes these cells produce milk. The more the baby suckle, the breasts make more milk. This hormone is produced more at night so breastfeeding at night increases the milk production.

Milk flow process:

- Around the alveoli are muscle cells, which contract and squeeze out the milk. A hormone called **Oxytocin** makes the muscle cells contract.
- When the baby suckles or when the mother thinks/feels about the baby fondly, the hormone Oxytocin gets released and makes the milk flow out. This is also called **Oxytocin reflex**, and is easily affected by a mother's thoughts and feelings.
- There are inhibitors present in milk too. If a lot of milk is left in the breast, the inhibitor stops the secretion. If the breast milk is removed, either when the baby suckles or by expression (in case the baby cannot suckle), the inhibitor is also removed. Then the breast makes more milk, and continue the flow freely. A balanced diet for mothers is good enough to produce adequate milk.

ACTIVITY 3: UNDERSTANDING THE GOOD BREASTFEEDING PRACTICES

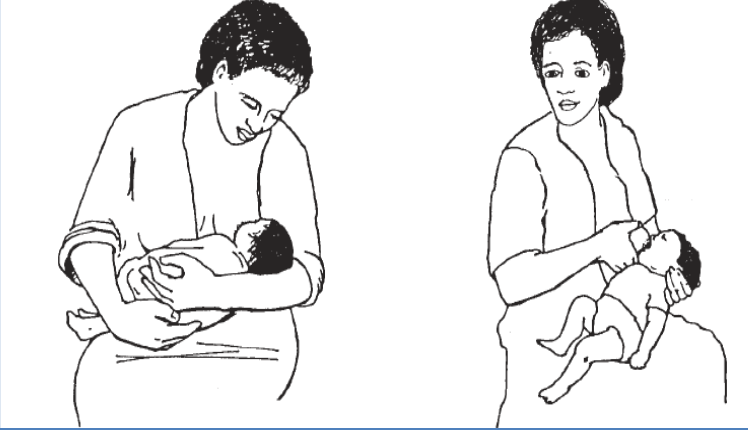
Method: Presentation, demonstration, audio-visual aid and discussion

- ✓ **Ask the participants: What is considered to be the correct position and the attachment of the baby during breastfeeding?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Show the figure….to the trainees on the presentation and explain the following points**

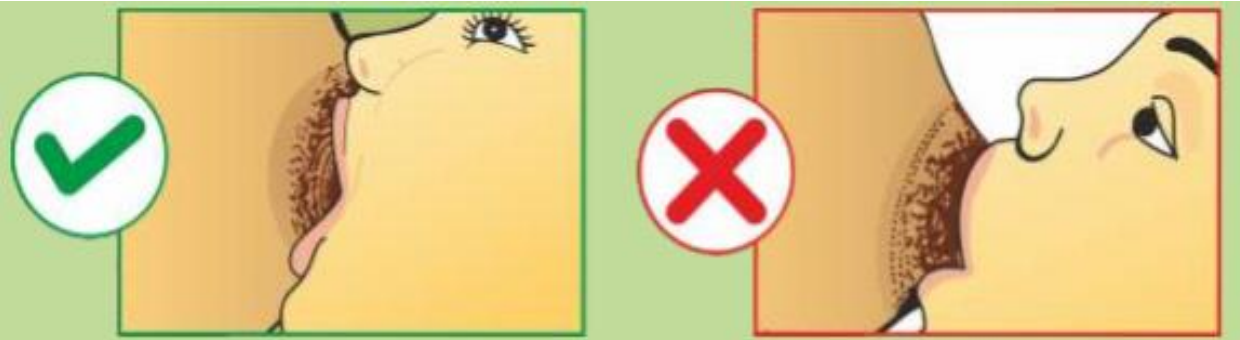
- Proper positioning is important for successfully exclusively breastfeeding a child.
- A child who is attached poorly to the breast-
  - Is not able to suckle breast milk properly and therefore gets insufficient milk.
  - Such a child remains hungry and often cries.
  - This often results in a mother thinking that there is insufficient milk in her breasts. She then starts losing confidence in breastfeeding.
  - Milk production gradually reduces and eventually breastfeeding is stopped.
  - A child is thus deprived of being fed exclusively breastmilk for first six months of life.

- ✓ **Explain to the mother important points for correct position and attachment for breastfeeding:**

- A mother can feed her infant in a sitting or lying down posture.
- Infant should be held in a proper position to support his body fully, as shown in fig….a).
- This includes-
  - Infant's head, neck and buttocks should form a straight line.
  - Infant's body should be turned towards the mother.
  - Infant should be facing the mother's breast.
  - A mother should look into her infant's eyes while breastfeeding.
  - Mother's hand should support the shoulder of the baby and not the neck, for the baby to manoeuvre.



- ✓ **Explain to the mother important points for correct position for breastfeeding.**
- The correct attachment necessitates
  - The breast should not block the nose of the infant.
  - Infant's chin should be touching the breast.
  - Infant's mouth should be wide open.
  - Infant's lower lip should be turned outward.
  - More areola of breast should be visible above than below the mouth of an infant.
    - Infant is suckling effectively if he suckles with slow deep sucks and sometimes pauses. An infant can be seen or heard swallowing.
  - The mother should not experience any pain while feeding the baby



- ✓ **Reiterate the learning on positioning and attachment by showing the AV to the trainees**
- ✓ **Demonstrate the correct positioning using a mannequin**
- ✓ **You may also ask the trainees to volunteer for demonstrating good positioning**
- ✓ **Ask the participants: What are the other good breastfeeding practices?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**

1. Ensure Frequent breastfeeding – on demand feeding

- Encourage the mother to practice on-demand breastfeeding, i.e. she should breastfeed a child whenever s/he demands for it.
- Infants should be breast fed as often and for as long as the infant wants, day and night.
- An infant should therefore be fed at least 6-8 times during the day and about 3-4 times during night.

2. Feed both fore and hind milk

- Both, fore and hind milk should be fed to a child.
- While breastfeeding, it is important that one breast is fully emptied before breastfeeding from the other breast. A child often takes 10-15 minutes to be fed from one breast.

3. Continue Breastmilk while at work

A working mother can also exclusively breastfeed her child, by either-

- Taking the child with her to work and feed her in between work time.
- Expressing the breast milk and storing it in a clean, covered bowl or katori.
- Expressed breast milk can be stored for a few hours in normal summer days.
- Any member in the family can be trained to feed the stored breast milk using a spoon for feeding.

The method of expressing breast milk is discussed in **session 7.4**

4. Avoid Bottle Feeding

Bottle-feeding should be completely avoided, to prevent possible contamination. If needed (when feeding expressed breast milk) feeding by cup or glass, which is thoroughly cleaned, should be encouraged.

5. Breastfeed as long as feasible

A child should be breast fed at least up to two years of age, and beyond if feasible. This implies that a mother should continue to breastfeed a child along with feeding of semi-solid food after 6 months of age.

6. Maintain personal hygiene and sanitation

It is important that the breastfeeding is carried out in a hygienic environment. Explain to the mother the importance of hygiene and sanitation in the overall health of a baby.

Personal hygiene

- Mother should wash her hands with soap following 7 steps of handwashing, as discussed in previous sections.
- The mother/caregiver should wash hands-
    - Before every breastfeeding episode
    - Before cooking or handling food
    - After defecation and after cleaning the baby post defecation
    - After touching the animals
    - After disposing human and animal excreta
- Mother should ensure wearing clean, washed clothes, and maintain personal hygiene, both for herself and her baby. This includes, bathing daily, cutting nails regularly, brushing teeth every day and washing hands.

Food hygiene

The food hygiene includes, ensuring-

- The cooking area is clean and hygienic
- The cooking as well as serving utensils are clean
- All the vegetables, especially green leafy vegetables are thoroughly cleaned before cutting and cooking

Clean and safe drinking water

In order to ensure the family has access to clean and safe drinking water, they should-

- Make sure the source of water is safe
- The container/vessel used for collecting and storing drinking water should be thoroughly cleaned
- Water should be stored at a height, away from children and pets
- Water should be covered
- Use long-handled ladle to take out water, never put the hands inside the vessel

Environmental sanitation

- The family should also ensure clean household and surroundings.
  - Clean the household and surroundings every day
  - Use latrines for defecation
  - Dispose of human/animal excreta and household waste in a sanitary way (by dumping it in a pit and covering it with sand)

Summarize key points

- Size of the breast does not have impact on the milk production capacity.
- More the baby suckle at the breast more the milk production.
- Breastfeeding at night increases breast milk.
- Areola is milk collection space, hence it should be inside the baby mouth along with nipple for proper milk flow.
- Two hormones, Prolactin and Oxytocin, facilitate production and secretion of breast milk, respectively.
- Correct positioning and attachment is necessary to ensure that child breastfeeds effectively
- Breastfeeding should be on demand, and for as long as feasible
- Hygiene, both personal and food, as well as sanitation should be maintained

Session 7.4: Overcoming common breastfeeding problems:

Items required Presentation, AV aid, mannequin, flip-chart, bold markers

ACTIVITY 4.1: UNDERSTANDING THE COMMON PROBLEMS FACED DURING BREASTFEEDING

Method: Presentation and discussion

- ✓ **Ask the participants: What according to you are the most common breastfeeding problems?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**

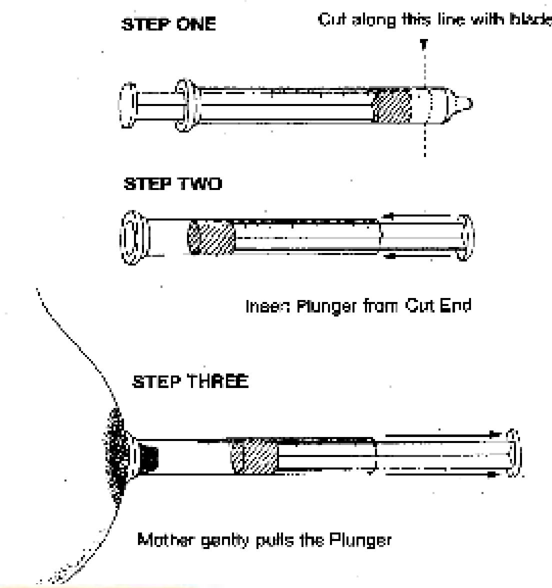
1. Mother complains of inadequate flow of breast milk

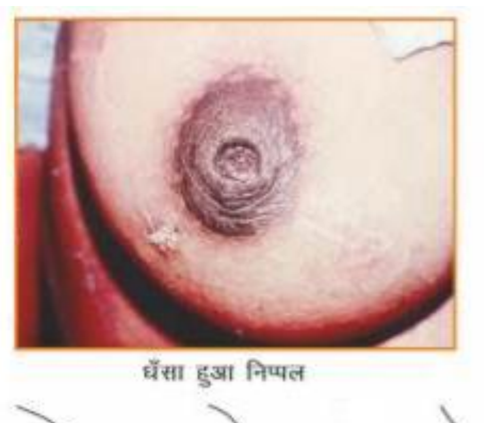
- A mother often complains that she does not produce enough milk and that her child will soon become weak and sick. Every mother must know that she has the capacity to feed her child (even two children or twins) fully with her own milk.
- ✓ **How to check if mother's milk is adequate**
- Inform the mother about the following signs and symptoms to identify adequacy of milk-flow check list
    - After baby is relaxed and calm.
    - Baby urinates 6-8 times or more in 24 hrs.
    - Baby gains more than 500 grams weight every month
    - Baby sleeps for 1-2 hrs after feeding.
    - When mother feeds the baby from one breast, the milk drips from the other breast

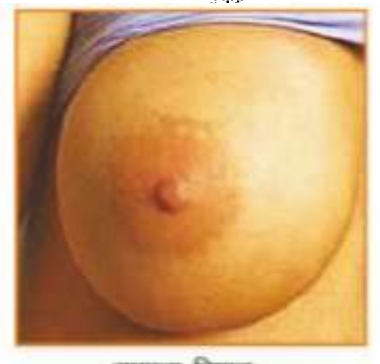
- This will also help a mother to continue breastfeeding and not switch to feeding additional milk in the form of animal milk or tinned milk.
- ✓ **To assess breast feeding the points to be checked are**
    - Use the correct position while feeding the baby.
    - Ensure the attachment is correct
    - Continue feeding at night.
    - Continue feeding the child frequently, as production of breast milk increases with frequency of suckling.
    - Mothers is relaxed and in comfortable environment.

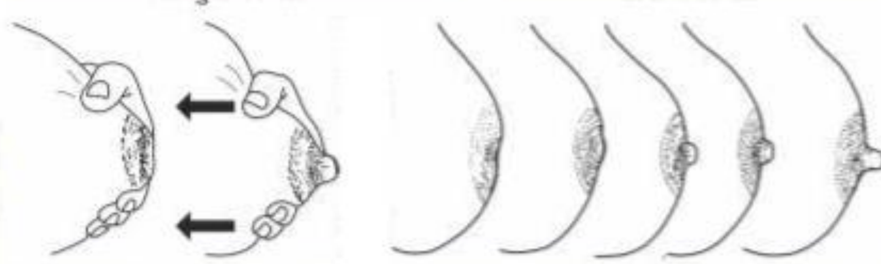
2. Breast Conditions

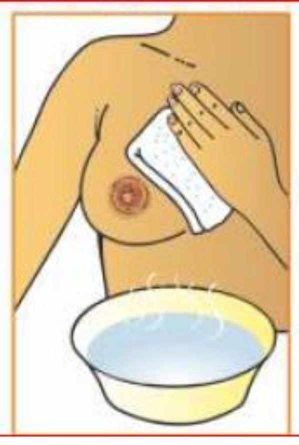
- Diagnosis and management of difficult breast conditions are important both to relieve the mother, and to enable continued breastfeeding.
- **Flat or inverted nipples:** Explain to the mother that the baby suckles from the breast, not from the nipple. However, properly formed nipples facilitate ease of breastfeeding for the baby. Some ways that can help improve flat or inverted nipples are-
  - Skin to skin contact
  - Mother helping the baby in attachment
  - Stimulating the nipples
  - Holding the nipples from above and below and pulling towards the chest, to draw the nipple out.
  - Use of syringe method
- **Engorgement:** Engorged breast means the breast is full of milk and the milk cannot let down.











How to diagnose?	Main reasons for engorgement are-	How to treat engorgement?	How to Prevent
○ Breast is extremely painful ○ Breast becomes swollen, shiny ○ Nipples become tight and may look red. ○ Mother may have fever	○ Delay in initiating BF ○ Poor attachment ○ Infrequent removal of milk; for e.g. if the BF is not on-demand or the child has difficulty suckling.	○ Remove milk either by the child or by expressing. ○ It could be done in the following step-wise manner: ○ Soak towel in warm water and do hot fomentation of the breast. ○ Massage the breast slowly and stimulate the nipples ○ Express milk slowly by hand ○ Give pain reliever (paracetamol) if necessary ○ Cold compression of the breast after feeding or after expressing the milk ○ If condition does not improve within a day, mother should visit nearest hospital	○ Frequent feeding and massaging of the breast using 2 fingers in a circular motion ○ Expose the affected area of the breast to air and sunlight for some time, everyday ○ Wear loose cloths ○ Avoid medicated lotions and ointments

- **Blocked duct and mastitis:** If milk is not removed from the engorged breast, mastitis may develop and an abscess may form, blocking the ducts storing milk. Such mothers should immediately be referred to the health centre.
- **Sore nipples and hardness in breast**: Nipples of breastfeeding mothers can become sore or cracked. Breasts can also become swollen, hard and tender when a child is not properly and adequately breastfed. These problems may result from improper attachment of the infant to the breast.
  - Regular expressing of breast milk helps in drawing out stored milk in the breast over a period of time and address all the above breast conditions. The method of expressing milk has been discussed in the **session 7.4.**

Summarize key points

- The adequacy of milk flow by the mother can be checked by enquiring about the frequency of feeding and the urine output of the child.
- A well-fed child is fed on demand, including at night, appears relaxed and urinates at least about 6-8 times per day.
- Common breast conditions like engorgement, mastitis, sore nipples should be immediately shared with the health workers and addressed appropriately.

Session 7.5: Exclusive Breastfeeding:

Items required Presentation, flip-chart, bold markers

ACTIVITY 5.1: UNDERSTANDING THE NEED FOR EXCLUSIVE BREASTFEEDING

Method: Presentation and discussion

- ✓ **Ask the participants: What do you understand by the term 'exclusive' breastfeeding? Till what age should a child be exclusively fed?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**

- A child should be exclusively breastfed for the first six months of life.
- Exclusive breastfeeding means giving only breast milk to a child. It implies that no pre-lacteal fluid, **NOT EVEN WATER** is fed to a child.
- The child can take medicines, ORS or vitamins, as advised by the doctor.
- Exclusive breastfeeding gives an infant the best chance to grow and stay healthy.

It promotes production of more milk:

Giving other food or fluids reduces the amount of breast milk the child takes and, as a result, the amount of breast milk the mother produces.

It decreases the transmission of germs from the environment:

- Exclusive breastfeeding is very important for prevention of infection and improved survival, growth and development.
- An exclusively breastfed baby has less chance of suffering from diarrhoea.
- No infant should be bottle-fed. Bottles are normally unclean, often not kept covered and get infected by dust or flies. This may lead to infections, especially diarrhoea.

It provides sufficient water to the baby:

- Exclusively breast-fed baby receives sufficient water from breast milk itself, even during summers.
- Feeding water can cause infections, is the water is unclean.
- Feeding water to a child along with breastfeeding results in early satiety and in reduction of appetite for breast milk.

The Infant Milk Substitute (IMS), feeding bottles and infant

The purpose of the IMS Act is to promote breast-feeding of new-born children and infants. This act states that no person can advertise, promote or mislead people to believe that infant food, infant milk substitutes, etc. are an acceptable replacement of mother's milk.

The key highlights of this Act are-

- Prohibits all persons from any kind of promotion of infant milk substitutes, infant foods or feeding bottles
- Prohibits the advertisement of infant milk substitutes and feeding bottles so that no impression is given that feeding of these products are equivalent or better than breastmilk.
- The Act also prescribes that all labels of IMS /Infant food, must say in English and local languages that breastfeeding is the best.

Session 7.6: Preventing undernutrition among children 0-6 months

Items required: Presentation, flip-chart, bold markers, growth charts,

ACTIVITY 6: GROWTH MONITORING OF CHILDREN 0-6 MONTHS

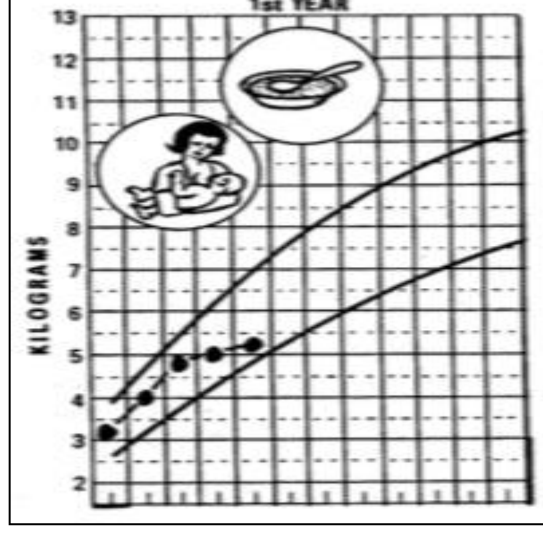
Method: Presentation, discussion, group exercise

✓ **Present the figure to the trainees, and explain them:**

This is the growth chart of a five month old boy Suraj. How can you interpret his growth chart? What information would you like to have to analyse the situation?

✓ **Discuss the points that the trainees come up with**

✓ **Add the missing points while explaining the following points using presentation**



- Suraj grew well for the first three months, but has grown at a slower pace in last 2 months. Considering the fact this a period of exclusive breastfeeding, the child should have growth at similar rate as in the first few months
- Showing it to the mother and caregiver, you may want to know-
    - Is Suraj being exclusively breastfeed? Or if he is given top milk or even Water?
    - If he had any symptoms of illness?
    - How many times a day is he fed?
    - His general feeding behaviour

From the responses, you may learn the following facts that could have contributed to slow growth of Suraj-

- The child is not exclusively breastfed; the mother may be giving water/ top milk
- The child is not being fed at night or the frequency of breastfeeding has been reduced in past couple of months

- Suraj had an infection which reduced his appetite and was not treated in time (in this case he may or may not be exclusively breastfed)
- Hygiene and sanitation is not practices at home

- Based on the responses from mother or caregiver, they should be counselled on the ways to address the issues and improve the feeding of the child. The key messages in the case above, can be-
  - Exclusive breastfeeding, not even Water
  - Frequency of feeding; feeding at night as well
  - Management & prevention of Diarrheal
  - Hygiene and sanitation
  - Reiterate the types of food that can be given.

Why Immunize the child?

- Immunization protects against diseases by inducing immunity and also reduces suffering, disability and death. In absence of these diseases, a child does not have a loss of appetite and continues to eat well and grow well.
- Routine immunization (RI) refers to the given set of vaccines administered under the NRHM. The RI schedule is presented in Table 7.1
- All immunization should be completed in the first year of the child's life

Table 7.1: Routine Immunization Schedule:

Immunization	Birth	1½ months	2 ½ months	3 ½ months	9 months	16-24 months
BCG	1 injection					
OPV	1st dose*	2nd dose	3rd dose	4th dose		Booster
Hepatitis B-0	1 injection*					
DPT		1 injection	1 injection	1 injection		Booster
Hepatitis B-1		1 injection				
Hepatitis B-2			1 injection			
Hepatitis B-3				1 injection		
Measles					1 injection	
Vitamin A					Dose 1	

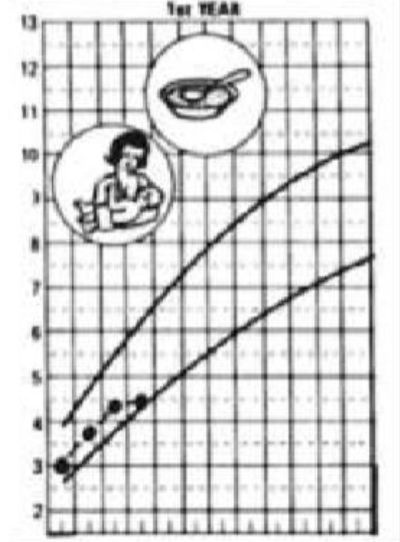
** For institutional delivery*

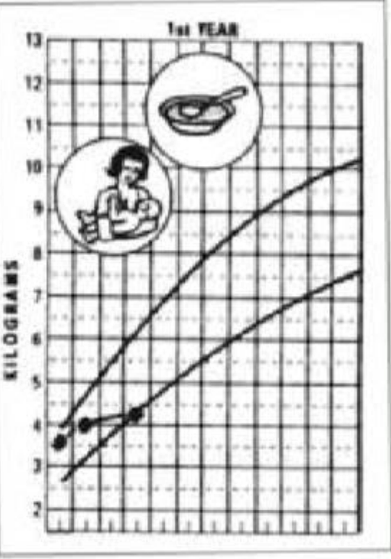
Tracking the weight

- Weigh the child regularly starting immediately after birth. The initial few months and the first year is extremely critical from the point of view of child survival.
- Convince the mother/caregivers about the 'need' to weigh the baby on a regular basis. Carry out the weighing exercise in front of the mother/caregivers and plot the weight on the child's individual Growth chart. Explain to the family what it means and how, by plotting the weight every month, they can actually follow their child's growth.
- Interpret the growth line/curve to see how is the child progressing in terms of -
  - Weight gain during the last month
  - Trend in weight gain over the last few months
- The Growth curve may give crucial information on the pattern of the child's growth. Based on this, talk to the mother/caregiver about the actual feeding practices, which mainly contribute to the pattern on growth chart.

'Learning by doing' exercise # 4

- Divide the participants into 4-5 groups
- Present the two graphs…. &…. to the participants.
- Ask them to interpret the graphs by addressing the following:
  - Interpret the Growth curve
  - List of questions that you would like to ask the mother/caregiver?
  - What can be the possible reasons for such a curve?
- Ask each group to assign one group member to present the findings





Session 7.7: Feeding During Illness

Items required: Presentation, flip-chart, bold markers

ACTIVITY 8: UNDERSTANDING HOW TO FEED DURING ILLNESS

Method: Presentation and discussion

✓ **Give this situation to participants:**

A mother comes to you saying that her 4 month old child is sick. He is refusing to feed whenever she tries to feed him. What advice are you going to give her?

✓ **Write the responses on the flip-chart**

✓ **Add the missing points while explaining the following points using presentation**

- The common signs that tell you that a child may be sick are-
  - The child does not want to suckle

  - The child does not get up to feed every 2-4 hours
  - Does not apply force to suckle
- During infections, the child needs more energy and nutrients to fight the infection. The goal in feeding a child during and after illness is to help him to return to the growth he had before he was ill.

- The child may not feel hungry due to illness. It is important that the mother remains patient and encourages the child to take feeds, giving small amounts frequently.
- The child's appetite usually increases after the illness so it is important to continue to give extra attention to feeding after the illness.
- If the child is too sick and is unable to suckle for a long time, expressed milk can be fed by cup or glass after the baby has stopped suckling at the breast. This will ensure the baby gets enough nutrients. Totally avoid using bottle to feed the baby as it may increase the risk of the child catching infection due to poor hygiene

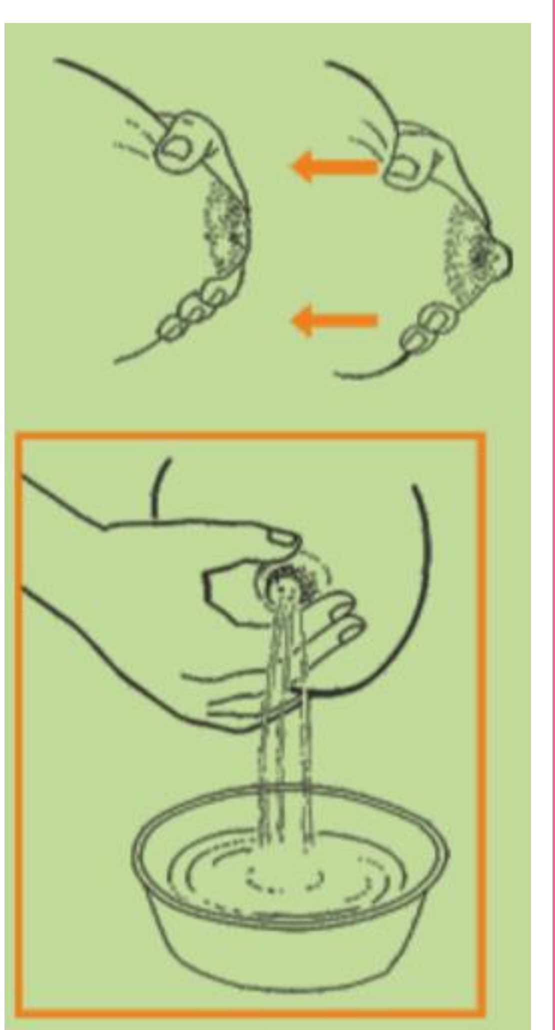
✓ **Explain to the trainees how to express milk**

- Expressing breast milk is useful and important in a number of situations, enabling mothers to initiate or to continue breastfeeding, as discussed in the previous sessions
- All mothers should learn how to express their milk, so that they know what to do if the need arises.
- Breast milk can be stored for about 8 hours at room temperature or up to 24 hours in a refrigerator.
- Hand expression is the most useful way to express milk. It needs no appliance, so a woman can do it anywhere, at any time.

- Wash hands thoroughly
- Sit or stand comfortably, hold the container near the breast.
- Put the thumb on the breast ABOVE the nipple and areola, and the first finger on the breast BELOW the nipple and areola, opposite the thumb.
- Press the thumb and first finger slightly inwards towards the chest wall (fig. a).
- Press the breast behind the nipple and areola between the fingers and thumb (fig. b).

- Press, release, press, release. This should not hurt; if it hurts, the technique is wrong.
    - Press the areola in the same way from the SIDES, to make sure that milk is expressed from all segments of the breast (fig (c)).
- Avoid rubbing or sliding fingers along the skin. Avoid squeezing the nipple itself. Pressing or pulling the nipple cannot express the milk. It is the same as the baby sucking only the nipple.

- Express one breast for at least 3-5 minutes until the flow slows; then express the other side; and then repeat both sides. The mother can use either hand for either breast, or change when they tire.



✓ **Reiterate the learning on expressing milk by showing the AV to trainees [Reference AV#..]**

Summarize key points

- Child should be fully immunized within the first year of birth
- Child should be periodically weighed, the overall situation assessed and analysed to counsel the mother/ caregiver regarding appropriate care practices
- The sick child needs more energy and nutrients to fight infections. Mother should be patient and feed small amounts frequently
- Child's appetite increases after illness, therefore, the child should be fed more frequently and increased quantity.
- If the child is too sick to suckle milk, mother can feed him/her expressed milk through a cup.

Session 7.8: Nutritional care during lactation

Items required Presentation, flip-chart, bold markers

ACTIVITY 8: DIET DURING LACTATION

Method: Presentation and discussion

- ✓ **Ask the participants: What should the diet of lactating mother look like?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**

- Pregnant mothers after delivery should be allowed to eat normal family food in adequate quantity and given plenty of water to drink.
- Adequate nutrition of mother during lactation is of vital importance since in the first few months of life, an infant derives the nutrients required only from mother's milk.
- A well-nourished mother secretes about 850 ml milk/day or about 5 glasses of milk/ day. A mother therefore needs nutrients to be able to produce adequate milk, and at the same time, can maintain her own health and nutritional status.

- ✓ **Explain to the mother that she should take diet that consists of the following-**

- Adequate cereals, pulses, vegetables and milk/milk products.
- Regular use of ICDS food supplement supplied to lactating women every week. The food items provided are the same as those for pregnant women. The food supplement should be consumed by the mother and not shared with the entire family. It is a good idea to divide the weekly ration into 7 portions for use every day.

- Regular consumption of foods rich in vitamin A such as dark green and yellow coloured fruits and vegetables.
- Increase the intake of fluids (water, milk, tea, etc.) for adequate milk production. Every day 7-8 glasses of water should be consumed.
- Daily consumption of only iodized salt with the recommended minimum 15ppm iodine.
- Daily consumption of IFA tablets. In case, IFA tablets are not supplied free of cost by the health department, a mother should be encouraged to buy and consume IFA tablets daily.

Explain to the mother that there is no truth in the food related taboos listed below, and that she should not follow them-

- Fresh fruits, vegetables and legumes can be given to the mother after delivery.
- No one special food or diet is required to provide adequate quantity or quality of breast milk. Breast milk production is not affected by maternal diet.
- No foods are forbidden during lactation
- Breastfeeding mothers have higher needs for food. Mothers should be encouraged to eat more food to maintain their own health.

Summarize key points

- Immediately after delivery, mothers should be allowed to eat normal family food and given plenty of water
- Diet of a lactating mother should be nutritious comprising of all food groups, iodized salt and iron and vitamin A rich foods
- No food is forbidden during lactation
- Lactating mothers have higher needs for food to maintain own health, and produce adequate milk without feeling tired and sick.

Session 7.9: Family planning and spacing

✓ **Ask the participants: What is the importance of planning and spacing the family?**

✓ **Write the responses on the flip-chart**

✓ **Add the missing points while explaining the following points using presentation**

The mother can become pregnant again after initial 3-4 months post-delivery. It is important for the mother to space two children for at least 3 years.

- The mother has to recover from the first pregnancy, gain enough strength and weight by consuming good nutritious food, so that the next child is healthy.
- It is recommended to breastfeed the child till 2 years of age. If the mother gets pregnant again before the first child is less than 2 years, there are chances that the mother stops breastfeeding the child. In this case the child will be deprived of his right to mother's milk, and from his right to good health.

There are many disadvantages for a couple with too many children-

- The mother becomes weak through frequent pregnancies (her body has not built enough strength and nutritional reserve after the previous pregnancy), so there is more risk of her having weak, LBW babies.
- The first child does not get good care if the next one is born too soon after.
- The mother has less time and money to care for all her children.
- It is more expensive to feed, educate and clothe a large family.

Common myths & misconceptions among mothers of children 0-6 months

'My breasts are too small to produce enough milk'-It is the fat and other tissue which gives the breast its shape, and which makes most of the difference between large and small breasts. Small breasts and large breasts both contain about the same amount of gland tissue, so they can both make plenty of milk.

Milk in the initial few days is so scant, it wont be enough for the baby'- The volume of an infant's stomach is perfectly matched to the amount of colostrum produced by the mother. The picture shows that the volume of a newborn's stomach is approximately 10 times smaller than that of a one-year-old child. The newborn does not need large quantities of milk in the first few days. Colostrum is sufficient.

I feed the baby when he/she cries, I then know that he's hungry'- Crying is a rather late sign of hunger. The mother should also watch out for some early signs indicating that the baby wants to breastfeed.

- Restlessness
- Opening mouth and turning head from side to side

Sucking on fingers or fists

Stomach capacity of the newborn and a 1-year-old child

Newborn stomach capacity

1-year old stomach capacity

10 X bigger

Session 7.10: Hygiene and Sanitation Practices

ACTIVITY 6: UNDERSTANDING THE OPTIMUM HYGIENE AND SANITATION PRACTICES

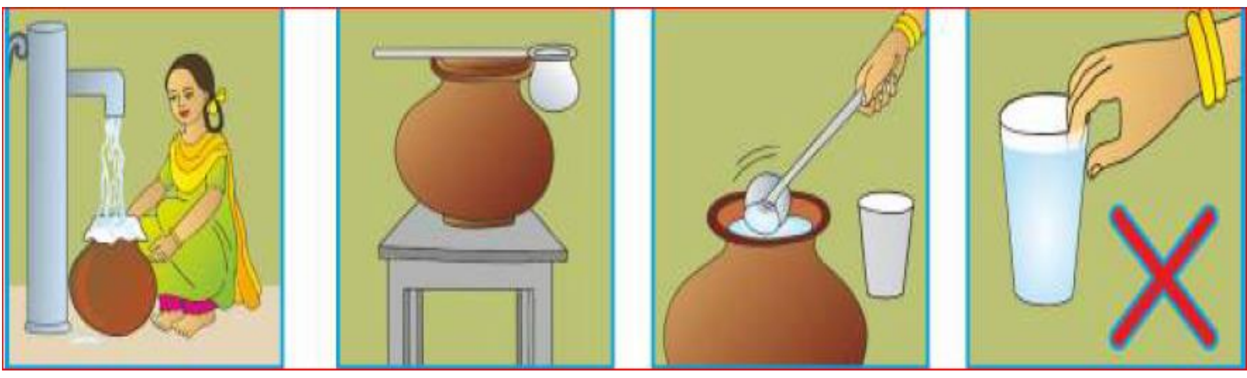
Method: Presentation, and discussion

- ✓ **Ask the trainees: In the situation above, what could have been the possible reasons for Aarti's illness?**
- ✓ **Brainstorm and discuss. One of the reasons that might come up shall be role of Hygiene and Sanitation. Take that as a reference and build the session from there.**
- A child who has completed 6 months of age starts crawling and putting things lying around, in its mouth. Moreover a child's food may be prepared and fed in unhygienic conditions. Such situations increase a child's exposure to infection resulting in illness, leading to loss of appetite, poor intake of food and loss of nutrients. Illness thus contributes to undernutrition and sets up a cycle of undernutrition and infection.
- Along with appropriate feeding practices, it is extremely important to practice hygiene and sanitation in order to prevent infection and undernutrition.

- ✓ **Let's discuss different components of good hygiene and sanitation practices:**

Food Hygiene: Hygienic practices are essential for ensuring food safety or safety from germs and hence from infections. Food safety measures need to be taken during each of the following steps- food preparation for cooking, cooking process, food storage and child or family feeding. Tell mother/caregiver to observe following practices-

- **Use clean and safe water**:
  - Get water for drinking or for washing uncooked foods from a safe source, such as piped water, tube-wells and hand pumps
  - If no safe source is available, filter using water filter or boil the water (rolling boil for 7 to 10 minute) or use chlorine tablets before drinking or using the water. These tablets are readily available at the village with the ASHA.
  - Collect water in clean vessel; the inside of the vessel thoroughly cleaned before storing water.
  - Wash your hands before collecting water.
  - Stored drinking water should be covered with a lid, keep it a little above the ground level, away from the reach of pets and children.
  - Never dip fingers into the water or take water out using a glass. A long handled ladle should be used to take water out of the vessel.



- **Store food safely:**
  - Buy fresh foods, such as meat or fish, on the same day you will eat them.
  - Cover foods to protect them from insects, pests and dust.
  - Store fresh food (especially food from animals) in a cool place (a refrigerator if available).
  - Always keep uncooked food being prepared for cooking (example cut vegetables, soaked dals) or cooked food covered with a lid to protect it from dust, flies, and insects.
  - Keep dry foods such as flours and legumes in a dry, cool place where they are protected from insects, rats and mice, and other pests.
  - Do not store cooked food for long. It should be fed to a child within two hours of cooking as germs start growing in the leftover food. Consumption of food, which is not fresh and clean, can cause diarrhoea, vomiting, typhoid, jaundice etc.
  - Always store food covered and reheat them thoroughly until hot and steaming (bring liquid food to a rolling boil).

- **Prepare food in a clean and safe way**
  - Wash hands before cooking or before handling food.
  - Ensure utensils, used for cooking food or feeding are thoroughly cleaned.
  - Keep food preparation surfaces clean.
  - Use clean, carefully washed dishes and utensils to store, serve and eat food.
  - Thoroughly wash all fruits and vegetables (especially green leafy vegetables) with clean water before cutting/chopping and cooking.

- Prevent raw meat, off al, poultry and fish from touching other foods. These foods often contain dangerous germs and worms which can easily wander to other foods.
- Cook meat, off al, poultry and fish well. Meat should have no red juices. Hard-boil eggs.
- Do not eat raw or cracked eggs because they can contain dangerous germs (called salmonella) that cause food poisoning.
- Boil milk unless it is from a safe source. Soured and fermented milks may be safer than fresh milk.
- Do not eat or use mouldy foods. They can make you very ill.
- Cover any wounds on hands before preparing food to avoid contaminating it.
- Do not spit near food or water.

Personal Hygiene:

Along with food hygiene, it is important that the mother practices good personal hygiene, both for herself as well as for her child, to prevent infections. Inform her-

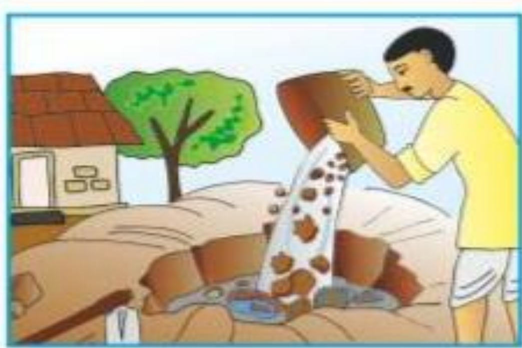
- Wash hands with soap and water, using 7 steps of handwashing, as discussed in previous sections.
- The mother/caregiver should wash hands-
  - Before cooking and before feeding the baby
  - Before eating or handling food
  - After defecation, and after cleaning the baby post defecation,
  - After touching the animals, after disposing human and animal excreta.

- Frequently wash baby's hands with soap and water
- Both mother and child should wear clean, washed clothes. Wash clothes frequently, especially in summers. Dry wet clothes in sunny open air.
- Cut fingernails and toenails frequently and keep them clean.
- Mother should ensure that she and the child takes bath every day

Environmental Sanitation: Poor sanitation results in high rate of infection since it increases the chances of flies carrying germs and spreading infection. Frequent illness adversely affects the growth of a child.

Poor sanitation is an important contributor of stunting among children. The Government of India, under the Swachh Bharat Abhiyaan, also stresses on keeping the environment clean and provides financial and technical support.

- Keep your house and yard clean to stop the spread of germs that carry illness
- Dispose of all faeces safely:
    - Use a toilet or latrine and keep it clean and free of flies.
    - Teach small children to use a potty.
    - Ensure immediate disposal of a child/infant's excreta using an appropriate method such as flushing excreta using latrine facility or putting excreta in a dug pit and covering the pit with soil.
    - If it is not possible to use a toilet or latrine, the faeces should be buried immediately.
- Everyone should always defecate well away from houses, paths, water sources and places where children play.
- Keep the surrounding area of the house free from animal faeces and other rubbish. Put rubbish in a covered bin, bury it, compost it or burn it, so it does not attract flies and other pests
- We should keep animal faeces away from the house, paths, wells, streams and children's play areas



✓ **Ask the trainees: Which according to you is the most commonly occurring disease as a result of poor hygiene and sanitation?**

✓ **Brainstorm and discuss, while informing the trainees:**

- The most common disease resulting from unsafe drinking water, infected food or unwashed hands is Diarrhoea i.e. frequent passing of watery stools.
- Diarrhoea is also one of the leading causes of child malnutrition and may lead to severe malnutrition or even death. This is discussed in detail in the next session.

Summarize key points

- A child who is ill, needs extra nutrients and thus food and drinks, both during and after illness to fight infection and for recovery respectively.
- A mother should continue breastfeeding the sick child, more frequently than before the illness.
- Along with appropriate feeding practices, it is extremely important to practice hygiene (personal and food) and sanitation in order to prevent infection and undernutrition.

ACTIVITY 7: UNDERSTANDING PREVENTION AND MANAGEMENT OF DIARRHOEA

Method: Presentation, demonstration and discussion

- Diarrhoea is passing of watery stools, many times during a day. It results in loss of water and essential nutrients from the body, thus contributing to undernutrition in children.

✓ **Refer to the figure on vicious cycle of infection and undernutrition, and explain:**

- As discussed in previous sections, when a child suffers from acute diarrhoea, he/she becomes undernourished due to loss in nutrients.

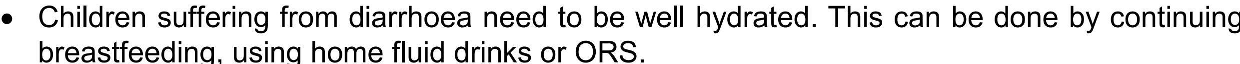
- Such children have poor immunity and are more prone to suffer from diarrhoea. Thus a cycle of diarrhoea and under nutrition sets in and such children if not managed timely and appropriately are at risk of becoming severely undernourished and dying

✓ **Management of Diarrhoea includes the following 3 components:**

- Rehydration through Oral Rehydration Solution (ORS) and home fluids
- Zinc supplementation
- Appropriate feeding

✓ **1. Rehydration through Oral Rehydration Solution (ORS) and home fluids:**

- Feeding of a child during illness and post-illness is very important. The prevalent practice of not feeding a child during illness is absolutely incorrect.



- Children suffering from diarrhoea need to be well hydrated. This can be done by continuing breastfeeding, using home fluid drinks or ORS.
- The home fluids include- lemon water with salt and sugar, buttermilk, rice water, very thin dal, etc.
- The ORS packets are available in sealed packets at AWC and Health Centres. As the name suggests, this drink helps in rehydrating the child following frequent episodes of thin watery stools.

Demonstrate to the trainees the step-wise correct method of preparing ORS

- **Step 0:** Take a clean utensil and spoon, and a packet of WHO-ORS powder
- **Step 1:** Take one litre of clean safe drinking water.
- **Step 2:** Boil this water (for 7-10 minutes) and then allow it to cool.
- **Step 3:** Empty the entire packet of ORS powder in this water and stir it until completely dissolved
  - It is very important to dissolve the ORS in the exact and recommended amount of water, i.e. one packet in 1 litre of water.
  - This solution can be used within 24 hrs. If all of the solution is not consumed within 24 hours, it should be thrown away and a fresh lot should be prepared.
  - This solution should be given to a child in small amounts till diarrhea stops.

✓ 2. Zinc supplementation:

Along with ORS, the management of diarrhoea also includes Zinc supplementation for 14 days.

- The dose of zinc tablet is 10 mg for children aged 2-6 months and 20 mg for children > 6 months once a day during diarrhoea for 14 days.
- Zinc tablet should be dissolved either in one-teaspoon water or ORS or breast milk and then administered to a child. No other liquid should be used.
- Zinc tablets are available with ANM, at Primary Health Centre (PHC) and Community Health Centre (CHC).

✓ 3. Appropriate feeding:

During Diarrhoea: Continuing appropriate feeding during diarrhoea is very important. Feed small amounts of food that a child can be encouraged to eat. Mothers /caregivers could prepare and feed specially prepared mashed plain khichri, dal-rice mixture, and liquid consistency soup prepared from mashed food. Frequent breastfeeding should be continued.

After Diarrhoea: When the diarrhoea episode is over, a child over 6 months should be regularly fed semi-solid food in addition to breast milk. This is essential to make up for the nutrients that were lost during diarrhoea. Caregiver must make extra efforts to feed additional food during this period of recovery otherwise a child can become undernourished. A child with diarrhoea usually has less appetite and therefore feeding a child may be difficult. It is advisable to start feeding the items a child likes the most.

A child needs to be immediately referred to PHCs (to ANM) in case of the following conditions:

- If diarrhoea doesn't stop in spite of adequate fluids and food within 2-3 days.
- If a child cannot drink or eat normally and vomits frequently, has fever, blood in stool or becomes dehydrated (sunken eyes, extremely thirsty and has no tears when he cries)

How can one prevent Diarrhoea?

- Wash hands with soap after defecation, before cooking and before feeding.
- Safe disposal and washing of hands after disposal of child excreta.
- Keep house and surroundings clean.
- Use safe drinking water. If possible add chlorine tablet to the water or boil the water before drinking. Cover drinking water.
- Use proper hygiene practices for preparing, storing and eating foods.
- Eat freshly cooked food. Do not buy and eat cut fruits.
- Keep utensils, cooking area clean. Do not allow flies to breed. Keep utensils covered.
- Use latrines. In case of open defecation, cover the fecal matter with mud or sand.
- Maintain surroundings of hand pumps to be clean and free of dirt or polluted water.
- Follow immunization schedule

Session 7.12: Developmental Milestones

Child development milestone is defined under four major domains, which are

- Motor or Physical Development
- Cognitive Development
- Communication or Language Domain
- Social and Emotional Development

Each domain of development is marked with certain age related indicators or milestones that a child at that particular age is supposed to acquire. Although each milestone has an age level, the actual age when a normally developing child reaches that milestone can vary. A significant delay in achieving a particular milestone can certainly signify developmental delay which requires proper screening and intervention. For example: One of the first skills a healthy baby develops is the ability to lift the head and control its movement.

Head control is needed before a child can learn to roll, sit, or crawl. Normally, a new-born child can lift or hold her head up for a moment, and he/she develops fairly good head control in the first months of life. Children with developmental delay are often slow to develop head control. Thus age related milestones do help caregivers and practitioners in mapping the progress of the development of children. Following is the developmental milestones for birth to six months children.

Table 7.1: Age appropriate development milestone

Domain	Milestone
Motor or Physical Development	Shows alertness during waking periods; responds by turning/looking towards sounds and touch; explores objects with hands and mouth; moves arms/ legs; develops control over head movement.
0 - 3 months Fine Motor: Grasps fingers; Holds small objects 0 - 3 months Gross Motor: Raises the head; Moves arms & legs	3 - 6 months Fine Motor: Grasps objects in both hands; Puts objects in mouth 3 - 6 months Gross Motor: Lifts head and trunk; Rolls over
Cognitive Development	Focuses eyes on near persons or objects; responds to familiar sounds; shifts eyes from one to another (objects/persons); notices plants, animals and other people in the environment with the help of an adult.

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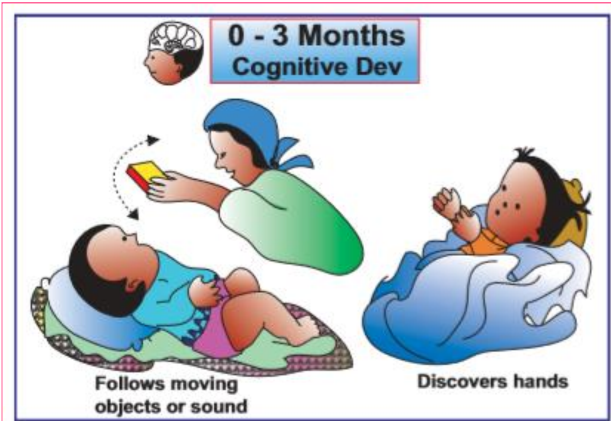
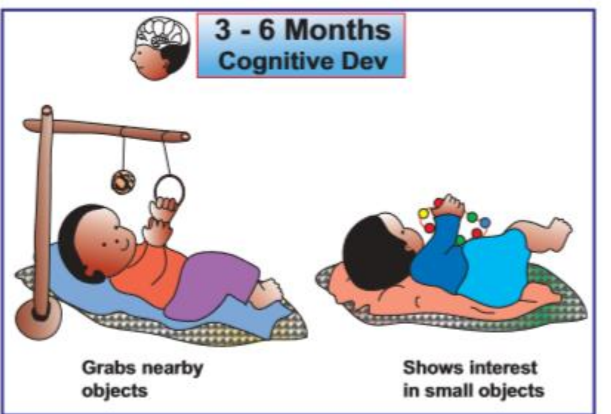
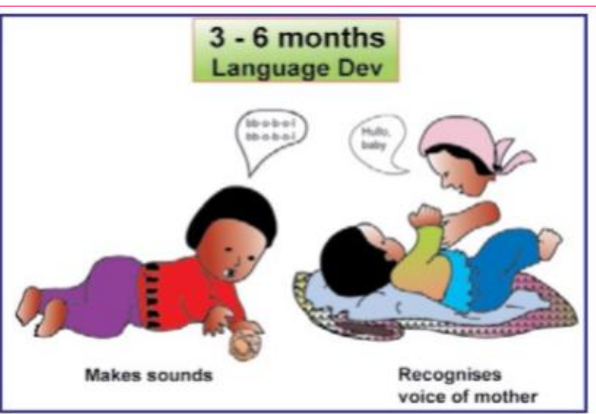
<tr><td></td><td></td></tr>
<tr><td>Communication or Language Development</td><td>Smiles reflexively when someone pays attention; Recognizes the voice of familiar people and turns towards the speakers; Makes sounds to let others know that s/he is experiencing pain or pleasure.</td></tr>
<tr><td> </td><td></td></tr>
<tr><td>Social and Emotional Development</td><td>Smiles back at caregiver; Makes eye contact while breast feeding; Cries and calms when picked up</td></tr>
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Session 7.13: Danger Signs for Child from Birth to Six Months

General

- Cannot be woken or is responding less than usual to what is going on around.
- Has glazed eyes and is not focusing on anything.
- Seems more floppy, drowsy or less alert than usual.
- Has a convulsion or fit.
- Has an unusual cry (high pitched, weak or continuous) for one hour or more.
- Has severe abdominal pain.
- Has a bulge in the groin that gets bigger with crying.

Temperature

- Feels too cold or hot (temperature below 35°C or above 38.5°C).

Skin colour and circulation

- Skin is much paler than usual or suddenly goes very white.
- Nails are blue, or big toe is completely white or mottled or colour does not return to the toe within three seconds of a squeeze.
- Blue colour develops around the mouth.
- A rash develops with reddish-purple spots or bruises.

Breathing

- Struggles to breathe or stops breathing.
- Breathes more quickly than normal or grunts when breathing out (measure breath per minute, set a timer for 30 seconds and **count** the number of times your **child's** chest rises. Double that number to get his **respiratory** rate. Normal child below 1 year should breathe 30-60 per minute).
- Wheezes when breathing out

Vomiting and diarrhoea

- Has vomited up at least half of their feed (food or milk) after each of the last three feeds.
- Vomit is green.
- Has both vomiting and diarrhoea.
- Has drunk less fluid and has fewer wet nappies or visits to the toilet than usual.
- Has blood in their poo.

Summarize key points

- Diarrhoea results in loss of water and essential nutrients from the body, thus contributing to undernutrition in children.
- Children suffering from diarrhoea need to be well hydrated. This can be done by continuing breastfeeding, using home fluid drinks or ORS.
- The management of diarrhoea also includes Zinc supplementation for 14 days, along with ORS.

SECTION 8: CARE OF CHILDREN 6-12 MONTHS

DURATION 5 hours

EXPECTED OUTCOME

All mothers of children from 6-12 months are identified, registered and counselled on optimal child feeding, hygiene and health care and are supported to seek services from government programmes- health and ICDS.

LEARNING OBJECTIVE

By the end of the session, the trainees shall be-

- Aware of the appropriate complementary feeding practices
- Aware of the nutrition gap beyond first 6 months of child's life
- Aware of the critical components of complementary feeding- quantity, consistency, variety, etc.
- Aware of Diarrheal management and prevention
- Aware of importance of Hygiene and Sanitary practices

KEY SESSIONS

Session	Session topic	Duration
1	Case study and Group exercise	1 hour
2	Timely initiation of Complementary Feeding	30 minutes
3	Overcoming the Gap- Energy, Iron and Vitamin A	30 minutes
4	Appropriate Complementary Feeding practices	1 hour
5	Feeding during illness and recovery	30 minutes
6	Hygiene and Sanitation practices	30 minutes
8	Preventing Malnutrition through Growth Monitoring	1 hour

Session 8.1: Case study and Discussion

Items required

Hand-outs of Case study, chart papers, bold markers

ACTIVITY 1: CASE STUDY

Method: Group exercise, presentation and discussion

- Divide the participants in 4-5 groups.
- Provide the handout of case study along with chart paper and bold marker/s to each group
- Ask each group to carefully read the case study

Case study: **Case study:** Sita's son, Shivam, is now 11 months old.

In her village on the Village Health and Nutrition Day, a Healthy Baby competition was organized. The competition was for children between the age group of 0-1 year. In the afternoon, the results for Healthy Baby competition were announced. Sita's son won the third prize! All the winners were asked to share their stories with everyone present. Sita too shared her story-

"This result comes as a pleasant surprise! It was not always that my family and I knew how to take care of our son. We made lot of mistakes in the beginning. I was only 17 years when I conceived. I did not go for check-ups at the health centre, did not eat well, and did not avail government benefits, which made me extremely weak. Shivam was born a LBW baby. We did not know if he needed special care, fed pre-lacteal feed to him and waited for the pandit to suggest an auspicious time for initiating BF. If not for the ASHA and AWW, Shivan's condition may have deteriorated. But they visited us very frequently, convinced my mother-in-law and husband to follow their advice in the best interest of our son. And slowly our perception began to change collectively.

✓ **Ask the trainees to respond to the questions presented below**

- What is Annaprashan? When is it celebrated? Why is it celebrated?
- Why did the AWW advice Sita to feed her child not dal water but a mixture of dal, cereal and vegetables?
- What social factors can you identify in this case study that impacted the outcome positively?
- Why was Shivan catching diarrhoea often, despite Sita following good dietary practices? How can one identify diarrhoea?
- What advice was given to Sita and family regarding hygiene and sanitation? And why?

✓ **Advise each group to select a presenter who would be assigned the task of presenting the responses (on chart paper) to the questions on behalf of the group.**

✓ **Following the presentation by each of the six groups, organize a discussion on the various emerging issues.**

Session 8.2: Timely initiation of Complementary Feeding

ACTIVITY 2: CORRECT TIME OF INITIATING COMPLEMENTARY FEEDING

Method: Presentation and discussion

✓ **Ask the participants: What do you understand by the term Complementary Feeding? What is the correct time to start it?**

✓ **Write the responses on the flip-chart**

✓ **Add the missing points while explaining the following points using presentation**

- A child normally doubles its weight at 6 months (5 months completed) and this weight is tripled by 11 months (10 months completed). This implies that a child who weighs 3 kg at birth should weigh at least 6 kg at 6 months and 9 kg at one year. For such rapid growth, mother's milk

alone is not sufficient after 6 months. A growing infant requires some additional food in addition to mother's breast milk to meet the increased nutritional needs of the rapidly growing child.

- Complementary feeding is feeding semi-solid foods along with continuation of breast milk to a child. The term "complementary feeding" is used to emphasize that this feeding 'complements' breast milk rather than replaces it.
- At the age of six months, child is able to swallow soft mashed food. It is necessary to start complementary feeding in form of semi-solid foods, along with continued breastfeeding after six months of age

- At times, many mothers continue to feed only breast milk or continue with only other forms of milk such as animal milk or formula milk to a child even at the age of 7-8 months. This is not right. Delay or poor complementary feeding practices result in a child being deprived of additional nutrients, which are required for the rapid growth of an infant.

✓ **Ask the participants: Why should breastfeeding be continued after initial 6 months?**

✓ **Write the responses on the flip-chart**

✓ **Add the missing points while explaining the following points using presentation**

- Breast milk provides all the energy and nutrients a baby needs for healthy growth in the first six months.
- From six to 12 months, breastfeeding continues to provide half or more of the child's nutritional needs, and from 12 to 24 months, at least one- third of their nutritional needs. As well as nutrition, breastfeeding continues to provide protection from many illnesses for the child and provides closeness and contact that helps psychological development.
- Women, who want to breastfeed their babies, should be supported and encouraged. Every time you see a mother, try to build her confidence. Praise her for what she and her baby are doing right. Give relevant information, and suggest something appropriate.

✓ **Ask the participants: What will happen if the complementary feeding is started 'too soon' or 'too late'?**

✓ **Write the responses on the flip-chart**

✓ **Add the missing points while explaining the following points using presentation**

- Adding complementary foods too soon may-
  - Results in low intake of nutrients by an infant. This is because food fed earlier than 6 months is often thin such as diluted to milk, watery soups/ dals/ gruel/ porridges.

- Increase the risk of illness/ diarrhoea because the foods introduced may have incorporated unsafe water may not be clean and could cause illness/ diarrhoea.
- Increase the risk of allergic conditions because the baby cannot yet digest and absorb other foods well
- Increase the mother's risk of another pregnancy if breastfeeding is not exclusive.

- Starting complementary foods too late is also a risk because the child:
  - Does not receive extra food required to meet his/her growing needs;
  - Grows and develops at slower rate;
  - Reduces the chance of consuming specific nutrients such as iron, resulting in anaemia from lack of iron

Summarize key points

- Complementary feeding means feeding semi-solid foods to the infant along with continuation of breast milk.
- Complementary feeding should be started once the child completes 6 months, not sooner, not later.
- Adding complementary foods too soon result in low intake of nutrients by the infant, as well as risk of infections/illnesses
- Starting complementary foods too late is also a risk because the child does not receive the extra food required to meet his/her growing needs

Session 8.3: Overcoming NUTRITION Gap- energy, Iron and Vitamin A

ACTIVITY 3: NEED FOR INITIATING TIMELY COMPLEMENTARY FEEDING

Method: Presentation and discussion

✓ **Explain to the trainees**

It is important to understand the need for different nutrients after the initial 6 months, which necessitates the timely initiation of complementary feeding.

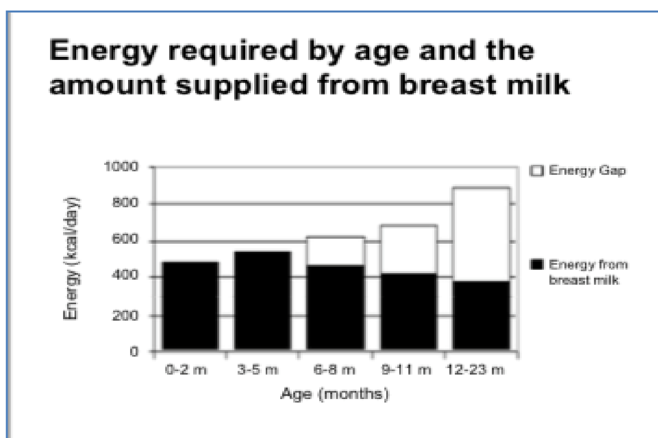
✓ **Present the 3 figures… to the participant's one at a time and ask: What do you see in the graph?**

✓ **Write the responses on the flip-chart**

✓ **Add the missing points while explaining the following points using presentation**

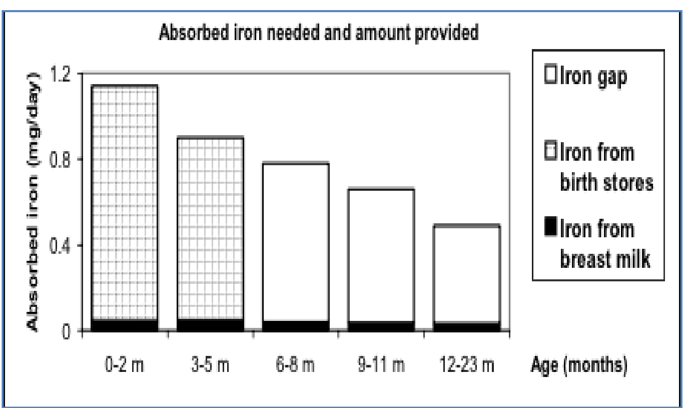
Energy gap:

- After 6 months, there is gradually a decrease in milk secreted by a mother
- Child's requirement for nutrients for the rapidly growing body increases.
- As can be seen in the figure, the energy provided by breast milk is sufficient for the baby till 6 months (indicated by black colour in the graph). After this period, there is a gap between the total energy needs and the energy provided by breast milk (indicated by white colour in the graph).
- The gap increases, as the child gets older, bigger and more active.



Iron gap:

- We have studied the importance of Iron in the previous session. A full term baby is born with good stores of iron to cover the body requirement for the first 6 months. This is indicated by checked area in the graph.
- However, the stores are over by 6 months, and Iron provided by breast milk (indicated by black colour) does not meet the increased requirements for iron in a growing baby. Thus the gap increases, as the child grows older (indicated by white colour).



Vitamin A gap:

- Vitamin A is needed for healthy vision and to help the body fight infections.
- Breast milk supplies a large part of the vitamin A (indicated by black colour) and to a great extent meets the vitamin A required by a baby below 6 months.
- However, as a young child grows, vitamin A requirements increase and breast milk alone is not sufficient. The gap of supply and requirements of vitamin A by a baby increases (indicated by white colour).

Vitamin A needed and amount provided
400
300
200
100
0
Vitamin A (ugRE/day)
Vitamin A from birth stores
Vitamin A gap
Vitamin A from breast milk
0-2 m
3-5 m
6-8 m
9-11 m
12-23 m
Age in months

Thus the gap in nutrients supplied by breast milk beyond initial 6 months needs to be filled by complementing it with other semi-solid foods or complementary foods.

Session 8.4: Appropriate Complementary Feeding Practices

ACTIVITY 4: UNDERSTANDING THE CORRECT COMPLEMENTARY FEEDING PRACTICES

Method: Presentation, demonstration and discussion

✓ **Explain to the trainees**

Let's learn the basics of introducing complementary foods to the baby, in terms of initiating the foods at 6 months, and the subsequent changes that should be brought, as the child grows older.

✓ **Present the table to the trainees and explain**

The following table presents a summary of best practices to be followed for appropriate feeding of semi-solid foods to a child who completes six months of age, till the child is 1 year old.

Table 8.1: Summary of correct complementary feeding practices (as per WHO guidelines)

Parameters	At 6 months	7-8 months	9-12 months
Breastfeeding	Frequent Breastfeeds	Frequent Breastfeeds	Breastfeeds
Texture/ Consistency of feeds	Soft porridge, well mashed fruit, vegetable, etc.	Mashed foods	Finely chopped or mashed; foods that baby can pick up
Frequency of feeding	2 times/day	3-4 times/day	3-4 meals plus 1 snack between meals
Quantity/ amount at each meal	2-3 tablespoonful's	Increasing gradually to ½ bowl (1 bowl= 250ml)	¾ of a bowl (1 bowl= 250ml)
If the child is **not breastfed for any reason-** ▪ Include top milk in the diet, along with one additional meal. ▪ Take extra care to see that the top milk is hygienically prepared, stored and fed to the child. ▪ Avoid bottle-feeding; use Cup instead.			

Based on the summary of correct complementary practices above, the important points to be practiced by a mother/caregiver with respect to the 'types of food' to be given to the child are summarized below for the age group- 6-12 months.

From 6-8 months:

- **At 6 months, when** you are initiating the complementary feeding, ensure food is easily digestible and soft so that the child can swallow it easily. Sieve or mash it to make it easily digestible. Food should not be very thin or watery in consistency since water fills the stomach and decreases satiety.

- After 6 months of age, a child is able to consume very soft and nicely mashed foods containing starch, which are easily digestible. In the beginning, feed the child- mashed dal, rice, khichdi, dalia, kheer, halwa, boiled and mashed potato, mashed vegetables, soft fruits like banana mashed with milk and cooked apple.

- By 7th or 8th month, the child can be introduced boiled and mashed egg, only if culturally acceptable and affordable. Initially give only the yellow part of egg and when a child grows, an entire egg with egg white can be fed to a child. A child can easily digest mashed half boiled eggs (boiled for only 3 minutes for consistency which is easily swallowed by a child).

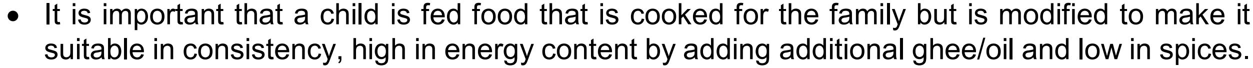
After 9 months:

- A child should be given bread, biscuit, chapatti, carrot etc. to nibble. However, this is for encouraging a child to explore and eat himself/herself. At this age, a child begins to develop teeth and wants to chew and bite things. However, remember, food thus consumed is not enough. A child at this age must be fed appropriate food at least 4-5 times by caregivers

At 9-12 months:

- A child can be fed mashed chapatti/ rice/ bread or biscuit mixed with milk or dal (mashed dal and not dal water). After 9 months of age, a child should be fed the food cooked for the family at least 4-5 times (including 1 snack) per day. ¾ to one katori can be given at one time.

- It is important that a child is fed food that is cooked for the family but is modified to make it suitable in consistency, high in energy content by adding additional ghee/oil and low in spices.



ACTIVITY 4: OTHER CRITICAL COMPONENTS FOR SUCCESSFUL COMPLEMENTARY FEEDING

Method: Presentation, demonstration and discussion

✓ **Explain to the trainees:**

In order to ensure that the complementary feeding is successfully initiated as well as continued, following components are equally important-

Active Feeding: This includes-

- Being loving and attentive to a child, while feeding.
- Responding to the signs of hunger by offering food.
- Using a separate utensil (plate/thali or katori) to feed a child. This will help in knowing the amount of a specific food consumed by a child.
- Allowing the child to eat at his/her own speed. Gently encouraging the child to eat, and never feeding forcefully.

Increased energy content

- ✓ **Ask the trainees: "How can you increase the energy content of the food, without increasing its quantity?**

- ✓ **Brainstorm and fill in the missing information while presenting the following:**

- A child at every meal needs to be fed high-energy food since a child eats only a small quantity of food at one time.
- Energy/calories of food can be significantly increased by-
- Adding a teaspoon of ghee/oil in every katori of feed. This will help in giving more energy for a katori of food. A teaspoon of oil provides energy equal to half chapatti.
- Adding sugar or jaggery to the food

Consistency of food

- ✓ **Keep these items ready for demonstration: 2 bowls, spoons, dal water, thin mashed dal**
- Show two bowls to the trainees. One with the dal water (dal boiled and only the water from top taken), and another with thin, but nicely mashed dal. Ask the trainees, which one is the correct consistency and why?

- ✓ **Brainstorm and fill in the missing information while presenting the following:**
- A child at one sitting eats rather small quantity of food. He/she therefore should not be given watery foods (such as watery vegetable soups or watery dal). This results in increasing only the water content of food and in reducing the energy and other nutrient content for the amount fed. Instead, the mother must give mashed dal/ vegetables.
- The consistency of semi-solid food prepared for feeding a child from 6 months to one year should be such that when placed on a plate, it spreads and does not flow easily.

Use of a variety of food items

- ✓ **Ask the trainees: Why is it important to ensure variety in a child's diet?**

- ✓ **Brainstorm and fill in the missing information while presenting the following:**

- Introduction of variety of food items is essential to ensure a child consumes all necessary nutrients.
- Exposing the child to a variety of food items at an early age is also important to develop his/her taste for different foods and inculcating good eating habits.
- A diverse diet should include various food groups to ensure receiving varied nutrients -
  - Cereals like wheat, bajra, rice, etc. are good sources of energy and protein
  - Legumes or pulses such as dals, beans, peas, lentils as well as nuts and oilseeds (e.g. peanuts), are good sources of protein
  - Yellow/orange vegetables & fruits are very nutritious and contain many vitamins and minerals especially Iron and vitamin C. This includes- carrots, pumpkin, tomatoes etc. and fruits like orange, papaya, mango etc.
  - Green leafy vegetables, like spinach, fenugreek leaves, mustard leaves, etc. are good sources of both Iron and Vitamin A.
  - Milk & milk products- curd, buttermilk, etc. are good sources of calcium and protein.
  - In case a family can afford, a child could be fed well-cooked egg, fish, meat etc. These are extremely good sources of good quality Protein
  - Ghee/ Oil and Sugar/Jaggery are good sources of calories/energy and are added to the child's food to make it energy dense.
  - Only Iodized salt should be used as Iodine helps in physical and mental development
- ✓ **Foods used for feeding should be locally available, culturally acceptable and affordable.**

Introducing new foods:

Following points should be kept in mind while introducing new foods to a child-

- Food items should be introduced one at a time.
- Once a child is comfortable eating a particular food item, only then any other food item should be introduced.
- Offer new foods several times, as children may not like (or accept) new foods in the first few tries.
- Do not feed anything forcefully.
- If a child does not like any particular food, then a mother should:
  - Try to feed such a food after a gap of a few days.
  - Try mixing it with some other food that a child likes and then feed it to the child.
- If a child does not consume a specific food item despite these efforts, then replace it with some other food item that is equally nutritious.

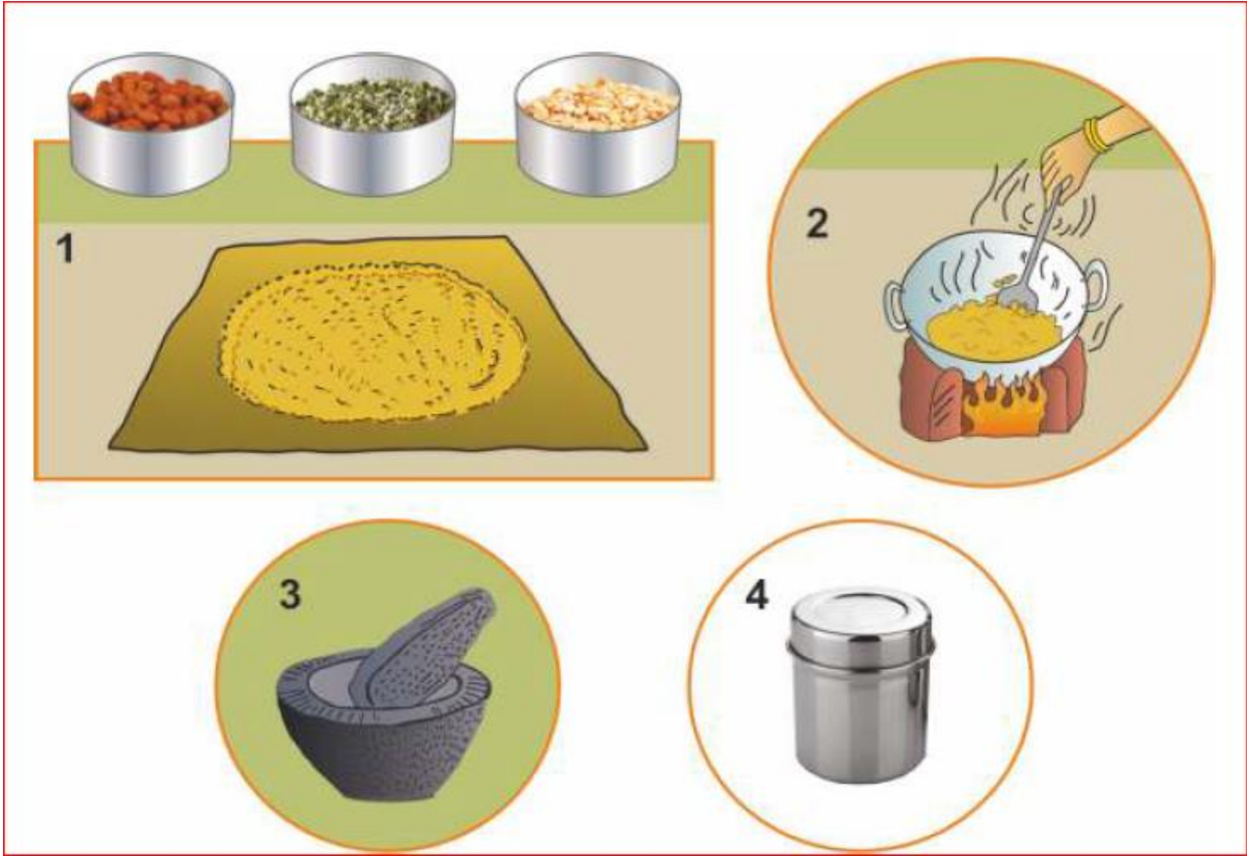
Preparing home-made or local 'Cerelac':

Soaking and germination/sprouting of cereals/pulses improve their quality and makes them easier to digest, rich in Iron and calcium. After germination, the grains can be used to prepare 'pre-mix', and fed to the children.

It is good to explain to the mother how the home-made pre-mix is as good as the commercially available 'cerelac', and way less expensive for the family. It is also a great source of nutrients for the baby, readily at disposal for the mother at home

✓ **Demonstrate to the trainees, how to prepare the 'pre-mix' at home**

- Invite 1-2 volunteers to assist you in the preparation
- Items required: Gas stove, cooking utensils, grinder, bowl and spoon
- Ingredients required
  1. Wheat [3 parts] {You can use the Wheat flour directly}
  2. Green moong whole dal or chana whole dal- soaked, germinated [1 part]: {Ensure you have got these ready beforehand
  3. Groundnuts [1 part]
  4. Hot Milk/ Water
  5. Sugar/ Jaggery



Demonstrate to the trainees, step-wise preparation of pre-mix at home

Step 0: All the ingredients, utensils and the place of cooking should be clean and hygienic. The person who is cooking should wash his/her hands with soap and water

Step 1: Soak the pulse for 4-5 hours

Step 2: Keep the soaked pulses overnight or longer (depending upon the weather) for germination

Step 3: Once germinated, dry the pulse lightly

Step 4: Clean the wheat and oilseed. {if using the wheat flour, use it directly}

Step 5: Dry roast all three (germinated moong dal, groundnuts and wheat/wheat flour) separately and remove the skin, if present (for eg. roasted groundnuts or chana dal)

Step 6: Separately grind each of these three in the grinder

Step 7: Mix all three [This dry mixture can be stored in a container, with lid (this keeps fresh for a month]

Step 8: Take 2 tablespoon of this mixture in a bowl, add warm milk or water and 1-2 tsp. sugar or jaggery. The water/milk should be added to ensure the correct consistency.

✓ **Show the ICDS food supplement (the trainer can locally arrange the food supplement from the AWC) to the trainees and explain:**

- The ICDS food supplement provides one-third of the required amount of energy and protein for the day. Food supplement provided by ICDS often needs to be cooked with milk or water to have a product with soft consistency. ICDS food supplement should be an addition to family food and should not substitute it.

✓ **Present the table to the trainees and explain**

- Based on the correct practices shared above, a sample menu for a child 7-8 months would look like that shared below. This can be used as a tool to showcase how a child's meal can be planned for the entire day, while counselling the mother

Table 8.1: Sample Meal plan for a child 7-8 months:

Time	Meal	Quantity (gradually increasing from 6 to 8 months)	Food group/s included
When child wakes up	Breastfeed		
9.00am	Sweetened Milk + biscuit/bread/chapatti/rice /dalia	1-2 tbsp. to ½ katori	▪ Milk/milk products ▪ Cereal ▪ Sugar
10.30-11.00 am	Breastfeed	½ to 1	
1.30-2.00pm	Mashed Khichdi (with added pumpkin/carrots + GLV) + a tsp of oil/ghee	2-3 tbsp. to ½ katori	▪ Cereal ▪ Pulse/Dal ▪ Orange/red Vegetable ▪ GLV ▪ Ghee/Oil

Time	Meal	Quantity (gradually increasing from 6 to 8 months)	Food group/s included
3.00-3.30pm	Breastfeed		
5.00pm	Very soft Banana, OR Soft Mashed Egg (if affordable and culturally acceptable), OR Soft Mashed potato (+ added ghee)	½ to 1	▪ Egg ▪ Fruit
6.30pm	Breastfeed		
8.30pm	Mashed Khichdi (same as earlier) or Halwa or mashed Roti in Dal (with GLV+ ghee)	2-3 tbsp. to ½ katori	▪ Cereal ▪ Pulse/Dal ▪ Orange/red Vegetable ▪ GLV ▪ Ghee/Oil
At night (+ any other time on demand)	Breastfeed		

Summarize key points

- Breast milk cannot meet the nutrient needs of a growing child beyond the first 6 months of life.
- Introduction of variety of food items is essential to ensure a child consumes all necessary nutrients, and to inculcate good eating habits
- With increasing age, the child's food should be modified in quantity, consistency and introducing variety of foods
- Family foods should be modified to make it suitable for the baby
- Germination improves the quality of nutrients in a cereal or pulse, and makes it easier to digest
- Homemade pre-mix is an excellent source of nutrients for the baby
- Energy/calories of food can be significantly increased, without increasing its quantity, by adding a tsp full of ghee/oil and/or sugar/jaggery

Session 8.5: Feeding During Illness and Recovery

✓ **Present this situation to the trainees:** Pushpa's daughter Aarti, who is 9 months old, is a happy and healthy child. Yesterday the AWW visited her and found that Aarti has fallen sick- she has developed fever and diarrhoea. Worried Pushpa shares, "Aarti is having frequent stools, many times a day. She has also stopped eating. My mother-in-law says I should not force her to eat, in fact should only give breast milk till her condition improves. Feeding her forcefully may worsen her health. I am following her advice"

✓ **Ask the trainees:**

- Do you think Pushpa is following the right practices, in the present situation? Why?
- What should be the AWW's advice to Pushpa and her mother-in-law?

- ✓ **Brainstorm and fill in the missing information while presenting the following:**
- A child who is ill needs nutrients to fight illness/ infection. If a child does not get extra food and drinks during illness, fat and muscle tissue of a child's body is used as fuel or energy by body. This is why a child lose weight, looks thin and stops growing. Undernutrition sets in.
- An ill child needs to be constantly encouraged to drink and eat. Lots of patience is required. A child should be offered small amounts of food at regular intervals. Try feeding a food item that a child likes. Also introduce foods of different varieties.
- If breastfed, continue breastfeeding for a sick child.
- In case of diarrh0ea, continue giving soft foods along with increased amount of fluids like ORS, thin buttermilk, thin dal, etc. Children suffering from diarrhoea are also given dosage of Zinc by health department to hasten complete recovery.
- When a child is recovering from illness, it is important to feed one extra meal (energy dense) to help him/her to meet the additional nutrient requirements for recovering from weight loss caused due to illness.

Session 8.6: Hygiene and Sanitation Practices

Refer section 7.10

Session 8.7: Diarrhoea: Prevention and Management

Refer section 7.11

Session 8.8: Preventing Undernutrition among Children 6-12 Months

ACTIVITY 8: UNDERSTANDING HOW TO PREVENT UNDERNUTRITION AMONG CHILDREN 6-12 MONTHS

Method: Presentation and discussion

- ✓ **Ask the trainees: what is the significance of this period (6-12 months) in preventing undernutrition?**
- ✓ **Brainstorm and fill in missing information while presenting the following details:**

- Period where a child starts complementary feeding (age >6 months), is a vulnerable period when a child can easily suffer from infections and undernutrition due to poor or inadequate feeding.
- Child's weight should be regularly monitored and plotted on the individual growth chart. Weighing a child, plotting his/her weight on the growth chart and looking at the growth curve gives crucial information on the pattern of the child's growth and helps in appropriate counselling.

- Weight and plotting of weight on a graph should be undertaken in the presence of mothers and/or caregivers. The growth line/curve is best to be studied in the presence of caregiver. Following facts should be noted to examine a child's progress:
  - Weight gain during the last one month
  - Trend in weight gain or loss over the last few months
- Based on the trend noted in the growth curve, the mothers should be counselled.
- In case of decline in weight, the community health/nutrition worker should probe to find out the reason for the decrease in weight e.g. illness, cause of illness such as poor hygiene, water or viral infection, feeding practice during and after illness, quantity and frequency of feeding is appropriate or not, addition of extra fat or oil in food practiced or not. Accordingly, the workers are advised to talk and counsel mothers/caregivers on taking the right actions and ensure gain in weight.

'Learning by doing' exercise # 4

- Divide the trainees into 4 groups
- Provide Chanda's growth chart (fig….), chart paper, bold markers to each group
- Ask the trainees to study the chart carefully, brainstorm and answer the following questions-
  - Key 5 points that you can interpret from this chart
  - 5 questions that you would want to ask the mother/caregiver that can help you understand the trend in the graph
  - What would you want to advise the mother/caregiver based on your interpretation of Chanda's growth status?
- Ask each group to select a representative who shall present the answers before everyone

✓ **Discuss the points emerging from all the presentations**

✓ **Add the missing points while presenting the following details:**

- The chart shows the weight record of a child Chanda. She is now nine months old. As per the weight record, Chanda grew well for the first few months, but has not grown at all in the last three months, indicating stagnant growth. . Looking closely, you may see that she grew well during the first six months. This is the time when she was exclusively breastfed. Chanda has not gained weight at all from the time complementary feeding was initiated.
- Showing it to the mother and caregiver, you may want to know-
  - Has Chanda being fed well? Does she have any symptoms of illness?
  - Was she ill with diarrhoea or any other illness? What action was taken?
  - What foods Chanda received and what was the consistency of food being fed?
  - How many times a day Chanda was fed? After 6 months, was the practice of breastfeeding continued or not?
  - How much food did she receive at each feed?
  - What is Chanda's general eating behaviour?
- From the responses, you may learn the following facts that could have contributed to stagnant growth of Chanda-
  - Chanda is not being fed but mostly left to eat by nibbling on biscuits or chapattis.
- Chanda suffered from frequent episodes of diarrhoea
- Mother is not aware of hygienic and sanitation practices nor about how to feed a child and how frequently and what quantity of food to be fed each time or use of different types of food items to enhance diversity
- Based on the responses from mother or caregiver, CNWs should counsel on the actions required. The key messages in the case of Chanda would be-
- Management & prevention of Diarrhoea
- Discuss on immunization schedule and vitamin A. Understand gaps if any.

- Correct frequency, consistency and quantity of feeds
- Emphasize on the various types of food that can be fed to Chanda at her age of 9 months. Also encourage mother to continue with breastfeeding

Common myths and misconceptions during 6-12 months

- **"My baby is not yet ready to start semi-solid foods… she spits out anything I give her to eat!":** This is a common problem when complementary feeding is initiated. This is because a child is used to swallowing only liquid food. Moreover, a child needs to acquire the taste for foods other than breast milk. The mother should be motivated to keep trying for a few days patiently and encourage the child to eat by telling stories or other actions, which interests the child. The child would soon learn to swallow and start liking the taste of semi-solid food.

- "**I think I am feeding my 10 month old a lot. I feed him one full katori twice a day! He has small stomach. I wonder if he can digest so much! I believe this is why he developed loose motions":**A growing child of 10 months requires more quantity of food because of his growing needs, and can easily eat and digest ¾ to 1 katori, 3-4 times a day. As the child is over one year, he would be able to eat 4-5 times a day, including 1-2 snacks along with the meal. The reason for loose motions is not because of feeding but due to other reasons. Diarrhea most commonly occurs due to unhygienic conditions- while preparing, feeding or storing the food, or not washing hands. Another reason is feeding the food that is stored for a long time and is possibly stale and full of germs.

- **"I have stopped giving food to my daughter for last 3-4 days. She has high fever…she is very cranky…she will not be able to digest it. I will restart when her fever is gone.":** When a child falls ill, the child's appetite is reduced. It is same as in case of the adults. When we fall sick, we too loose our appetite. Children need more food when they fall sick, so that they have the strength to fight the infection/illness. The mother should relax and have patience to keep trying to feed the sick child. She should try various preparations, salty and sweet. The child should be fed what he/she likes in small quantities, a number of times in a day. As the fever subsides, the appetite returns.

- **"The food that I give to my 8 month old child is without the spices and made with very little oil/ghee. I do that because such a small child cannot digest the heavy oil/ghee and may develop loose motions":** The children at this age do not face any problem in digesting oil/ghee. In fact, oil and ghee when added to any food, increases its energy without increasing the quantity of the food. It therefore gives the child required strength and energy to grow. A mother must add little ghee/oil (½-1 teaspoon) to the food whenever she feeds her child. Adding ghee and oil will also make the food tasty. This may also encourage the child to eat more.

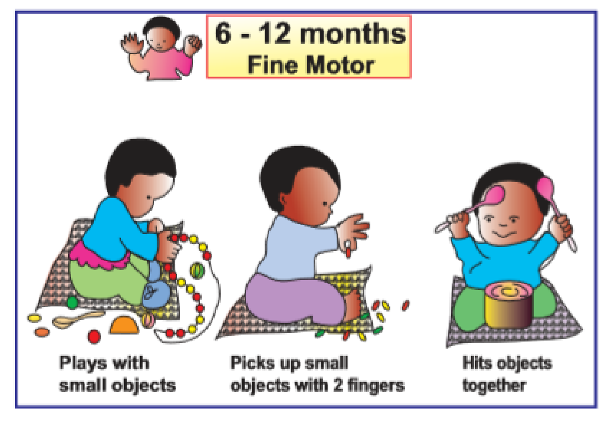
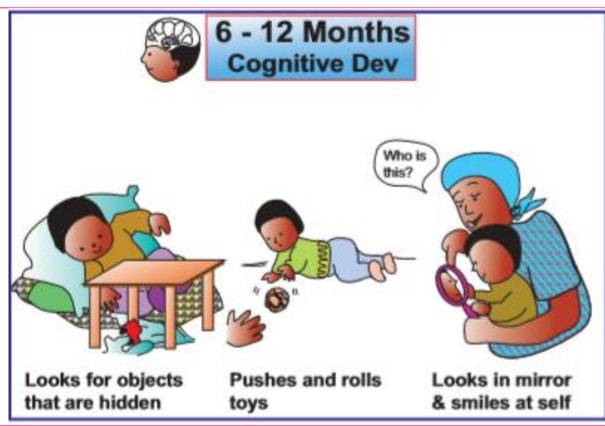
Session 8.9: Developmental Milestones for Six Months to One Year age

Child development milestone is defined under four major domains, which are

- Motor or Physical Development
- Cognitive Development
- Communication or Language Domain
- Social and Emotional Development

Each domain of development is marked with certain age related indicators or milestones that a child at that particular age is supposed to acquire. Although each milestone has an age level, the actual age when a normally developing child reaches that milestone can vary. A significant delay in achieving a particular milestone can certainly signify developmental delay which requires proper screening and intervention.

Table 8.1: Age appropriate development milestone

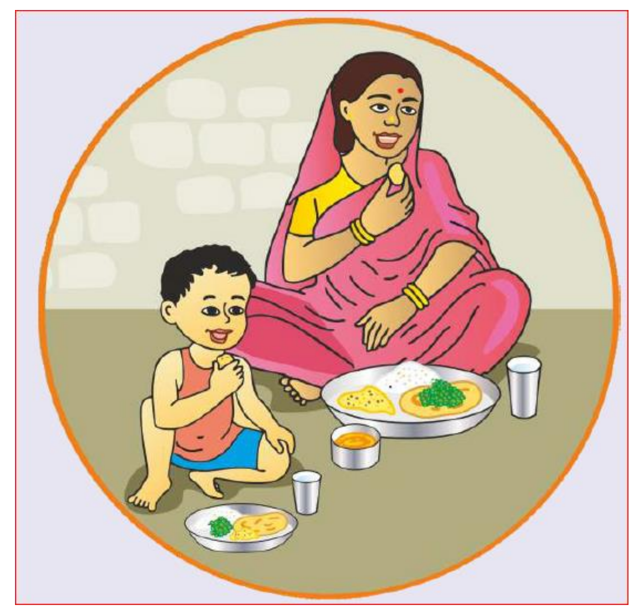
Domain	Milestone
Motor or Physical Development :	Explores and interacts with the environment playfully; explores various ways to move body (e.g. climbing, dancing); tries to 'bite' into hard surfaces with gum; enjoys feeling different textures (e.g. bricks, walls, tile, wood, twigs, water); walks holding furniture.
 	
Cognitive Development: Focuses eyes on far objects or persons; use senses to explore objects and experience their properties (e.g., colour, texture, weight, taste); recognizes familiar people; looks in appropriate direction for toys that have been dropped or partially covered by a blanket.	

Communication or Language Development: Pays attention to familiar voices; Responds appropriately to simple requests such as "wave bye-bye" ; Explores book with senses (sight, touch, smell); Imitates various sounds made by adults; Enjoys nursery rhymes; Makes sounds that are associated with vehicles, animals, birds or toys	
Social and Emotional Development: Vocalizes when near familiar adults; Enjoys playing with adults like peek-a-boo; Identifies himself/herself in reflection(mirror, water, picture)	

Session 8.10: Danger Signs for Child from Six Months to One Year

- **Signs of difficulty breathing:** Difficulty breathing can present in a number of ways. This include nasal flaring, recession of the skin and muscles under and in between the rib cage, and fast breathing. Breathes more quickly than normal or grunts when breathing out (measure breath per minute, set a timer for 30 seconds and **count** the number of times your **child's** chest rises. Double that number to get his **respiratory** rate. Normal child below 1 year should breathe 30-60 per minute).
- **Signs of dehydration:** A dry mouth, little or no tears when crying, decreased number of wet nappies and excessive thirst
- **Signs of head injury**: With a history of head injury (child falling on his head, or being struck on the head) look out for a decreased level of consciousness, vomiting, strange behaviour, excessive sleepiness, weakness of any body part.
- **Signs of severe infection:** Often the cause of infection is not immediately apparent like in the case of middle ear or urinary tract infections. Be on the lookout for high fevers, refusing to eat or drink anything, rapid pulse and rapid breathing.
    - Refusing or unable to drink of breastfeed
    - Excessive vomiting and/or diarrhoea
    - The child is lethargic or unresponsive or have unusual behaviour
    - Any fits or convulsions are present

SECTION 9: CARE OF CHILDREN 12 MONTHS TO 5 YEARS



DURATION **1.5 hours**

EXPECTED OUTCOME

All mothers of children from 1 year till 5 years are identified, registered and counselled on optimal child feeding, hygiene and health care and are supported to seek services from government programmes- health and ICDS.

LEARNING OBJECTIVE

By the end of the session, the trainees shall be-

- Aware of the good care practices for children 1 to 2 years
- Aware of good care practices for children > 2 to 5 years of age
- Aware of growth monitoring and promotion of children in this age category

KEY SESSIONS

Session	Session topic	Duration
1	Care for children 1-2 years	45 minutes
2	Care for children >2-5 years	45 minutes

This section is segregated into two sections: 1-2 years and >2-5 years. The age group 1-2 years is included in the concept of care in the first 1000 days of life.

Session 9.1: Care for children 1-2 years

ACTIVITY 1: UNDERSTANDING CARE OF CHILDREN 1-2 YEARS

Method: Presentation and discussion

- ✓ **Ask the participants: What are the good feeding and care practices for children 1-2 years?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**

- During the first and second year, breast milk continues to be an important source of nutrients for a baby. Breastfeed a child between meals and after meals.

- Continue breastfeeding a child for at least 24 months. Feeding beyond 24 months remains beneficial for a child who is growing rapidly. Brain development is also very rapid with about 85% of brain developing by 24 months of age.

- As a child gets older, introduce the child to what is generally eaten by the entire family or family foods. However, it is important to feed at least 4-5 times a day, including 1-2 snacks and continue increasing the portion size of feed to meet the growing needs for nutrients.
- The table below presents a summary of feeding norms for the child aged 1 to 2 years.

Age	**Breastfeeding**	**Texture/ Consistency**	**Frequency**	**Quantity at each meal**
12 to 24 months	Breastfeeding on demand	Food cooked for the family, softened	3-4 meals plus 2 snacks between meals	A full bowl (250 ml)

- Always feed freshly prepared foods to a child since stale foods contain germs that can cause diarrhoea and other diseases.
- Every child 6-36 months is entitled to the ICDS food supplement. This is supplied once a week in the form of ready to cook food packets supplied as Take Home Ration or THR (discussed in the previous section). The THR provides for one-third energy and protein and recommended Micronutrients. THR are ready to be consumed merely by mixing hot water or milk. THR food can be used with additional oil/ghee and sugar/jaggery, if desired. THR should be fed in addition to continued 2-3 feeds prepared by family/caregivers for a child using varieties of family diet.
- Apart from well-cooked cereals, vegetables and fruits, a child of one year can also be introduced well-cooked and finely mashed flesh foods such as meat and fish, if these items are culturally acceptable and affordable by a family.
- Variety of foods that needs to be fed to a child is important and has been discussed earlier. However, consistency of the food should be changed gradually to the type of food consumed by family.
- Feed a child adequate quantity of food served in a separate bowl. This is important for assessing the amount of food consumed by a child in one feed. Also, effort should be made to help a child to eat himself/herself.
- The term 'snack' should not be confused with foods such as sweets, biscuits, or other processed foods. Snacks refer to healthy foods which is not a full meal but eaten in between big meals. Good snacks include banana, other fruits, cooked potato, bread, yoghurt and other dairy products etc. Snacks should be fed to a child by ensuring there is enough time gap for a child to be hungry enough for the planned full meals.
- Mothers should continue to follow active or responsive feeding practices. Responsive feeding practice means assisting children to eat, being sensitive to their cues or signals for being fed, feeding slowly and patiently, encouraging but not forcing a child to eat and talking to a child during the process of feeding. In all these actions, it is important to keep an eye-to-eye contact.
- As discussed in the previous session on Immunization, the children between 16-24 months should be given DPT and OPV vaccines as well as measles vaccine between 9-12 months. Vitamin A dose (100,000 IU or half dose) should also be administered to a child at 9-12 months and a full dose (100,000 IU) between 18-24 months

'Learning by doing' exercise # 5

- Divide the participants into 4 groups
- Ask each group to suggest appropriate complementary foods for one of the following age groups:
  - At 6 months
  - From over 6-9 months
  - From over 9 months up to 12 months
  - From over 12 months up to 24 months
- Ask each group to explain their inputs to everyone, discussing age-appropriate characteristics of complementary feeding - frequency, amount, thickness (consistency), variety, active/responsive feeding, and hygiene

Developmental Milestones for Child from 12 months to 5 Years

Child development milestone is defined under four major domains, which are

- Motor or Physical Development
- Cognitive Development
- Communication or Language Domain
- Social and Emotional Development

Each domain of development is marked with certain age related indicators or milestones that a child at that particular age is supposed to acquire. Although each milestone has an age level, the actual age when a normally developing child reaches that milestone can vary. A significant delay in achieving a particular milestone can certainly signify developmental delay which requires proper screening and intervention.

Table 9.1: Age appropriate development milestone

Age	**Domain**			
	Motor or Physical Development	**Cognitive Development**	**Communication or Language Development**	**Social and Emotional Development**
	Milestone			
1-2 years	Explores and responds to different surface and textures (e.g. mats, mud floor, soft pillows, etc.); coordinates eye and hand movements (e.g., puts a smaller object into a large container); bends down from a standing position; walks in a straight line; jumps while standing at one place; Tries to grab and keep the ball; begins to participate in games, outdoor play, and other forms of exercise.	Understands when called from another room; Explores objects by linking together different approaches: shaking, hitting, looking, feeling, tasting, mouthing, pulling, turning and poking; Recognizes familiar objects and pictures in books; Solves problems by trial and error (E.g. Tries to reach a toy with several ways); Begin to identify difference between two different pictures or objects; Plays with dolls or stuffed animals and realistic props together (e.g., use a play spoon to feed a doll)	Uses words to express emotions; Scribbles are all over the paper; Tries using combination words to form phrases and sentences; Demonstrates interest in books, pictures and looks at them without any adult help.	Expresses pleasure when familiar adults are around; Shows personal desires (I want, Don't want); Experiences a wide range of emotions (e.g., affection, fear, anger, sadness).; Clings to caregiver in the presence of strangers; Follows some consistently set rules and routines

Session 9.2: Care for children 2 to 5 years:

- ✓ **Ask the participants: What are the good feeding and care practices for children 2-5 years? Why is it important to pay attention to the care practices of children beyond 2 years?**
- ✓ **Write the responses on the flip-chart**
- ✓ **Add the missing points while explaining the following points using presentation**

Good feeding practices should be encouraged and continued beyond the first 1000 days (i.e. beyond the age of 2 years) of life. This is important to ensure that good eating habits are inculcated and children receive special care till they are more independent.

- ✓ **Let's reiterate some crucial points, from what we have discussed in previous sections so far:**

Entitlement in Government feeding program:

Children aged 3 years and above (till 6 years) are entitled for Supplementary food at the AWC. As mentioned above, a child receives THR up to 3 years. Beyond 3 years, a child is fed with hot cooked meals at the ICDS centre or AWC. A mother should therefore make sure that her child over 3 years is registered at the AWC, attends AWC every day and receives the supplementary food.

Feeding during illness: A child should be fed at regular intervals with adequate amounts of foods even during illness, to be able to have the strength to fight infections and illnesses. Similarly, it is important to feed a child recovering from illness one extra meal to meet the additional requirements for recovering from weight loss caused due to illness.

Hygiene and sanitation: In addition to proper feeding, maintaining personal and food hygiene, along with environmental sanitation is extremely critical to ensure good health and nutritional status (this has been explained in detail in earlier sections).

Worm infestation:

- As a child grows older, he/she starts becoming independent and walks around, playing independently on floors as well as outside home.
- Such mobility increases risk for worm infestation, especially if personal hygiene is not practiced or if the surroundings are dirty or if a child walks bare-foot.
- Worm infestation in a child could lead to anaemia and loss of appetite with adverse impact on growth
- As a preventive measure, following steps should be taken-

- o Every child should be given a deworming tablet, once every six months. This is provided at the AWC or by an ANM
- o Children should be encouraged to wear slippers/footwear whenever they go out to play. After play, a child should be trained to wash hands with soap and water
- o Children should be discouraged to play with animals, especially in dirty/unclean surroundings

Feeding children >2-5 years:

- A child in this age category can consume all types of family foods. Adequate quantity and quality of food helps in meeting the daily requirement of nutrients.
- A child who continues to breastfeed beyond 2 years, need to be fed food from family pot at least 5-6 times a day. The amount fed at each meal needs to be increased with increase in age. If a child is not being breastfed, care should be taken to give extra water, milk, and extra meals to make up for the gap.

- A child at this age should be encouraged to eat on his own. In such situations, a mother should supervise a child while eating food and ensure appropriate feeding practices are followed.
- It is important that a variety of foods are introduced to a child in order to make the diet adequate in required nutrients. Introduction of a variety of foods also helps in the development of taste and liking for different types of food at an early age. Food items from different food groups should be included in the diet as per seasonal availability and affordability- cereals, pulses, green leafy vegetables, yellow fruits and vegetables, citrus fruits and vegetables, dairy products (milk), oilseeds (like groundnuts) and animal products (eggs, fish, meat, etc.)
- Iron and vitamin A rich foods should be included in the diet on a regular basis to prevent anaemia, eye disorders and to improve immunity.
- In between meals, a child should be fed small meals/snacks such as fruits, milk and milk products, etc.
- Adding a teaspoonful of oil/ghee or sugar/jaggery in the meal can enrich the food being fed to a child. This helps in making the meal energy dense.
- Germinating the cereals and pulses is also a good way to enhance the quality of food. Germination helps in improving the overall utilization of the food and helps in makes food highly nutritious.
- The process to be followed for producing such nutrient dense foods is as follows:
    - o Pulses/cereals can be soaked overnight, then tied in a cloth and left to germinate. Germination in a hot weather takes 3-4 hours and in winter season 10-12 hrs. Germinated cereals or pulses can be dried, roasted lightly and powdered. This powder can then be added to any food while cooking to enhance its nutritional quality.
    - o To enhance the overall nutritional content of the food, cereals should be combined with dals, milk products or flesh foods. This implies cereal-pulse mixture (e.g. rice & dal, Khichri, chapatti/dalia & dal), or cereal-milk products (rice & milk, chapatti/bread/dalia/vermicelli & milk). Inclusion of citrus fruits /lemon in the meal enhances absorption of Iron.
    - o Care should be taken that food is hygienically prepared and served to a child.

- For improving the quality of food fed to a child without adding to the cost, a family should be encouraged to grow nutritious seasonal vegetables such as green leafy vegetables, other yellow/orange/red vegetables (pumpkin, tomato, carrots, etc.), lemon, etc. Such a 'kitchen garden' can be developed in open area around the house or in the farm area allocated for growing seasonal vegetables.

Session 9.3: Hygiene and Sanitation Practices

Refer section 7.10

Session 9.4: Diarrhoea: Prevention and Management

Refer section 7.11

Session 9.5: Developmental Milestones for Child from 2 months to 5 Years

Child development milestone is defined under four major domains, which are

- Motor or Physical Development
- Cognitive Development
- Communication or Language Domain
- Social and Emotional Development

Each domain of development is marked with certain age related indicators or milestones that a child at that particular age is supposed to acquire. Although each milestone has an age level, the actual age when a normally developing child reaches that milestone can vary. A significant delay in achieving a particular milestone can certainly signify developmental delay which requires proper screening and intervention.

Table 9.1: Age appropriate development milestone

Age	Domain			
	Motor or Physical Development	**Cognitive Development**	**Communication or Language Development**	**Social and Emotional Development**
	Milestone			
2-3 years	Active early participation in activities; demonstrates awareness of own body in space (e.g., walks around a table without bumping into it); bends over easily; picks up objects from a standing position; scribbles with crayon and make vertical, horizontal and circular strokes with crayon; fastens large buttons.	Follows moving objects/persons with both eyes working together; Identifies some foods by smell; Distinguishes natural objects from man-made objects using different senses; Remembers and communicate what happened earlier in the day; Solves problems using innovative ways (Climbs on a stool to reach an object/toy); Describes physical objects in terms of relative size (e.g., big, little, small, tall, short, long, heavy, light) and quantity (e.g., many, a lot, full,	Demonstrates ability to follow 1-2 step direction; Uses nonverbal gestures and body language to express needs and feelings (e.g., gives spontaneous hug); Continues to communicate in sentences with some parts of speech missing; Turns pages to find a favourite picture in a familiar book; Enjoys hearing nursery rhymes and begins to recite familiar phrases of songs, books and rhymes. Scribbles with crayon/writing instrument and	Uses simple ways of communication, e.g., to share toys sweets with familiar adults; Begins to build relationships with other adults and children; Knows age and gender; Shows strong sense of self as an individual and tries to be assertive; Expresses need for emotional support ; Anticipates and follows simple routines, with reminders and assistance

Age	Domain			
	Motor or Physical Development	**Cognitive Development**	**Communication or Language Development**	**Social and Emotional Development**
	Milestone			
		empty, whole, part, all, none). Counts to at least 5 from memory, Understands the concepts of day and night, afternoon and evening in terms of daily activities.	makes vertical, horizontal and circular strokes.	
3-4 years	Engages in at least 60 minutes or up to several hours, daily of unstructured physical activity; Physically reacts appropriately to the environment (e.g., bends knees for a soft landing, moves quickly to avoid obstacles); improves eye-hand coordination (e.g., catches a bounced ball); creeps, crawls and rolls slowly; walks with ease on straight lines; holds crayons with fingers instead of fist; puts a stiff wire or thread through a large hole; completes simple puzzles of 1-2 pieces.	Discriminates between pleasant and unpleasant odours; Memorizes a short nursery rhyme of 2-3 lines; Does simple classification on the basis of any one concept or dimension, for e.g., shape, colour; Carries out pretend play depicting different situations. Differentiates between big and small objects and match objects of the same size; Identifies simple shapes (e.g., circle, triangle, rectangle, and square).	Listens with increasing attention to spoken language, conversations and stories read aloud for 5 minutes or so; Follows 2 step directions given in a sequence; Expresses ideas in words, phrases or simple short sentences; Develops a vocabulary of several hundred words; Enquires about meaning of unfamiliar words; Shows interest in reading or in written text by enjoying read aloud.	Approaches familiar adults freely; Identifies one's likes, dislikes, thoughts and feelings; Begins to express feelings, needs and opinions with more accuracy in difficult situations
4-5 years	Engages in structured physical activities for more than 60 minutes each day; carries a glass full of water across the room without spilling it; Creeps and crawls speedily through a narrow space; rolls fast; Walks on straight, curved and circular lines with ease; Runs fast with improved pace; Puts a stiff wire or thread through a smaller hole or beads; Completes simple puzzles.	Distinguish different taste, i.e. sweet, salty, bitter and sour; Discusses changes in weather and seasons, using common weather-related vocabulary (e.g., rainy, sunny, windy); Observes. remember and immediately recall four to six objects shown to him/her at a time; Memorizes a full verse; Does classification on the basis of two concepts, for e.g., shape and colour; Reproduces and extends a logical sequence with	Listens with increasing attention to spoken language, conversations and stories read aloud for 5-10 minutes; Speaks in complete sentences about an idea/experience/ object; Uses the correct grammatical structure with respect to gender; Develops awareness of, and more extended vocabulary related to the body, for e.g. neck, shoulder, elbow, knee, ankle chest etc.; Holds a book right side up	Manages in the absence of adults; Enjoys playing in a group of children; Expresses sympathy towards peers (e.g., says, "Don't cry); Demonstrates confidence in approaching tasks; Progress in understanding the feelings, and that others may feel differently about the same situation; Tolerates the absence of familiar adults

Age	Domain			
	Motor or Physical Development	Cognitive Development	Communication or Language Development	Social and Emotional Development
	Milestone			
		objects, pictures, stories and events.	based on the knowledge of the positions of the objects pictured.	
5-6 years	Initiates physical activities (e.g., movement games with other children, dancing to music); Walks up and down on an inclined plane with ease; Maintains balance while moving quickly; puts a stiff wire or thread through holes arranged in a complex order or design; Completes puzzles of 10 - 25 pieces.	Recalls familiar food stuffs through the sense of taste, for e.g., lime, sugar, sauce etc.; Describes simple relationships between animals, plants and the environment (e.g., "Fish live in water." "Some animals eat plants."); Observes, remember and immediately recall six to seven objects shown to him/her at a time; Thinks in forward and reverse sequence; Applies different strategies to find solution to problems.	Listens with increasing attention to spoken language, conversations and stories read aloud for 10-15 minutes; Begins to communicate using more than two sentences and knows the rules related to sentence formation; Develops awareness of and still more extended vocabulary related to the body, for e.g., eyebrows, eyelashes, lips, cheeks, heels, hips, etc.; Writes own name with some help.	Enjoys interacting with other adults and adults; Enjoys and engages in cooperative play with group; Shows awareness, understanding, and concern for what others are feeling; Handles appropriate tasks independently; Begins to understand the use of resources to comfort self and controls expression of emotion with adult's guidance; Uses more complex language to express his/her understanding of feelings and their causes.

Session 9.6: Danger Signs for Child from 12 months to 5 Years

- **Signs of difficulty breathing:** Difficulty breathing can present in a number of ways. This include nasal flaring, recession of the skin and muscles under and in between the rib cage, and fast breathing. Breathes more quickly than normal or grunts when breathing out (measure breath per minute, set a timer for 30 seconds and **count** the number of times your **child's** chest rises. Double that number to get his **respiratory** rate. Normal child below 2 year should breathe 30-60 per minute), **24-40 breaths** per minute for pre-schooler (3-5 years).
- **Signs of dehydration:** A dry mouth, little or no tears when crying, decreased number of wet nappies and excessive thirst
- **Signs of head injury**: With a history of head injury (child falling on his head, or being struck on the head) look out for a decreased level of consciousness, vomiting, strange behaviour, excessive sleepiness, weakness of any body part.
- **Signs of severe infection:** Often the cause of infection is not immediately apparent like in the case of middle ear or urinary tract infections. Be on the lookout for high fevers, refusing to eat or drink anything, rapid pulse and rapid breathing.
    - Refusing or unable to drink of breastfeed
    - Excessive vomiting and/or diarrhoea
    - The child is lethargic or unresponsive or have unusual behaviour
    - Any fits or convulsions are present

Summarize key points

- Breastmilk is an important source of nutrients for the child during the second year as well
- As the child grows older, he/she should be introduced to what is generally eaten by the family
- The child should be fed at least 4-5 times a day, including 1-2 snacks in between meals and on-demand breastfeeding
- Growth monitoring should be continued for the child till 5 years
- Families should be encouraged to grow ‘kitchen garden’
- Worm infestation can lead to Anaemia and affects overall growth of the child. The child should be dewormed every 6 months. Preventive measures include: wearing slippers/shoes, discouraging children to play with animals, maintaining personal and environmental hygiene.

SECTION 10: MANAGING CHILDREN WITH SEVERE ACUTE MALNUTRITION (SAM)

DURATION **2 hours**

EXPECTED OUTCOME

All children with Severe Acute Malnutrition (SAM) are timely identified and referred to the NRC for initial care and treatment followed by proper counselling of mothers to ensure optimal care of these children at home.

LEARNING OBJECTIVE

By the end of the session, the trainees shall be-

- Aware of the method of identification and referral of children with SAM to the NRC
- Aware of admission, discharge and follow-up criteria
- Aware of the treatment protocol of the SAM child during his/her stay at NRC
- Understand the care practices for SAM children at household level

KEY SESSIONS

Session	Session topic	Duration
1	Understanding Severe Acute Malnutrition	1 hour
2	Timely identification and admission to Nutrition Rehabilitation Centre (NRC)	
3	Management of children with SAM	30 minutes
4	Care of children at household level	30 minutes

Session 10.1: Understanding Severe Acute Malnutrition

As discussed in section 2, acute malnutrition or wasting is defined by low weight for height. Wasting is classified as severe or moderate according to the degree of wasting and the presence of edema. It is severe acute malnutrition or SAM if the wasting is severe- identified at the Anganwadi level with Z Score and/or presence of nutritional edema (use of Moyo Charts). Thus the children aged 6 months till 5 years can be identified if suffering from SAM through any one of the following criteria-

- ✓ **Weight for height less than -3SD**
- ✓ **Child has failed appetite test and/or**
- ✓ **Bipedal (in both feet) Edema**

Session 10.2: Timely identification and admission to NRC

- Timely identification and management of children with SAM is extremely crucial as such children have 8-10 times higher chance of dying than normal children.
- At the field level, CNWs are requested to take the child to the VHSND or Anganwadi Centre for measurement of weight for height followed by assessment of Z score.
- If the child till 6 months of age and suffering from the following he/she has to be immediately taken to Sick New-born Care Unit (SNCU)
  - ✓ **Visible severe wasting**
  - ✓ **Unable to suck breast milk**
  - ✓ **Very low weight for age**
- If the child above 6 months of age and suffering from the following he/she has to be immediately taken Nutrition Rehabilitation Centre (NRC) or Malnutrition Treatment Centre (MTC)
  - ✓ **Loss of Appetite and/or Medical complications & (fever/hypothermia, diarrhoea/vomiting, ARI/breathing difficulty/ severe pallor, dull /lethargy /unconsciousness /convulsions)**
  - ✓ **Bilateral pitting edema**

- If the child above 6 months of age has Z Score less than -3SD but pass appetite test then he/she will be referred to Village Child Development Centre (VCDC) / Community Management of Malnourished Centres at the Anganwadi
- In case such a child has any medical complications, immediate actions should be taken to refer such a child to the PHC or the nearby Nutrition Rehabilitation Centre (NRC) or Malnutrition Treatment Centre (MTC). These Centres are based at PHCs, CHCs or district hospitals. These are considered the referral facilities for SAM.
- When a child is brought to the NRC or at the PHC facility level, a second level weight for height measurement is undertaken to confirm if a child who is suspected to be suffering from SAM is indeed a case of SAM. These children are also checked for the existing medical complications. Only children (above 6 months) who are identified as SAM, and also have medical complications, are admitted to the NRC.

Bipedal oedema is an independent sign of SAM. If children are found to have oedema in both legs, they are admitted directly to the NRC, irrespective of their anthropometric measurement.

Session 10.3: Management of children with SAM

- There is specific protocol for medical care at NRCs. As a part of medical care, children with SAM undergo special appetite check and medical check-up.
- Children, who are noted to have poor appetite, fever, any infection or any medical complications (as listed above) are admitted to NRCs for 14 days.
- Children with no loss of appetite and no medical problems are discharged and can be taken care at home. It has been observed that 8 out of 10 SAM children can be managed at home level with appropriate care.

Activities during the stay at NRC:

- Children are treated at NRCs in the presence of their mother / caregivers. Both the mother and child are admitted at NRC. A mother is paid a daily sum to meet the loss of wages due to the admission at the NRCs
- At NRC, the treatment regime for the child includes-
    - Specific formula feed and food mixture, which is 2 - 4 gms. / kg / day of protein and nearly 200 Kcal/ kg/ day
    - Necessary medications and
    - Mineral vitamin supplements
- Tracking of a weight gain of 5 gms. / kg/ day
- During the stay, a mother is counselled to take care of feeding and hygiene practices to be followed at home. The NRC staff also carries out demonstration of easy-to-make recipes for the child.

Discharge criteria: The child is discharged from the NRC when he/she fulfils the discharge criteria:

- Increase in weight by 15% from the weight at admission
- Absence of oedema, fever
- Active and cheerful
- Treatment completed for infection and other medical complications
- Child is eating well along with necessary micronutrients
- Age appropriate Immunization is complete
- Mineral-vitamin supplements are given
- Mother/caregiver is aware about:
    - Cooking and feeding according to child's needs
    - Can follow instructions and give medicines, vitamins, Iron, etc.
    - Can identify danger signs during diarrhoea, fever, respiratory tract infections for referring to hospital and also know about home remedies for immediate relief
    - Have been counselled about the optimum feeding and care practices to be followed at home after discharge
    - The follow-up plan for the child is ready and the parents know at what interval do they need to bring the child to the NRC
    - Parents are sensitive towards the care of the child
- The child discharged from NRC need to be linked with the AWC/ Balwadi in the village. The mother should ensure that her child's name is registered at the AWC for 'follow-up' and enlisted with children for provision of double ration of supplementary food.

Follow-up:

- Following discharge, a child is followed up for two months.
- The AWW/Balsakhi is instructed to bring the child for medical check-ups at the NRCs after an interval of 15 days.
- Mother is provided with the cost of travel and wage loss of one day.
- During follow-ups, following activities are carried out-
    - Weight, height and SD of the child

- Discuss with mother/caregiver-:
  - If they are following optimal feeding and care practices at home?
  - If the child being fed the supplementary food provided by the AWC?
  - Has the child suffered from any illness or diarrhoea after being discharged from NRC? If yes, what was done?
- Children with SAM discharged from NRC need to be monitored every week by AWWs/ASHA at the community level
- The community health and nutrition workers are expected to support AWWs/ ASHA in conducting homes visits of such SAM children at least every 3 days in the first 15 days of discharge. During home visits, ensure the following-
  - Weigh the child and check for oedema and appetite
  - Observe and discuss feeding practices being followed post discharge.
  - Based on feedback from mothers, provide appropriate advice on diet and hygiene.
  - As per the advice given during the discharge, counsel the mothers of SAM children to regularly visit NRCs for medical check-ups.

Session 10.4: Care of child at household level

Once the child is discharged from the NTC, it becomes the responsibility of the family as a unit to take proper care of the child and adopt healthy feeding practices. Explain to the mother things that she needs to follow while the child is discharged and stays at home-

- Give small frequent meals, made energy dense by adding ghee/oil or sugar/jaggery
- As the child is able to tolerate the food, gradually increase the amount of food with each meal
- If the child is still breastfeeding, continue to breastfeed the child at regular intervals, after the meals
- Frequency of feeding should be high –almost 5-6 times a day.
- The double quantity of THR food given to children with SAM under the ICDS programme should be prepared with right consistency and with added oil/ghee
- Ensure food and personal hygiene and environmental sanitation

SECTION 11: ENHANCING SKILLS OF CNWS

DURATION **2.5 hours**

EXPECTED OUTCOME

The community-based workers possess skills to carry out behaviour change communication activities at the field level effectively, resulting in desired changes in behaviour among mothers/caregivers towards care and feeding practices for children.

LEARNING OBJECTIVE

By the end of the sessions, the participants will-

- Possess skills to carry out mapping exercise in their designated area of work
- Be aware of the desired communication and counselling skills
- Be aware of steps to carry out inter-personal and group counselling

KEY SESSIONS

Session	Session topic	Duration
1	Developing Counselling/communication skills	1 hour
2	Conducting Counselling sessions: Inter-personal and Group counselling	1.5 hours

Session 11.1: Developing counselling/ Communication skills

✓ **Ask the trainees: What do you understand by Counselling?**

✓ **Brainstorm and discuss. Fill in the missing information by explaining the following:**

- Counselling is a way of working with people in which you understand how they feel, and help them to decide what to do.
- The first two counselling skills are about Listening and Learning.

A mother, especially a breastfeeding mother, may not talk about her feelings easily, especially if she is shy, and with someone whom she does not know well. You need the skill to listen, and to make her feel that you are interested in her. This will encourage her to tell you more.

Skill 1. Use helpful non-verbal communication

Non-verbal communication means showing your attitude through your posture, your expression. It has five key components-

✓ **Invite one of the trainees and carry out small role-plays to demonstrate each of these components.**

i. **Posture:** Your head should be levels with her and not higher than the mother/caregiver
ii. **Eye-contact**: You should look at her and pay attention as she speaks, and not look away at something else or down at your notes
iii. **Barriers:** Remove the barriers between you and the mother/caregiver, e.g. the table or the notes while talking
iv. **Taking time:** Make her feel that you have time and are not in a hurry

v. **Touch:** Touch the mother appropriately, for e.g. in situations when she is worried or stressed about something.

Skill 2. Ask Open Questions

✓ **Explain to the trainees:**

To start a discussion with a mother or take a history, you would need to ask some questions to the mother. The questions should be asked in ways that encourages mother to talk to you and give you information. Such questions are 'Open' questions. Here the mother will not be able to answer a 'yes' or 'no', which usually happens when you ask 'Closed' questions.

Open questions usually start with words like- 'How?', 'When?', 'What?', 'Where?' 'Why?', 'Who?'. Closed questions start with words like- 'Are you?', 'Did he?', 'Has he?', 'Does he?'

✓ **You may also call out these questions randomly, and ask the participants to answer if each of this is open or closed?**

Open questions	Closed questions
"Tell me, how are you feeding him?"	"Are you breastfeeding him?"
"What made you decide to give the water?"	"Are you having any difficulties?"
"How are other members of your family supporting you?"	"Did you breastfeed your baby?"

Skill 3. Use responses and gestures that show interest

✓ **Demonstrate the skill to the trainees.**

If you want a mother to continue talking, you must show that you are listening and that you are interested in what she is saying. You can do that in two important ways-

- With gestures, for example, look at her, nod, and smile
- With simple responses, for example, you say 'Mmm', 'Oh!'

Skill 4. Empathize- show that you understand how she feels

✓ **Explain to the trainees:**

Empathy is a rather difficult skill to learn. It is difficult for people to talk about feelings. When a mother says something that shows how she feels, it is helpful to respond in a way that shows that you heard what she said, and that you understand her feelings from her point of view.

For example, if a mother says: "my baby wants to feed very often and it makes me feel exhausted!" You respond to what she feels, perhaps like this: "You must be feeling very tired all the time then?"

✓ **Give a situation to the trainees:**

A mother says "My nipples are so painful, I will have to bottle feed."

✓ **Out of the 3 possible responses shared below, which one do you think is the most appropriate?**

1. "The pain makes you want to stop breastfeeding?"
2. "Did you bottle feed any of your previous children?"
3. "Oh! Don't do that - it's not necessary to stop just because of sore nipples."

Skill 5. Avoid words that sound judging

✓ **Explain to the trainees:**

If you talk to a mother about feeding, especially when you ask questions and use judging words, you may make her feel that she is wrong, or there is something wrong with the baby. The judging words are words like: right, wrong, properly, good, badly, enough, well, etc.

For example, do not say, "Are you feeding your child properly?" Instead, say: "How are you feeding your child?"

Similarly, do not say, "Do you give her enough milk?" Instead say: "How often do you give your child milk?"

How to build confidence of the mother/caregiver and give support?

- The third and fourth counselling skills sessions are about **`building confidence and giving support'.** A breastfeeding mother easily loses confidence in herself. This may lead her to respond to pressures from family and friends to follow inappropriate feeding practices. You need the skill to help her to feel confident and good about herself.
- It is important not to make a mother feel that she has done something wrong: She easily believes that there is something wrong with herself or with her breastmilk, or that she is not doing well. This reduces her confidence.
- It is important to avoid telling a breastfeeding mother what to do: Help each mother to decide for herself what is best for her and her baby. This increases her confidence.

Skill 6. Accept what a mother/caregiver THINKS before 'advising' or 'counselling'

✓ **Explain to the trainees:**

Your response should 'accept' what a mother/caregiver says (even if it's a mistaken idea), without agreeing or disagreeing

✓ **Give the following examples to explain further:**

What mother thinks?	Your Response
"The first milk is not good for a baby − I cannot breastfeed until it has gone."	"You do not want him to have the first milk?"
"I need to give him formula now that he is two months old. My breast milk is not enough for him now"	"I see "
"I am worried about giving my one year old child family foods in case he chokes."	"Mmm. You are concerned that he might choke."

Skill 7. Accept what a mother/caregiver FEELS

✓ **Explain to the trainees:**

Your responses should show your acceptance of how the mother/caregiver feels

✓ **Present these cases to the trainees (from 1st column in table…) one after the other. Also state the responses (both correct and incorrect)**

✓ **Ask the trainees to respond which of these response is correct and which ones are incorrect.**

Case	**Correct Response**	**Incorrect response**
Savita's baby boy has a cold and a blocked nose, and is finding it difficult to breastfeed. As Savita tells you about it, she bursts into tears.	"It's upsetting when a baby is ill, isn't it?"	• "You don't need to cry - he will soon be better." • "Don't worry - he is doing very well."
Pushpa is in tears. She says that her breasts have become soft again, so her milk must be less, but the baby is only 3 weeks old.	"You are really upset about this, I know."	• "Don't cry - I'm sure you still have plenty of milk." • "Breasts often become soft at this time - it doesn't mean that you have less milk!"
Agnes is in tears. Her baby is refusing to eat vegetables and she is worried.	"You are really worried about this?"	• "Don't cry – many children do not eat vegetables." • "It is important that your baby eats vegetables for the vitamins he needs."

Skill 8. Praise what a mother/caregiver and baby are doing right

✓ **Explain to the trainees:**

You should praise the mother/caregiver for what she is doing right, to build her confidence. Only thereafter counsel and make suggestions about incorrect practices

✓ **Present these Cases to the trainees (from 1st column in table…) one after the other. Also state the responses (both correct and incorrect)**

✓ **Ask the trainees to respond which of these response is correct and which ones are incorrect.**

Case	**Correct Response**	**Incorrect response**
The mother of a 3-month-old baby says that he is crying a lot in the evenings, and she thinks that her milk supply is decreasing. The baby gained weight well last month.	"He is growing very well - and that is on your breast milk alone."	• "Many babies cry at that time of day- it is nothing to worry about." • "Just let him suckle more often - that will soon build up your milk supply."
A mother is breastfeeding her three-month-old baby, and giving little water sometimes. The baby has slight diarrhoea.	"It is good that you are breastfeeding - breast milk should help him to recover"	• "You should stop the fruit juice - that's probably what is causing the diarrhoea." • "It is better not to give babies anything but breast milk until they are about six months old."
A 15-month-old child is breast feeding and having thin porridge and sometimes milk and bread. He has not gained weight for six months, and is thin and miserable.	"It is good that you are continuing to breastfeed him at this age."	• "You should have started giving family foods to the child by now!" • "You are not giving enough food to the child."

Skill 9. Give a little, relevant information

✓ **Explain to the trainees:**

Depending upon the stage that a child is in, you should provide information that is MOST RELEVANT AT THAT TIME. This will help in preventing any confusion.

✓ **Give the following cases (in the first column) to the trainees one after the other, and ask them to suggest that 'one message' (most relevant information) that they think should be given to the mother**

Case	Most relevant information
Mother who thinks that her milk is too thin	Foremilk normally looks watery, and hind-milk is thicker
Mother who thinks that she does not have enough breast milk	More suckling makes more milk
Mother with a 12-month-old baby who thinks that the baby is too old to breastfeed any longer	Breastfeeding to at least two years of age help a child to grow strong and health.
Mother with a 15-month-old baby who is getting two meals per day	Growing children of this age need three to four meals per day, plus one to two snacks if hungry, in addition to milk.

Skill 10. Use Simple Language

✓ **Explain to the trainees:**

While counselling, use simple, easy to understand language. Sometimes when we give information, the information is correct, however the technical terms used are not understood by the mother/caregiver.

✓ **Present the following messages (in the first column) to the trainee's one after the other, and ask them to suggest a 'simpler version' of this message that can help the mother to understand it correctly.**

Message	Simple language
Colostrum is all that a baby needs in the first few days.	"The first yellowish milk that comes is exactly what a baby needs for the first few days."
Exclusive breastfeeding is best up to six months of age.	"Breast milk alone is all a baby needs until he is about six months old."
Dark-green leaves and yellow- coloured fruit and vegetables are rich in vitamin A.	"Dark-green leaves and yellow-coloured vegetables help the child to have healthy eyes and fewer infections."
Breastfeeding beyond six months of age is good as breast milk contains absorbable iron, calories and zinc.	"Breastfeeding to at least two years of age helps a child to grow strong and healthy."

Skill 11. Make one or two suggestions, not commands

✓ **Explain to the trainees**

While counselling the mother, do not use words like- should, must, never, give, do, etc. which may sound like a 'Command'. Rather, you should make 'suggestions' and include phrases like "Have you considered?", "would it be possible?", "What about trying..", etc. and words like perhaps, often, sometimes, etc.,

✓ **Present these Cases to the trainees (from 1st column in table…) one after the other. Also state the responses (both correct and incorrect)**

✓ **Ask the trainees to respond which of these response is correct and which ones are incorrect.**

Case	Command	Suggestion
A mother with a baby of 3 months, who feels her baby may be feeling thirsty.	"Do not give your baby any drinks of water or glucose water, before he is at least six months old!"	• "You may find that breastfeeding is all that he needs - extra water is not usually necessary". • "Have you thought of giving him just breastfeeds? Babies can get all the water that they need from breast milk"
A mother with a child of 4 months, feels her milk supply is not enough.	"Feed him more often, whenever he is hungry, then your milk supply will increase!"	• "A good way to build up your milk supply is to breastfeed your baby more often." • "Would you be able to breastfeed him more often? That is a good way to build up your milk supply."
A mother whose child is about to complete 6 months.	"You must start complementary foods when your baby is six completed months old."	• "Children who start complementary foods at six completed months grow well, are active, content." • "Could you start some foods in addition to milk now that your baby is six completed months old?"

Session 11.2: Conducting counselling sessions: Inter-personal and group counselling

✓ **Explain to the trainees:**

Counselling will require you to have the knowledge of the specific subject as well as the ability to transfer the information in such a way that it is accepted and practiced by the target group. The skills discussed above should be used while communicating with the mother/caregivers.

The three steps in counselling involves- i) **assessment** of a situation ii) **analysis** of a situation and iii) formulating **actions** based on the assessment and analysis of the situation.

Skill 1. Assessing the situation

Discussions with mother/caregiver of the child will enable you to assess and analyse the situation or a problem. While discussing, show interest in the discussion and issues raised by the mothers, praise good practices, understand and repeat the concerns expressed and empathize with the concern of the mother.

Use of certain tools can also help in assessing the situation. For example, growth chart is a tool which can help you in assessing the nutrition status and growth trend and initiating discussions with mothers on issues pertaining to child feeding, episodes of illnesses, feeding during illness, hygiene and use of safe water practices. Similarly, by holding a dialogue with the mother on foods fed to a child in last 24 hours and history of illness of the last month helps in assessing the situation regarding awareness and practice of feeding and child-care.

- For example if a mother is feeding semi-solid to a 9 month child twice a day, check the nutritional status and growth trend by weighing the child and plotting on the growth card.
- Inform the mother of the situation and initiate discussion with mothers. Try and understand what are the feeding practices followed. The discussion could focus on-
  - What are the food items fed? What is the quantity fed at a time?
  - Is breastfeeding being continued?
  - Is breast milk given prior to feeding semi-solid or after it?
  - Who feeds the child?
  - Why is the feed given only twice a day?
  - Also ask questions regarding any illness, including diarrhoea and practice of feeding during episodes of diarrh0ea.
  - Ask details of any health services sought.

Skill 2. Analysing the situation

- Following the discussion, try and assess the reasons for the observed growth trend or the nutritional status
- Try and find out the reasons for the feeding pattern followed such as feeding the child watery food only twice a day.
- Based on the information emerging from the discussion, you should analyse the situation and conclude in your mind the factors responsible for the situation
- The factors identified could be-
  - Lack of correct knowledge/information to mothers,
  - Incorrect feeding and care practices being pushed by the mother-in-law,
  - Poor support from elders or lack of time.
- Also during your discussion you need to check whether a mother is aware and convinced of the importance of appropriate feeding and of the serious impact of poor child feeding practices on physical growth, mental development

Step 3: Formulating Actions

Once the analysis is completed, based on the analysed situation, you can conduct the counselling and provide appropriate guidance regarding feeding practices, behavioural issues, health services etc.

- While counselling, do not use an ordering language or tone.
- Consider appropriateness of time and situation while giving advice to the mother/caregiver.
- The following points must be kept in mind.
  - Make sure that you are aware of the rationale supporting each of the messages that you impart. The information delivered should be simple and supported with the rationale to convince the caregivers to follow the practice.

- Ask questions to assess whether your message has been understood or not and whether the caregiver is convinced or not regarding the advice given.
  - Ensure that your voice is soft and language is clear and simple.

'Learning by doing' exercise # 7

- Divide the participants into 3 groups.
- Give each group a common situation, but for 3 different age-groups:

A community nutrition/health worker and/or the AWW is making a home visit to a mother with a child of following age

1. 5 months
2. 9 months
3. 14 months

The aim of visit is to understand the prevalent care and feeding practices for child, understanding the issues that need attention and counselling the mother/caregiver regarding the same.

- Based on the skills discussed in session 1 and the step-wise method of conducting Home Visit discussed in session 2, each group shall present a Role-play while demonstrating appropriate communication skills.

SECTION 12: ACTIVITIES OF COMMUNITY NUTRITION WORKERS

DURATION **2.5 hours**

EXPECTED OUTCOME

The community-based workers possess skills to carry out behaviour change communication activities at the field level effectively, resulting in desired changes in behaviour among mothers/caregivers towards care and feeding practices for children.

LEARNING OBJECTIVE

By the end of the sessions, the participants will-

- Possess skills to carry out mapping exercise in their designated area of work
- Be aware of the desired communication and counselling skills
- Be aware of steps to carry out inter-personal and group counselling

KEY SESSIONS

Session	Session topic	Duration
1	Social Mobilisation and Creating Enabling Environment	1 hour
2	Home visit and Tracking of	1.5 hours

Session 12.1: Social Mobilisation and Creating Enabling Environment

Social mobilization means engaging a range of players/stakeholders (in the present context, the larger community, the PRIs, etc.) whose goal/aim is complementary to our goal, to bring about relevant change.

✓ **Village entry and mapping exercise will be carried out in the beginning, before reaching out to the beneficiaries with program activities. This exercise will help CNW in getting acquainted with the community and obtaining important information about the target community and beneficiaries.**

In the present context, social mobilization shall help in achieving the following-

✓ **Catalysing the community to provide an environment of support to caregivers.**

- This facilitates in adoption of specific essential behaviours by caregivers, families as well as by community members.
- For example, community members can be informed and convinced that infants under 6 months should be fed ONLY breast-milk, and NOT EVEN WATER. Diarrhoea is a major reason for nutrition deficiencies, diarrhoea can be prevented by minimising contamination in food and water.
- Once the community members are informed, convinced and mobilized, the community support to members of families with young infants regarding exclusive breastfeeding increases and this helps a caregiver to follow the advice being given by service providers regarding exclusive breastfeeding practices.

✓ **Influencing systems and service providers**

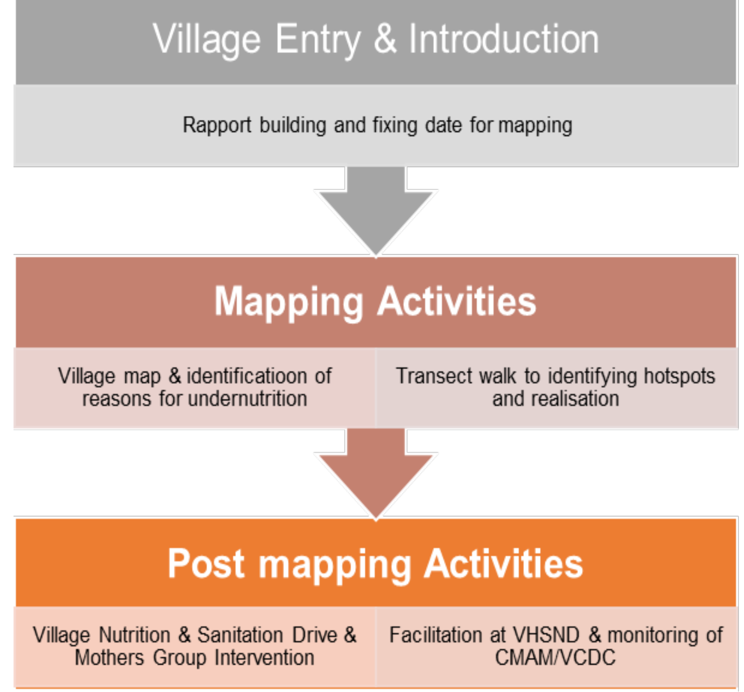
- Social mobilization also helps in influencing the system to respond to demands generated for services by beneficiaries, caregivers or their families.
- For example, a rally in community regarding routine immunization creates awareness and demands for services.

- Such demand creation exerts pressure on AWWs to inform parents of the VHND date and venue and for ANM to ensure that adequate vaccine supply is carried and children entitled to immunization are administered the required vaccine.

✓ **Community nutrition workers (CNW) need to have thorough knowledge of the target group (women and children) present in the village, also the reasons they are suffering from the issue, which is malnourishment. Considering, which CNWs are expected to identify**:

  - **high risk families that need focus**
  - **ensure that no target group is missed out**

There will be steps of social mobilisation, which will start with village entry, mapping and then contentious influencing as part of post mapping activities



Village entry and mapping will be one time activity followed by post mapping activities, which will be conducted in regular interval.

STEP 1: VILLAGE ENTRY & INTRODUCTION-MONTH ONE

CNWs may inform members of Village Health, Sanitation & Nutrition Committee (VHSNC) including Panchayat Head, ANM, AWW, ASHA about his/her visit in advance to ensure their availability. On the village entry day:

✓ **CNWs should start the meeting with greetings and introductions. Local greetings should be used if facilitators are familiar with the language. To save time the community leaders / representatives should be asked to introduce themselves.**

✓ **CNW will then introduce the project "Nutrition India Project – aims to improve nutritional status of children in first the 1000 days of life, which will reduce stunting and wasting among children.**

✓ **CNW will then inform about the objective of mapping- mapping will help us to identify village level reasons of childhood stunting and wasting and help us in implementing the project accordingly.**

✓ **CNW will then fix a date for mapping exercise by ensuring that there are no other activities planned at the same time, so that all members of the community are available.**

✓ **Do's**	☒ **Don'ts**
• Fix meeting as per availability of the village level functionaries	• Do not preach or prescribe • Do not make promises or offer inducements

STEP 2: VILLAGE MAPPING- MONTH ONE

CNW will undertake Participatory learning & Action (PLA) for the mapping exercise, PLA is the tool which helps in understanding community needs and in getting mothers and caregivers involved in the discussion about maternal and child-care. It helps in creating a two-way dialogue. PLA will be carried out in various ways, which will start with a mapping exercise.

Mapping will have three parts, first will be drawing village map with natural resources, services and houses, second will be disease mapping and third will be realisation stage.

Drawing Village map & identifying reasons for undernutrition: With the help of AWW, gather the villagers (men, women, and youth) at the AWC.

The meeting with the community should start with greetings and introductions. Local greetings should be used if facilitators are familiar with the language. To save time the community leaders/representatives should be asked to introduce themselves, instead of each person of the community introducing herself/himself.

The next step should be explaining the purpose of the visit. It should be emphasised that CNW is here to learn about the community and to hear from community members about how they live – their livelihoods, homes, festivals, the crops they grow, their water and sanitation situation etc. In case of an inquiry about the purpose of this information seeking, it could be explained that this is regarding a survey to identify communities and villages willing to take steps to improve their quality of life on their own rather than waiting for the government's help

The VHSNC members including ASHA, ANM and AWW will need to participate. With their help, draw the map of the village on the ground using chalk, rangoli, sticks, and leaves:

- their houses,
- neighbours houses,
- agriculture fields, crops the grow,
- livelihood
- defecation practices (toilets or open defecation),
- drinking water sources,
- institutions (school, AWC, health centre, panchayat bhawan)
- other facilities and services (public distribution service centre, etc.)

As the village gets mapped, focus and ask them to point the houses which have-

- Newly wed couples
- Pregnant women
- Children 0-6 months
- Children 6 months till 2 years
- Severe Acute Malnourished children
- Severe Underweight children

Ask the villagers to suggest some local markers to identify such households. As the picture gets completed, transcribe it on a paper for your record and use.

Disease mapping: ask villages to help you identify major diseases, leading questions are provided below:

a. What is the major disease children below 2 years suffer from? List the diseases
b. What is the frequency of disease for each child? Collect information
c. What is the major disease mothers suffer from? List the diseases
d. What is the frequency of disease for each individual? Collect information
e. Is there some months when many of you or your children suffer from the particular disease (name the disease they are naming)? IF YES please prepare the disease calendar for the village

English	Marathi	English	Marathi
Jan	Magh	July	Saravan
Feb	Phalgun	Aug	Bhadra
March	Chaitra	Sep	Aswin
April	Baishak	Oct	Kartik
May	Jestha	Nov	Margshis
June	Asahar	Dec	Poush

There could be a different disease for a certain period of time, please record that for that very village.

✓ **During the whole process, please, identify key influential people in the village, they could be Panchayat Head, ANM, AWW, ASHA or somebody else. They should be those who are followed by the community.**

Thank the participants and say that you will come back to discuss further. When the village map gets completed, CNW should request the AWW and few key influential people to come along with the CNW to walk around the village to relate what has been drawn, to the actual village. Set out on a 'transect walk'.

Transect walk for realisation: this is a simple process of walking through the village with village leaders (key influential people) and VHSNC members and community to understand the village better.

It also helps in ensuring what has been drawn on the paper has all correct details. Make sure that you discuss about the reasons of malnourishment while walking around the village and try to figure out the following:

- open defecation points
- sources of drinking water and its surroundings.

Once you find any of the above, stop and talk about it:

✓ **How frequent they clean surroundings of drinking water source? Etc.**

✓ **Whether people go for open defecation face problems? Why they do not have toilet at home?**

✓ **Use the tool Food and faeces – only for villages you find open defecation. Please note that this tool gives better result if it is done during transect walk.**

Another option would be to have this discussion at a location where faeces have been brought and placed at, or near, the meeting place. In case the meeting place is at any temple/religious area be cautious while exercising this tool or if possible ask people to come out of the place nearby and do it.

Food and faeces

CNW: Could I have a glass of water?

Anganwadi Helper-- bring a glass of clean potable drinking water.

CNW gulps a little bit and offers the people present the water. Some may take it, while others may refuse simply because they were not thirsty or simply do not feel like drinking water with faeces in view.

CNW: Had this been a clean place, I would not be concerned about drinking this water.

People agree. The CNW then pulls a strand of hair from her/his head and showing it to the people asks an obvious question - What is this?

People will answer that it is a strand of hair. The CNW dips this strand of hair in the faeces and then dips it in the water. Making sure the action is visible to all.

CNW: Would anybody like to drink this water now? Why are you people not taking it? People may say it is because they saw it being dipped in the faeces.

CNW: Any idea as to how much faeces has actually got mixed with it? People: Very little, just equal to one strand of hair.

CNW: But how does the water look now? Has the colour of water changed? Participants: No, it looks clean.

CNW: What would have happened, if you had not seen this happening in front of you? Participants: We would have drunk it.

CNW: What would have happened if you had drunk it? Participants: We could have fallen sick.

CNW: So, no one is willing to drink this water when the faeces on a strand of hair had been mixed with it. How many flies could sit on our food while we are eating? How many legs does a fly have? Participants: 5 or 6. Who said 6? Can everyone clap for her/him?

CNW: Can someone calculate the number of legs in the flies that could possibly sit on food we eat?

CNW: Is there anybody in this village who throws food away because flies sit on it? If anyone does, please raise your hand.

Mostly, the answer is: None.

CNW: Then, what is it that flies are leaving on the food?

Community: Faeces.

CNW: So, what are we eating with food in this village?

Community: Eating faeces.

CNW: Does everyone agree with the lady/gentleman who had just said s/he was eating faeces.

People generally agree.

CNW: Should we stop eating faeces like this or should we continue?

People normally say: It should be stopped.

CNW: You may wish to think carefully about this.

Community: Yes, we want to stop it.

CNW: Could those of you who want to stop it please raise your hands? Those who do not want to stop it need not raise their hands.

CNW: So how do you want to start taking steps to stop this?

IF YES THEN you form separate vigilance groups of male, female and children who can take initiatives to stop open defecation will be formed, each groups can have one or more members of VHSNC.

After completion of the above activity, CNW can note down the name of group leads (women, men and children) and also name of their members. Also inform key informants about his /her visit schedule and also fix a meeting date for next step of Village Nutrition & Sanitation Drive.

- In addition, activities such as rally, street plays, Nukkad natak, wall paintings, rallies etc. would be organized as a part of the project activities and also during the special events such as World breastfeeding week and Nutrition week etc.
- For effective social mobilization, there will be activities like engagement with the key influencers in the community such as elderly women, traditional healers, priests, religious leaders, teachers etc.
- Sharing success stories such as stories of rehabilitating a SAM case could be used to mobilize community to prevent malnutrition and for regular weighing of children.

✓ .Do's	☒ Don'ts
• Ensure the participation of all in the community including women, men and youth • Facilitate participatory exercises in a manner that can engage all in a group to collectively think and act	• Do not preach or prescribe • Do not find faults • Do not make promises or offer inducements • Do not impose/suggest solutions by your own.

After completion of above activity, CNW can inform key informants about his/her visit schedule and also fix meeting date for clean village drive.

STEP 3: POST MAPPING ACTIVITIES – SECOND MONTH ONWARDS

Village Nutrition & Sanitation Drive involving Village Health, Sanitation & Nutrition Committee (VHSNC): The groups formed for Village Nutrition & Sanitation Drive will meet every month, maintain group activity register and undertake following activities

- Community action planning to achieve open defecation free (ODF) status: Once the community has decided to end open defecation, they will be encouraged to sit together and make a concrete community action plan to achieve ODF status.

  First, the CNW should ask them to set a date by which they would like to end OD. People may or may not decide it the same day. This can be taken up during a subsequent follow-up visit the next day.

  - **Formation of Nigrani Samiti (monitoring committee) involving members of VHSNC -** A Nigrani Samiti should only be formed once the community has agreed themselves that a dedicated sanitation team is needed to drive the ODF movement at the village level. The role of the facilitator is simply to enable the formation process.

    At this stage, the CNW can play a more proactive role and help people form a Nigrani Samiti or whatever name they might like to give to this group in the village. It often requires very little facilitation to convey to communities the need for a team of inspired and dedicated sanitation volunteers to accomplish the task.

- **Preparation of Village Sanitation & Nutrition Plan (VSNP):** a planning exercise needs to be facilitated for people to discuss and decide how they are going to accomplish this goal. For which CNW will need to coordinate with the Chief Ministry Rural Development Fellow (CMRDF) of VSTF and help the **Nigrani Samiti** to collect exact situation of toilet usage and then planning stages of ODF status.
  The VSN plan will be prepared in consultation with the VHSNC members including panchayati raj institution, anganwadi worker, Accredited Social Health Activist (ASHA), Accredited Nurse Midwives (ANM) and Members of Nigrani Samiti.
- **Facilitate in organising Gram Sabha to discuss Village Sanitation & Nutrition Plan-** CNW will facilitate in organising Gram Sabha, during meeting following will be discussed:
  - Dissemination of result of sanitation status mapping:
    - Present the role of water, sanitation and hygiene (WASH) child's health and wellbeing
    - Current status WASH in their village
    - VSN plan prepared by the Nigrani Samiti to boost VAN drive at the village level

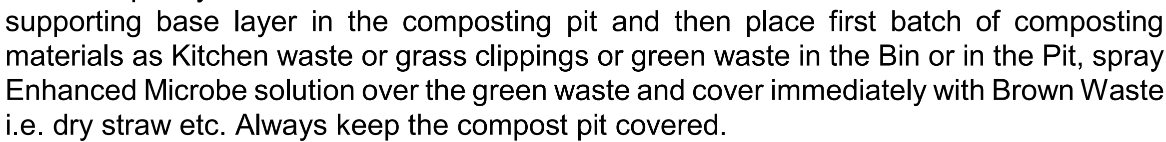
As an outcome of this discussion, mode of communication for mobilizing parents and caregivers of potential beneficiaries before and during VHNDs will be decided including sites for wall paintings, ***hoisting Village Health Sanitation & Nutrition day hording as a symbol or reminder for the day days and responsibility to support group volunteers.***

- **Implementation of Village Sanitation & Nutrition Plan**: following activities will be facilitated e taking decision to construction of toilets at houses and institutions (Anganwadi, Health Centre and Schools)
  - **Facilitation for construction of toilets**: CNW along with CMRDF connect the households with Government schemes to construct household toilet.
  - **Behaviour change Communication** on Personal, household and community hygiene
    - Point of use of Water (refer WASH flip chart)
    - Safe Sanitation (refer WASH flip chart)
    - Personal Hygiene (refer WASH flip chart)
    - Environmental Hygiene (refer WASH flip chart)
    - Food Hygiene (refer WASH flip chart)
    - Diarrhoea prevention and treatment (refer WASH flip chart)
    - Correct infant & young children feeding practices (refer video)
    - Early care helps in neurodevelopment of neonates and child (refer video)

✓ **Do's**	☒ **Don'ts**
• Ensure the participation of all in the community including women, men and youth • Facilitate participatory exercises in a manner that can engage all in a group to collectively think and act • Recognise the ignition moment and seize it to build community consensus to end open defecation at the earliest	• Do not preach or prescribe • Do not find faults • Do not make promises or offer inducements • Do not impose/suggest solutions by your own.

- **Composting-** Composting is a natural process that involves the decomposition of organic matter. Millions of microorganisms drive the compost process by breaking organic matter down to its original nutrient form. Steps of pit composting are details below:

- **Step-1:** Select a suitable space of land in preferably under shade and dig a pit of 2.5m x 2.5m x 1m dimension. The place may be selected where some sunlight is available and rainwater from roof does not reach the pit, bins or pitchers can also be used for the composting process.



- **Step-2:** Collect Brown Waste like straw, dry leaves, hay, maize stalk, sawdust and Ash by chopping into small pieces of 2-3 cm size. It will help to raise the temperature in the composting material up to 71°C
- **Step-3:** Inoculation materials as Old compost or Enhanced Microbes (EM) by mixing cow dung and water in a bottle and ferment it for 5 to 6 days.
- **Step 4:** Place a stiff layer of organic waste as paddy straw or card board as supporting base layer in the composting pit and then place first batch of composting materials as Kitchen waste or grass clippings or green waste in the Bin or in the Pit, spray Enhanced Microbe solution over the green waste and cover immediately with Brown Waste i.e. dry straw etc. Always keep the compost pit covered.
- **Step 5:** each time green waste is put into the pit they will need to be sprayed with Enhanced Microbe solution and then covered with Brown Waste for better result i.e. fast composting. Keep a bag of Brown (C) near the bin to cover the kitchen scrap and grass clippings.
- **Step-6:** Place garden twigs (Chopped into small pieces of 2-3 cm size) or loose materials in between the layers to allow air migration, retain moisture and keep loose the composting mass.
- **Step-7:** repeat the process till the pit is filled, once filled, leave the pit for 30 days to turn the waste to compost.
- **Step-8:** after 30 days the compost could be used for gardening purpose.

- **Preparation of soil for kitchen garden:** plough the garden soil and mix compost in 1:4, where compost will be one part for four parts of soli. Compost can also be used for existing trees and herbs.
- **Kitchen Garden** – a mix of fruit bearing trees and vegetables could be grown in the kitchen garden as shown in the figure 11.1 using water drained from bathroom and wash area of the house.

Seasonal vegetables grown in the district of Nandurbar and Amravati is tabulated in table number 11.1. The list has been prepared considering shallow and medium black soil, annual rainfall 872.0 mm with 34 rainy days, lift irrigation (for about 60%) using open well.

Figure 12.1: lay our plan of kitchen garden

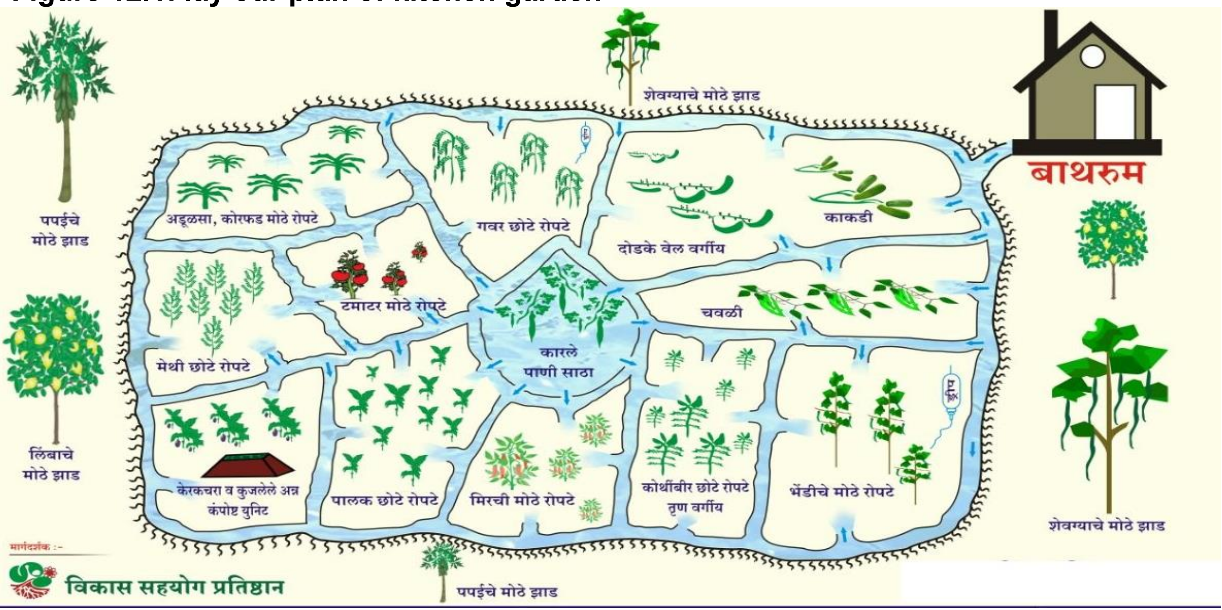


Table 12.1: Seasonal Vegetables and source of planting

Rainy Season	Source of Planting material	Winter Season	Source of Planting material	Summer Season	Source of Planting material
Drumsticks	Stump	Spinach	Seed	Tomato	Seed or seedling
Papaya	Seed or seedling	Dill (Shepu in Marathi)	Seed	Brinjal	Seed or seedling
Brinjal	Seed or seedling	Coriander (Cilantro in Marathi)	Seed	Drumsticks	Stump
Chilly	Seed or seedling	Tomato	Seed or seedling	Papaya	Seed or seedling
Ridge gourd (Dodka in Marathi)	Seed or seedling	Cluster bean (Guar in Marathi)	Seed		
Pumpkin	Seed	Brinjal	Seed or seedling		

Mobile App Checklist

The CNW would capture the approximate number of attendance (adults – men and women, children – boys and girls), attendance of key stakeholders, and activities carried out in each drive.

Session 12.2 Facilitation at VHSND – Monthly Activity

- VHND is a common platform for allowing the people to access the services of Health and ICDS.
- It is organized once every month on fixed day, fixed time and fixed place.
- Its aim is to provide essential and comprehensive health & nutrition services to pregnant women, lactating mothers, children (0-6 yrs.) and adolescent girls.
- The platform ensures early registration, identification and referral of high risk children and pregnant women.

- It provides an effective platform for interaction of service providers and the community

CNW will facilitate and ensure that VHSNDs are organized in a well-planned manner so as to ensure maximum participation from the community, PRI members and other stakeholders. These days could be organized to have a festive environment. CNWs may undertake following activities for VHSNDs:

- Coordinate with the ANM, ASHA, AW, to ensure that all households visited, specially SC, ST, minorities, Pregnant women, lactating mothers, mothers of children below 6 years, and they are motivated to visit the VHSND
- Hoist the NIP hording/ Banner to establish VHSNC as a community event
- Liaison with ANM, ASHA, AW, PRIs and other VHSNC members
- Facilitate so that AWC is clean
- Facilitate so the clean drinking water is available during VHSND
- Facilitate for a place with privacy at the AWC for ante natal check-ups
- Facilitate with last mile connectivity so that vaccines reach the VHSND site
- Facilitate to ensure weighting machines are working
- Facilitate to see that growth monitoring of children (0-6 years).
- Facilitate for distribution of supplementary nutrition to all children.
- Identify the SAM, MAM, SUW children for home visit and periodic tracking
- Identify high risk pregnant women and mothers facility issues with lactation
- Facilitate for the referral of severely underweight children with clinical signs to PHC/CHC/NRC.
- Collect measurement data of SAM, MAM, SUW children, high risk pregnant women and mothers facility issues with lactation for real time data base management and tracking
- Conduct nutrition and health education using Audio video aids, posters and flip charts.
- Orient parents and caregivers during VHSNDs about the need for nutrition during first 1000 days of life, immunization and hand wash with soap in child’s wellbeing

By the end of the VHSND, the CNWs must have collected:

- List of SAM/MAM/SUW Children with their age, mother’s name, address, Z score, appetite test result, medical complications (Y/N) etc.
- List of High Risk Pregnant Woman (HR-PW) with their age, husband’s name, address, their Blood Pressure, haemoglobin level and medical complications etc.
- List of Lactating Woman facing issues in lactation (LW*) with their age, husbands name, address, their date of delivery, haemoglobin level and type of lactation problem etc.

The CNW (with assistance from ASHA/ANM/AWW and/or CMRDF) will identify the above listed households, and proceed for registration of each household and the target beneficiaries.

The list of target beneficiaries would keep getting updated with new clients monthly after VHSND/Health Camp.

VHSND: Mobile App Checklist

- **Process** –presence of key stakeholders on VHSND (ASHA/ANM/AWW).
- Services –document the services being provided to children, pregnant and lactating women on VHND like – registration, THR, drugs and vaccines, counselling etc.
- Observations –on staff cleanliness, availability of equipment and correct method of weighing etc.
- Individual Health Vitals – The CNW will specifically record the health vitals of her target groups from the government VHSND register. The health vitals being captured are:

SAM/MAM/SUW Children	High Risk Pregnant Woman	Woman Facing Issue in Lactation
• Height • Weight • Z-Score • Bilateral Pitting Edema, • SAM failed Appetite test • SAM with medical complications • MAM with medical complication, • SUW with medical complications • Referral to NRC	• Weight • Haemoglobin • Reason for High Risk Pregnancy	• Weight • Haemoglobin • Issues in Lactation

Session 12.3 Home Visit by CNWs– Fortnightly Activity

✓ **Explain to the trainees:**

STEP1: Before you enter the house:

- **Keep your slippers/footwear out of the house**. This is important so that you do not carry any infection in the house.
- **Wash your hands with soap and water** because during this home visit, you may have to touch the new-born. If you have just met a sick person, do not visit the new-born just after that.

STEP2: After you enter the house:

- **Greet all the family members.** If there are other members of the family in the house, such as the husband and other ladies, then greet everyone.
- **Take permission from them to meet** the mother and talk to her.
- **Involve other family members in your discussion:** It is important to include other family members also in your discussion during your home visit.
- **Your objective should** be to educate everyone, considering the fact that at some point even they may play the role of a caregiver.
- **We are aware that** women, who already have an experience of giving birth and then taking care of the child, may influence the new mother with their own beliefs, traditions and ways to take care of the baby.
- **For this reason**, if we wish to change these traditions and beliefs related to the child-care, then not just a new mother, but we need to address all those family members who can influence the new mother.

STEP3: Household & Client Registration:

- The CNW will visit each household as identified during VHSND, and proceed for registration of clients and capturing target client information.
- The household and client registration is a **one-time activity** and marks the beginning of the journey of the target client as captured in the mobile application, more clients could be added in the mobile application for the same household as and when identified at the VHSND subsequently. Duding registration following information will be captured:
    - Name of Head of Household
    - Socio-Economic Details,
    - Water, Sanitation and Hygiene behaviour at household level etc.
- Client Registration – The household would have one or more (type as well as number) of target clients as have been identified on VHND/Health Camp. Each of these would be individually registered and some basic details would be captured.
    - SAM/MAM/SUW Children (0-5 years) – Place and Type of Delivery, Initiation of breastfeeding, Weight at birth etc.
    - High Risk Pregnant Woman – No. of live births, Birth spacing and Use of contraceptives, Expected date of delivery, Registration of pregnancy, Weight at time of registration, Reasons for high risk etc.
    - Lactating Woman facing issues in Lactation - Date of delivery, Place and type of delivery, No. of live births, Birth spacing and Use of contraceptives, Issues in lactation etc.
- **UIC Generation** – At the end of the registration of the Household, and each Target Client a Unique ID will be generated. This UIC will serve as a unique identifier for them in the system throughout their journey in the program. A time-stamped geo-location along with an image of the **client (optional)** will be captured during the registration process.

Census Code (6 Digit)						**Household Number**				**Type of Client (P-Pregnant, L- Lactating, C- Child)**	**Client Number (3 Digit)**		
5	3	1	5	0	9	H	0	0	1	P/L/C	0	0	1
The 1st SAM/MAM/SUW Child in 1st house which was surveyed in the village Nirgudi (Census Code - 531509) will be **531509001C001**													

STEP4: Target Client Tracking

At the end of the registration, the CNW will also fill further details of each target client as are envisaged in the individual tracking form (Form 1, Form 2, and Form 3 for HR-PW, LW* and SAM/MAM/SUW Children respectively) in the same visit.

TIPS----Ask, listen, and pay attention and advice: Act according to the objective of home visit-

- **When you ask question**, listen to the answer carefully and try and understand fully what the mother and her family are trying to say
- **Observe the child very carefully**, so that you can see for yourself what is being done- for example, how is the mother feeding the baby, how is hygiene and sanitation, etc.
- If you feel there is a need to advise the mother about something that she is not aware of or does not know how to do it, in that case you should use the **Videos, flip-book to explain all key points.**
- **Videos, flip-book** will help you in addressing all the important aspects in a correct manner. You will not miss any point. When you are done explaining, ask the mother if she has a question. Ask her 1 or 2 questions to see if she has followed what was being told or not.

TIPS----Asking the mother: Sometimes when you ask something to the mother, other family members tend to answer.

- In such cases, thank them, but ask the same question to the mother again. This usually happen in presence of the mother-in-law or other elderly.
- The **mother may be reluctant to** say anything, or may repeat what the mother-in-law said.
- **You will have to skilful** make the mother answer your questions because her own views about her health, the baby's health and reactions, and her experience of feeding the baby are all very important.

Regular growth monitoring:

- As has been discussed in the previous sections, it is important for a mother and caregiver to ensure regular monitoring of a child's growth and development. Every child up to 59 months should be registered at an AWC/Balwadi and with the ANM of the sub-centre in the local area. This will help in giving a child various health and nutrition services that are provided by the Government. These include supplementary feeding, immunization, regular weighing and growth monitoring etc.
- A mother/ caregiver should be encouraged to take her child to the AWC/Balwadi every month and get him/her weighed. At the AWC/Balwadi, the AWW/Balsakhi of the area records/plots the weight of a child in the appropriate growth chart and review progress in growth in the last few months and interpret growth curve.
- The main point to remember is that one weight on its own does not give adequate information. It is important to look at the shape of the weight for age growth curve
- To judge the trend of growth and accordingly counsel the caregivers.

'Learning by doing' exercise # 6

- Divide the trainees into 3 groups.
- Present 3 growth charts for 3 different children, one showing normal growth curve, one with a flat growth curve and another one with a dropping growth curve.
- Assign one growth chart to each of the 3 groups and ask them to list down
  - Key questions that you would want to ask the mother or caregiver, considering the growth curve.
  - What are the main factors responsible for the growth trend and the present nutritional status of the child?
  - Key points for counselling the mothers of these children.
- Ask one representative from each group to present before the audience their responses. Discuss the responses and add the missing points.

Growth promotion/counselling: The key counselling points for children with three different types of growth curves are discussed below.

- **Child with an upward growth curve:**
  - Praise the mother for her efforts and the result seen in child's nutritional status
  - According to child's age, enquire about child's feeding practices- amount, frequency and food groups included in the diet, general eating habits, mother/caregiver's involvement, etc. and advise accordingly.
  - It may be extremely useful to ask the mother of a child to recall what all foods child ate in the last 24 hrs. (Including the consistency of the food). This will give you a picture of what the daily diet looks like for this particular child
  - Enquire about child's immunization status and advise accordingly
  - Reiterate key messages on-
    - Hygiene (personal and food) and sanitation
    - Vitamin A supplementation, Deworming
    - Regular growth monitoring

- Feeding during illness and recovery
- Encourage the mother to feed the child Supplementary food available at the AWC/Balwadi
- Encourage the mother to continue her efforts to ensure the child remains healthy and grows well

- **Child with a flat growth curve:** [A flat growth curve means that a child's weight is stagnant for the past few months. Explain why this should be of concern to a mother. Inform mothers that a flat curve is a danger signal since a child in such a situation can either improve or deteriorate rapidly in its health and nutrition status if not given appropriate care.]

✓ **Ask a mother/caregiver:**

  - Was the child unwell or had any symptoms of illness in the past few months?
  - Was the child often falling sick?
  - If yes, how did you address it?

- Based on the information given by a mother, analyse the problem, assess the situation and advise the family to take appropriate actions to address the problem. For example, if a mother says that her child has been frequently suffering from diarrhoea for past 2 months, counsel her on adopting measures for improving hygiene and sanitation practices for preventing diarrhoea, improving feeding practices during illness, feeding ORS, etc.
- Moreover, enquire about the feeding practices being followed. For understanding the situation, probe into eating behaviour-
  - Ask a mother to recall what her child ate in last 24 hrs. Or the previous day ?
  - What foods are being given to the child and the consistency of food being fed?
  - How many times a day is the child being fed?
  - How is the appetite of the child? And how much food does he eat each time?
- Based on the information collected, advice the mother/caregiver on actions that need to be taken to improve the actual feeding practices.
- Enquire about the child's immunization status, the administration of the prescribed six monthly deworming and VAS dose.
- Reiterate key messages on-
  - Hygiene (personal and food) and sanitation
  - Vitamin A supplementation, Deworming
  - Regular growth monitoring
  - Feeding during illness and recovery
- Inform mothers to make use of the ICDS supplementary food entitlement of a child Register the mother at the AWC

- **Child with a downward growth curve:**[A declining growth curve means that a child's weight is going down instead of increasing. Explain to the mother of a child what this shape of the curve or fall in weight signifies. Emphasize why this situation is of concern, even if the child falls in the green zone or normal zone. Advise on urgent actions that are needed to rectify the causes of such growth faltering. Try and seek as much information about child's overall health, eating pattern and habits as possible from the mother/caregiver. Also enquire about his immunization status, vitamin A supplementation, deworming, etc.]
  - If such a child is suffering from illness/infections, he/she should be immediately referred to the health centre or the NRC
  - Explain to the mother that special care and attention is required for the child, especially in terms of feeding during illness and recovery.
  - Enquire about the feeding practices and child's general eating habits, and advise appropriately.
  - Advise mothers to ensure regular growth monitoring- twice monthly in this case to check if the child is recovering from loss of weight or not.
  - Make a strong point about the need to maintain hygiene (personal and food) and sanitation in and around the house if infections are to be prevented.

STEP4: Keep the record of home visit:

- **Keep noting down key points as per the questions in the tablet,** in case you have some more questions or observation while talking to the mother take notes in your field diary. You can elaborate them later, after the visit.
- **After each visit**, write down all main points related to that visit in detail.
- **Do not wait to sit and write-down at the end of the day,** after many hours, in which case there are chances that you may forget many things or may incorrectly write points from one visit in some other visit records.
- **Go through the record of previous home visit before undertaking the next visit**: Before any home visit, read the record of the previous visit where you have made points about the mother and child and other related aspects.
- **During this home visit, ensure that the problems you had come across in the last visit**, have ended/solved or not.

✓ **If you notice that your advice is not being followed:**

✓ **Then you will have to modify your advice in such a manner that the family is convinced to follow the advice.**

✓ **Inform your cluster coordinator in case you find that households are not following your advice since last three visits.**

Household: Mobile App Checklist

Tracking of Target Groups (SAM/MAM,SUW Child, High Risk Pregnant Women and Women Facing issue in Lactation) and Periodic Intervention in every 15 days:

- The purpose of these visits is to track the health status of target groups and engage in inter-personal communication, motivate them to attend VHND and also council parents on various aspects including behaviour change.
- It is to be noted that health vitals (Height/Weight/Hb etc.) will not be captured by the CNWs during these visits. Health vitals for each of target population will be collected at the VHSND days.
- The CNW can also click an image of the target client or household (optional) during each visit to facilitate evidence-based data collection.
- There are different forms for different target groups as tabulated below:

Information Category	**High Risk Pregnant Women**	**Women facing issues with lactation**	**SAM/MAM/SUW** (Child under 6 months and 6-59 months)
Basic Tracking Information	• The date of the visit • Presence /absence of the target client in the household.		
Nutrition	• Consumption of food from 7 different food groups.	• Consumption of food from 7 different food groups.	• feeding colostrum • exclusive breastfeeding • consumption of water, solid/semi-solid food by the child more than 6 months of age • consumption of food from 7 different food groups for lactating mother

Information Category	High Risk Pregnant Women	Women facing issues with lactation	SAM/MAM/SUW (Child under 6 months and 6-59 months)
VHSND	• Access to ANCs to be captured from the Mother and Child Protection Card • receipt of IFA and calcium • receipt of counselling on various asks • checking of Health vitals • receipt of THR from the AWC	• Access to PNCs to be captured from the Mother and Child Protection Card • receipt of IFA and calcium • receipt of counselling on various asks • support regarding correction of lactation issue • checking of Health vitals • receipt of THR from the AWC	• Access to immunization to be captured from the Child Protection Card • receipt of IFA and calcium for lactating mother • receipt of counselling on various asks • health and nutrition services from the AWC, and any incidences of Diarrhoea, Pneumonia, Acute Respiratory Infection • checking of Health vitals • receipt of THR from the AWC
Medicine Supplements	consumption behaviour of IFA and Calcium pills		
Mother Group	• target groups membership in the mothers group • whether she is attending meetings • whether she is receiving benefits provided through mothers group		
Water, Sanitation & Hygiene (WASH)	• households WASH behaviour (30 days) • The CNW will also make certain observations about the cleanliness and hygiene as being practised by the mother/pregnant women during every 2nd household visit (30 days).		
CMAM / VCDC			• details of any CMAM/VCDC benefits being received by the child.

Session 12.4 Mothers Group Intervention– Monthly Activity

The program would form three mothers group to impart various training activities, they will be:

- Group 1: pregnant women's group,
- Group 1: mothers group (0 to 5 months) and
- Group 1: mothers group (6 to 59 months)

The groups will have floating members, who will graduate from one to another like from Group 1 to 2 and then to 3. The groups will have a group head, who will maintain register, which will contain names of active members and minutes of meeting. Following activities will be undertake with the groups on monthly basis

Composting and Kitchen Garden:

Same as mentioned in section 11.1

Nutrimania - How to play

Games manual attached as Appendix B

Training and capacity building:

The topics of training and capacity building are tabulated below:

Table 11.1: Topics of training to be delivered to the Mothers Group

Malnutrition in first 1000 days	**Infant & young children feeding practices-**	**Diet diversity**	**Hygiene & Preventive**
• Early care helps in neurodevelopment of neonates and child • Impact of Malnutrition in first 1000 days	• Early initiation of breastfeeding • Importance of Exclusively breastfeeding • Till when child should be on exclusively breastfeeding • Importance of complementary feeding • When should we start complementary feeding	• What is quality calorie rich food • How can we enrich our food using locally available materials • How to enhance palatability of food • What is nutrition supplementation and balanced diet	• Who to keep drinking water safe from contamination • How to dispose child excreta • How flies bring our shit to our food • When should we wash our hands-with what • How can we minimise contamination of our food and drinking water • How hygiene could prevent worm infestations for child and mother • What happens when child or mother has worm infestation
health issues- diarrhoea • What is diarrhoea • How it impacts chid health • How diarrhoea could be treated by Zinc & ORS supplementation • How diarrhoea could be prevented	**health issues- Acute Respiratory infections** • What is Acute Respiratory infections • How it impacts chid health • How Acute Respiratory infections could be treated • How Acute Respiratory infections could be prevented	**health issues- child pneumonia** • What is pneumonia • How it impacts chid health • How pneumonia could be treated • How pneumonia could be prevented	**Importance of growth monitoring** • What is growth monitoring • Why is important for child • How it is done
Food hygiene and nutrients • Why Correct Cooking practices is important • How it impacts out life	**Best Practices - 270 Days** • Why 4 ANCs are essential • 100 IFA and 2 TT injection • Proper weight gain during pregnancy • Institutional delivery	**Best Practices – first 365 Days of life** • Post-natal services • Feeding colostrum • Kangaroo care • Exclusive breastfeeding • Complimentary feeding • Hygiene • Immunization • seek medical advice in case of jaundice, fever, others	**Best Practices – second 365 Days of life** • Complimentary feeding • Hygiene • Immunization • seek medical advice in case of jaundice, fever, others

Mothers Group : Mobile App Checklist

The CNW will broadly capture the following details, at each meeting –

- Process – This will include documenting the venue details, aggregate number of group members (attended), and presence of key stakeholders in the meeting (ASHA, ANM, PRI, CC etc.). The CNW can also capture an image of the meeting.
- BCC Activities – The CNW will document the BCC/Training extended during the session as determined by the program.
- Demonstrations – The CNW will document if any demonstrations were carried out for the group members – like cooking of palatable calorie rich diet, and manure making and kitchen garden. Please note, that list of the recipes, and crops, as would be demonstrated have not been finalized and shared.

Session 12.5 Monitoring of CMAM/VCDC– Weekly Activity

The program would promote community management of SAM/MAM/SUW Children by engaging SHGs at AWC level to provide nutritious meals to the malnourished children till they are cured/improve of acute malnutrition.

The CNW's role would be to do one-time registration of the CMAM (SHG at Anganwadi) Centre, and then periodically track the process, WASH, and (aggregate) monitoring of the children availing services at the CMAM centre. The on-tap registration of the CMAM centres in the mobile application has been introduced to help addition of more centres as the program progresses through a simple, easy-to-use process.

The specific details, as will be captured in sub-forms are –

CMAM/VCDC : Mobile App Checklist

- CMAM (SHG) Information and Registration – Any CMAM centre in the village that is a part of the program will be registered by the CNW with basic details like Village, Name of SHG, Name of AWC, No. of SHG members etc. This will be a one-time activity for each CMAM centre. Subsequent capture of details will only be possible for the CMAM centres that have been registered on the mobile application once.

- Process – During each visit, the CNW can select the CMAM centre and proceed to capture basic process details like members present, maintenance of stock register etc. This will be captured at a periodicity of 7 days.

- Nutrition Services – The CNW will capture the details of the meals as are being served in the centre over the last 7 days (1st Serving, 2nd Serving, 3rd Serving, and 4th Serving). This will be captured at a periodicity of 7 days.

- Aggregate Progress Monitoring – Once a month, the CNW will monitor the aggregate progress of the children (by boys and girls) in the CMAM Centre – like achievement of target weight gain, relapse, non-responder etc. for the last month. These details would be captured from the registers being maintained at each CMAM.

- WASH and Observations – The details on WASH behaviour, and observations on staff cleanliness, water and food storage, feeding practices etc. will be captured by the CNW once a month.

Session 12.5 Monitoring of Nutrition Rehabilitation Centre– Weekly Activity

One NRC is present in the program geography at each of the four blocks. Malnourished children with medical complications and/or bilateral pitting edema are referred to NRC on VHSND for nutritional rehabilitation.

The program will capture two types of details of each NRC – monitoring of NRC and individual target client specific health vitals (as recorded in NRC). The Cluster Coordinator (CC) will be performing these roles.

NRC: Mobile App Checklist

- NRC Information and Registration – Each NRC will be registered one-time by the Cluster Coordinator. Additional information like infrastructure – beds, human resources will also be captured as a part of this registration.

- Monitoring Monthly Performance – The CC will capture the NRC performance details on a monthly basis viz. new admissions, re-admissions, relapse rate, average length of stay, average weight gain, recovery rate, case fatality rate etc. These details will be as captured from the NRC registers by the CC (at the end of the month).

- Observations – The CC will capture observations on hygiene, and services provided at the NRC like - staff cleanliness, food cooking and storage, feeding, weight measurement, toys, ward environment etc. This will be done once a month.

- Referred Child's Health Vitals – The cluster coordinator will first capture that a referred child has reached the NRC. Further, he will then record the height, weight and z-score of each target child as is enrolled in the NRC on a weekly basis, till the child is discharged.

Session 12.6 School Level Activities– Monthly Activity

A nutrition and hygiene curriculum would be introduced in the school (class 5th to 10th) of the region to promote children learning and imbibing best practices on sanitation and hygiene. A nodal teacher would be trained to impart this training to students.

The CNW would primarily have the role of one time registration of these schools and carry out periodic monitoring activities (every 30 days) on the progress of the curriculum.

The specifics are as follows

School: Mobile App Checklist

- School Information and Registration – A school in the village that is a part of the program will be registered by the CNW with (short) basic details like: Name of School,
  - Address,
  - Nodal Teacher, and
  - No. of students enrolled (boys and girls) in class 5-10th.
- This will be a one-time activity for each school.
- Monitoring Progress on Curriculum – The CNW can select the school (as is registered) and can proceed to capture details of the progress of the students of each class (5th – 10the) on the various modules (Module 1 – Module 6) of the curriculum.

- ✓ **Observation of hand washing (monthly activity will be undertaken after the Module 1 has completed. Observation M&E allows capture of impact beyond the numbers:**
  - In Schools, rather than asking children if they wash their hands with soap, the CNWs will observe the children at lunchtime and see if they wash their hands with soap. This method allows us to accurately capture the change in children.
  - The month one observation will be baseline
  - Next observation will start once the Module 1 has completed
  - The HPs watch the children break for lunch and see how many wash their hands with soap before eating. For which CNW will choose a particularly grade on the specific day and follow the students of the grade from class room till lunch to note how many of them had washed the hands before having food. This will be continuous observation for three months. Post every day observation the HP need to note following points
    - ✓ No of students in the grade
    - ✓ No of students attended the school today
    - ✓ No of students had lunch at school
    - ✓ No of Students washed hands
  - The same method can be used for observing children when they use the latrines in order to understand whether they are washing their hands afterwards. No CNWs will observe the Opposite GENDER toilet; that means a female HP will observe only Girls Toilet and a Male will observe only boys toilet.
  - During the observation no CNW will tell / talk to students about using the same, rather he/she will be a silent observer.
  - CNWs will make three time slots
    - ✓ Morning before school starts (30 Mins)
    - ✓ Post Lunch (30 Mins)
    - ✓ At the school Closure (30 mins before closure and 30 mins after closure)
  - The CNW will be at the handwashing point near to the toilet and will make a note of the numbers
  - This is then compared with attendance records for the school for that day, to get an overall total.

Session 12.7 Documentation of Case Studies

Case Study Template (for inviting case studies for research)

We want to build a library of good quality case studies covering topics related to the malnutrition and undernutrition in children, causes, measures taken, impact on beneficiaries, legislative and policy support etc.

If you have a case study that you would like to share, please complete this template and e-mail it to: <insert email ID>

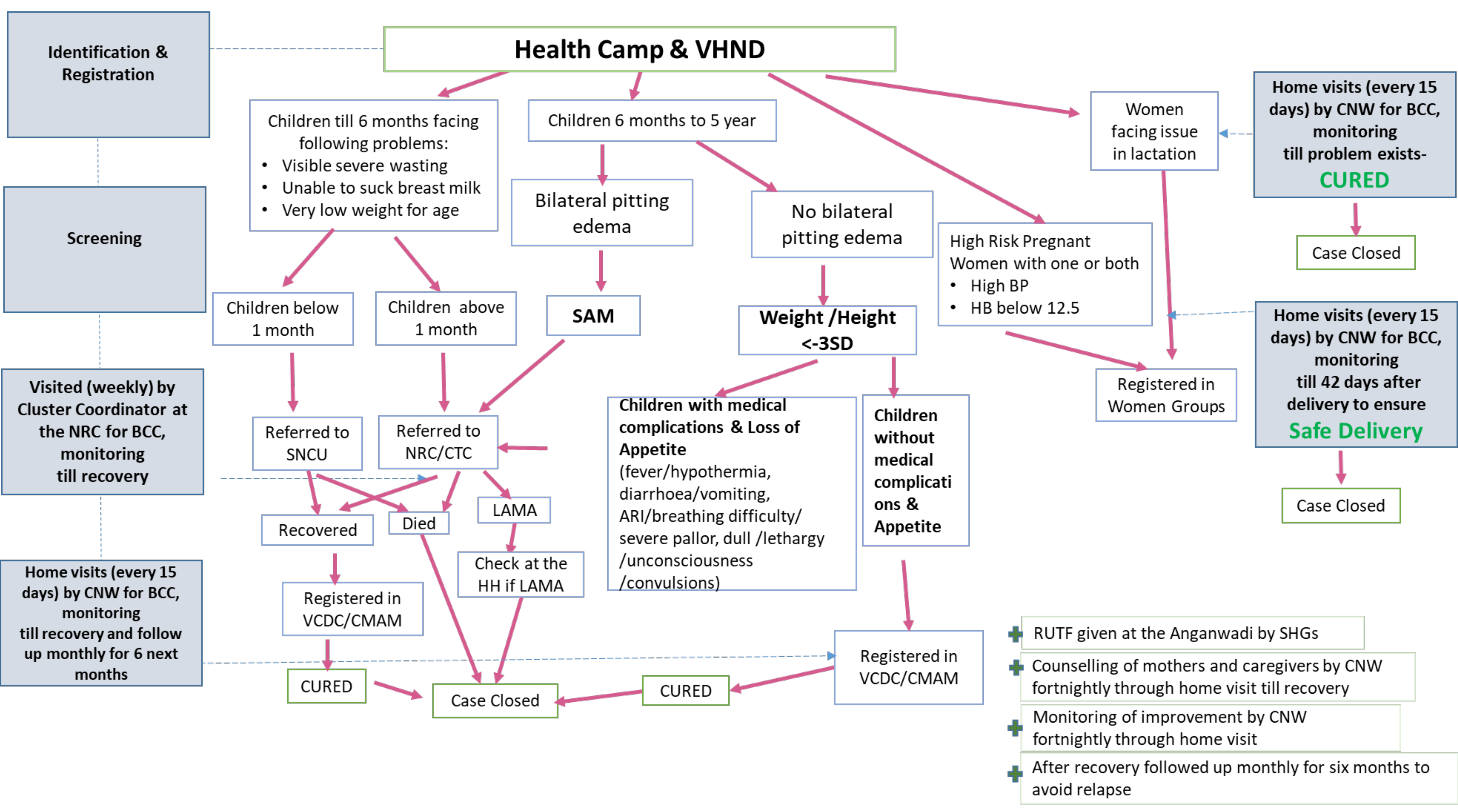
The process:

1. Complete this case study template.
2. e-mail the template to <insert email ID>
3. When we have completed looking into your case study summary we will get back to you and ask for the full details.
4. If you have any questions, please contact <name and contact number>

- Author : Author contact details
- **Case Study Title**
- Summary: *A brief summary of the problem, the actions taken to try to resolve the issue and the final results. (75 words)*
- The problem: What was the problem? , E.g. Lack of local products with cultural acceptance for promoting nutritious food (50 words)
- The consequences: What were the consequences of this problem, i.e. how was the problem identified? E.g. Beneficiaries of Government programs refusing to accept drug supplements provided by Anganwadis (100 words)
- Legislation – Existing, Was there any legislation that helped you solve the problem? Actions(150 words)
    - What did you do?
    - Who did you involve?
    - Who did you lobby and why?
    - What worked?
- Did any aspects of the project go more smoothly than expected? (50 words)
    - What didn't work?
- Did any aspects of the project prove to be more problematic than expected? (50 words)
    - Outcome
    - Did you solve the problem?
- Did you effect a change in the quality of life of the identified community? (75 words)
    - Lessons learnt
- What would you do differently next time? *(75 words)*

Session 12.7 Journey of Target Group

Journey of target groups SAM, MAM, SUW, High Risk Pregnant Women and Mothers facing issue in Lactation is depicted below;



Leave against Medical Advise (LAMA)

SECTION 13: POLICIES AND PROCEDURES

Session 13.1 Safeguarding Code of Conduct

Plan International (India Chapter) is committed to creating a safe environment for children and young people. All staff have a duty to uphold the principles of Policy on Safeguarding Children and Young People and commit to maintaining an environment that prevents violence against children and young people. Further to this, sexual exploitation and abuse by staff (including those that work in our humanitarian response) constitutes acts of gross misconduct and is therefore grounds for termination of employment.

As such, I agree that I will:

a. Adhere to the Plan International (India Chapter) Policy on Safeguarding Children and Young People and be open and honest in my dealings with children and young people, their families, and communities participating in programmes, projects, processes, events, and activities.

b. Treat children and young people in a manner which is respectful of their rights, integrity, and dignity and considers their best interests regardless of age, sex, gender, gender identity, sexual orientation, nationality, ethnic origin, colour, race, language, religious or political beliefs, marital status, disability, physical or mental health, family, socio-economic or cultural background, class, or any history of conflict with the law.

c. Create and maintain an environment which prevents the abuse and exploitation of children and young people ensuring that I am aware of potential risks with regards to my conduct and work, and take appropriate action so as to minimise risks to children and young people.

d. Contribute to building an environment where children and young people we engage with are:
   i. respected and empowered to participate in and discuss decision making and interventions for their safeguarding in accordance with their age, maturity and evolving capacities; and
   ii. well informed on their safeguarding and protection rights and the steps to take if they have a concern.

e. Display high standards of professional behaviour at all times, providing a positive role model for children and young people.

f. Comply with all relevant international standards and local legislation in relation to child labour, and refrain from using children and young people aged below 18 years for domestic or other labour, if such work is inappropriate, exploitative or harmful given their age or developmental capacity, which interferes with their time available for education and recreational activities, or which places them at significant risk of injury, exploitation, or violence. In addition, I understand that I must not use children and young people of any age that we work with for domestic or other labour.

g. Respect the privacy and confidentiality of children and young people associated with Plan International (India Chapter). This means I will:
   - Never ask for or accept personal contact details or invitations to share personal contact details (this includes email, phone numbers, social media contacts, address, webcam, skype, etc.) from any child or family associated or formerly associated[1] with our work or share my own personal contact details with such individuals except where this has been

[1] Where the child is a sponsored child requests for continued communication upon 'graduation' of the sponsorship (when the sponsored child reaches 18 years) must comply with Plan International (India Chapter) Sponsorship guidelines on the same.

explicitly authorised by Plan International (India Chapter) and/or for Plan International (India Chapter) business purposes.[2]

- Never disclose, or support the disclosure of, information that identifies sponsored families or children, through any medium, unless that disclosure is in accordance with standard Plan International (India Chapter) policies and procedures and/or has the explicit consent of Plan International (India Chapter).[3] Media includes paper, photographs, and social media.
- Never make any contact with a child, young person, or family members associated with Plan International (India Chapter) work that is not supervised by a (or another) member of Plan International (India Chapter) Staff. Such contact may include but is not limited to visits and any form of communication via social media, emails, and letters.
- Always ensure that when on an official or work visit with Plan International (India Chapter) and I wish to take pictures of children and young people associated with the organisation, for personal use, I will:
  - Always consult first with the local Plan International (India Chapter) office so as to make sure that it is ok to take pictures in the local context and that the intended use of the pictures does not conflict with Plan International (India Chapter) policies.
  - Ask permission of the child or young person (or in the case of young children, their parent or guardian) informing them of the specific purpose(s) and intended use (including how and where) and respect their decision to say no making it clear that there will be absolutely no negative repercussions from denying such consent.
  - Ensure the images are respectful and do not impact negatively on their dignity and privacy.
  - Ensure that the use of the images does not put the child or young person at risk of being identified or located.
  - Never upload the images of children and young people associated with Plan International (India Chapter) to non-Plan International (India Chapter) social media pages without the full and explicit consent of Plan International (India Chapter)[4].

h. Report and respond to any concerns, suspicions, incidents or allegations of actual or potential abuse to a child or young person in accordance with applicable procedures of the engaging office.

i. Cooperate fully and confidentially in any Plan International (India Chapter) investigation of concerns or allegations of abuse to children and young people.

j. Immediately disclose all charges, convictions, and other outcomes of an offence, which occurred before or occurs during association with Plan International (India Chapter) that relate to exploitation and abuse of a child or young person.

I will not:

a. Abuse or exploit a child or young person or behave in any way that places a child or young person at risk of harm, including through harmful traditional practices such as, for example, forced or child marriage.

b. Engage in any form of sexual activity or develop physical/sexual relationships with anyone under the age of 18. Regardless of the age of consent locally. Mistaken belief in the age of a child is not a defense.[5]

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[2] Plan International (India Chapter) will seek informed consent as appropriate from the child or young person.

[3] Plan International (India Chapter) will seek informed consent as appropriate from the child or young person.

[4] Plan International (India Chapter) will seek informed consent as appropriate from the child or young person and parents or guardians where applicable.

[5] ST/SGB/2003/13: UN Secretary-General's Bulletin on Special measures for protection from sexual exploitation and sexual abuse, 2003 (endorsed by Plan International).

c. Engage in sexual relationships with Plan International (India Chapter) youth direct beneficiaries aged 18 to 24 years as these undermine the credibility and integrity of Plan International's work and are based on inherently unequal power dynamics'.[6]

d. Use physical punishment/discipline or use of physical force of any kind towards children and young people.

e. Engage young people in any form of sexual activity which involves the exchange money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading or exploitative behavior. This includes exchange of assistance that is due to beneficiaries[7]

f. Use language or behave towards a child or young person in a way that is inappropriate, offensive, abusive, sexually provocative, demeaning or culturally inappropriate.

g. Fondle, hold, kiss, hug or touch children or young people in an inappropriate or culturally insensitive way.

h. Have a child/children/young person with whom I am in contact in a work related context, stay overnight at my home or any other personal residential location or accommodation.

i. Sleep in the same room or bed as a child or young person with whom I am in contact in a work related context. Where it is necessary to sleep in proximity with unaccompanied children and young people, I will make sure that another adult is present and it is in line with authorized procedures.

j. Do things of a personal nature for children or young person, with whom I am in contact in a work related context, (e.g. taking a child/young person to the toilet/bathroom; helping them get UN/dressed etc.) that they can do for themselves.

k. Spend time alone away from others with children and young people with whom I am in contact in a work related context; I will always make sure that another adult is with me and/or I am with the child/young person in an open public place, where others are around and in plain view of others.

l. Hit or otherwise physically assault or physically abuse children or young people.

m. Act in ways that shame, humiliate, belittle or degrade children and young people, or otherwise perpetrate any form of emotional abuse.

n. Discriminate against, show differential or preferential behavior towards, or favor particular children and young people to the detriment of them or others.

o. Develop relationships with, engage in any practice with or develop behavior towards children and young people which could in any way be deemed or interpreted as exploitive or abusive.

p. Condone or participate in behavior of children or young people which is illegal, unsafe, or abusive.

q. Use computers, mobile phones, video and digital cameras, or any such medium to exploit, harass or bully children or young people.

r. Use computers, mobile phones, or video/digital cameras or other electronic devices, to access, view, create, download, or distribute pornography, especially abusive images of children or young people.

[6] We recognise that our incentive Workers and Community Volunteers live in communities where we operate and so on rare occasions, relationships may develop that may be seen as acceptable in the community but would breach this element of the code. However, we expect Incentive Workers and Community Volunteers working in Programme areas to make known to the relevant manager any potentially compromising relationship they are in or considering, that involve a beneficiary who is aged 18 years and above.

[7] ST/SGB/2003/13: UN Secretary-General's Bulletin on Special measures for protection from sexual exploitation and sexual abuse, 2003 (endorsed by Plan International).

The above is not an exhaustive list. Staff, Associates, and Visitors should consider all related actions and behavior which may compromise the rights and safeguarding of children and young people.

Personal Conduct outside Work or Engagement with Us

We do not dictate the belief and value systems by which Staff, Associates, and Visitors conduct their personal lives. However, actions taken by them out of working hours that are seen to contradict this policy will be considered a violation of the policy.

Our Staff, Managers, Associates, and Visitors are required to adhere to principles of this Policy on Safeguarding Children and Young People both at work and outside work.

APPENDIX A: PRE-TEST/ POST TEST

Name of the participant: ______________________________

District: ____________________________________

S. No.	Questions
1.	What is the break-up of 1000 days in first 1000 days concept of child's life? A. 9 months pregnancy, and 2 years after birth B. 2 year and 9 months after birth **Answers** **A** ☐ **B** ☐
2.	You are Community Nutrition Worker, who will be your first point of contact at the village? A. Household B. ASHA, ANM, AWW C. Panchayat Member **Answers** **A** ☐ **B** ☐ **C** ☐
Pregnancy & Breastfeeding	
3.	What is the ideal weight gain during pregnancy? A. 5-6 kgs. B. 10-12kgs **Answers** **A** ☐ **B** ☐
4.	Complete **Antenatal Care** (ANC) constitute of --------- A. 3 ANC check-ups B. 4 ANC check-ups **Answers** **A** ☐ **B** ☐
5.	**Antenatal Care** (ANC) constitute of what? i. Issue of Iron Folic Acid (IFA) supplement ii. Physical check-up iii. Weighing iv. 2 dose of TT vaccine v. Health & Nutrition Counselling vi. Check-up of Hb, Blood pressure(BP), urine and abdomen **Answers** **A (i+iii+iv)** ☐ **B (ii+iii+iv+v)** ☐ **C (i+ii+iii+iv +v+vi)** ☐ **D (iii+iv +v+vi)** ☐

S. No.	Questions
6.	How many IFA tablets do the pregnant women need to consume during pregnancy? A. 500 B. 100 **Answers** **A** ☐ **B** ☐
7.	What should be the minimum gap between the two child-births for a woman? A. 3 years B. 2years **Answers** **A** ☐ **B** ☐
8.	Which serves as the 'first natural vaccine' of the baby? A. DPT B. Colostrum C. BCG **Answers** **A** ☐ **B** ☐ **C** ☐
9.	Who would you call as low birth weight baby? A. Less than 2 kg B. Less than 2.5 kg **Answers** **A** ☐ **B** ☐
10.	What is the right time to initiate breastfeeding after normal delivery? A. After two days of birth once rituals are completed B. Immediately after birth could be within an hour **Answers** **A** ☐ **B** ☐
11.	What should be given to child after birth? A. mother's milk B. jaggery and water C. honey and water **Answers** **A** ☐ **B** ☐ **C** ☐
12.	Early initiation of breastfeeding(just after birth could be within an hour) is essential---------- A. Because early breastmilk contains Colostrum (yellowish in colour), it is rich in energy, nutrients and antibiotics, which protects child from diseases. B. Because breastmilk is available during early days only **Answers**

S. No.	Questions
	A ☐ **B** ☐
13.	How many times should an infant breastfeed in 24 hours (day and night)? A. 6-8 times during the day, and 3-4 times during the night B. 2-3 times in a day and not during night **Answers** **A** ☐ **B** ☐
14.	What do you understand by the term "Exclusive Breastfeeding"? A. Breastfeeding for 6 months with water as and when required B. ONLY Breastfeeding for 6 months, NOT EVEN WATER **Answers** **A** ☐ **B** ☐
15.	What is complete food for a 5 months old baby? A. Breast milk B. Semisolid food and mothers milk **Answers** **A** ☐ **B** ☐
16.	How best one could check whether breast milk has been sufficient for a child below 6 months? A. Baby urinates 6-8 times or more in 24 hrs. and gains more than 500 grams weight every month B. Baby sleeps throughout the day and night **Answers** **A** ☐ **B** ☐
17.	What are the major breastfeeding problems? A. Engorgement B. Mastitis C. Sore nipples D. All of the above **Answers** **A** ☐ **B** ☐ **C** ☐ **D** ☐
18.	What could be the possible home based treatment for Engorged breast (the breast is full of milk and the milk cannot let down)? A. Taking a towel soaked in warm water and do hot fomentation of the breast. B. Massaging the breast slowly and stimulating the nipples C. Express milk slowly by hand D. Give pain reliever (paracetamol) if necessary E. All of the above step wise **Answers**

S. No.	Questions
	A ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐
19.	To encourage breastfeeding what needs to be done? A. Correct position while feeding the baby. B. Ensure the attachment is correct C. Continue feeding the child frequently, as production of breast milk increases with frequency of suckling D. All of the above **Answers** **A** ☐ **B** ☐ **C** ☐ **D** ☐
20.	Which part of the Breast should be inside baby's mouth to draw milk better? A. Till Nipple B. Till Areola- Nipple plus the dark part of the breast **Answers** **A** ☐ **B** ☐
21.	Fill in the blank: ________________ is the tool used to monitor growth of a child A. Meter scale B. Lactometer C. Growth Chart **Answers** **A** ☐ **B** ☐ **C** ☐
22.	Is it necessary to wash breast before breastfeeding episode? A. Yes B. No **Answers** **A** ☐ **B** ☐
23.	What could be the possible reason for not breastfeeding a child below 6 months? A. Mother has less milk B. Baby too weak to suckle C. Mother is unwell D. All of the above **Answers** **A** ☐ **B** ☐ **C** ☐ **D** ☐
Nutrition	
24.	What should be the right consistency of complementary feeding for a child aged- Match the column a. 6 – 8 months i) Family foods

S. No.	Questions
	b. 9-11 months — ii) Mashed and very soft c. > 12 months — iii) soft, energy dense, finger foods (something that a child can pick and eat) **Answers** **A** **(a with ii, b with iii, c with i)** **B** **(a with i, b with ii, c with iii)** **C** **(a with iii, b with i, c with ii)**
25.	Which foods are good sources of Iron? A. Animal foods, green leafy vegetables, pulses B. Rice, roti, maize **Answers** **A** **B**
26.	Which foods are good sources of Vitamin A? A. Rice, roti, maize B. Pumpkin, carrot, tomato, mango, papaya **Answers** **A** **B**
27.	How can you increase the 'energy' content of food with easily available raw material at home, without increasing its quantity? A. By adding- i) Oil/Ghee, ii) Sugar/Jaggery, iii) groundnut B. By adding- spices **Answers** **A** **B**
28.	Fill in the blank: A child at 12 months of age should be fed semi-solid food for at least ________ times in a day A. 7-9 times B. 4-5 times **Answers** **A** **B**
29.	Which are the 3 major symptoms of Iron deficiency i.e. Anaemia. i) Breathlessness ii) Paleness of tongue and tiredness iii) Bleeding iv) Fat v) Paleness of conjunctiva/ or eyes

S. No.	Questions
	Answers **A** ☐ (i,ii,iv,v) **B** ☐ (i,ii,iii,iv) **C** ☐ (i,ii,v)
30.	What is the significance of Vitamin A for the child? A. Vitamin A is needed for: a) improving immunity, b) strengthening the visual system (or the eyes) B. Vitamin A is needed for: a) reproduction , b) blood clotting **Answers** **A** ☐ **B** ☐
31.	Why is Iodine critical in the body? A. Iodine is needed for: a) improving immunity, b) strengthening the visual system (or the eyes) B. Iodine is needed for: Mental and cognitive development **Answers** **A** ☐ **B** ☐
32.	The prevalence of SAM defined by weight for-height below---- A. -4SD B. -3 SD C. -2SD **Answers** **A** ☐ **B** ☐ **C** ☐
Nutrition Rehabilitation Centre	
33.	Severe Acute Malnutrition child (above 6 months) is referred to Nutrition Rehabilitation Centre A. If the child failed appetite test B. Even if the child has no medical complication **Answers** **A** ☐ **B** ☐
34.	Where will the Severe Acute Malnutrition child below 6 months is referred to---- A. Sick New-born Care Unit B. Community Management of Malnourishment/ VCDC **Answers** **A** ☐ **B** ☐
35.	You are a Community Nutrition Worker, a SAM child of your village who was there at the NRC leaves against medical advice (LAMA), your cluster coordinator informs you. What will be your first action? A. Close the case

S. No.	Questions
	B. Check at the household level if the child is available at the house then pursue with parents to send the chid back to the NRC **Answers** **A** ☐ **B** ☐
Water, Sanitation & Hygiene	
36.	Where should mothers of child (0-3 years) dispose child faecal matter? A. In the Drain B. In the Dustbin C. In the Toilet or Bury in ground D. Throw Anywhere **Answers** **A** ☐ **B** ☐ **C** ☐ **D** ☐
37.	What is the best definition of diarrhoea? A. passing loose or watery stools 3 or more times a day B. passing loose or watery stool once a day **Answers** **A** ☐ **B** ☐
38.	What are the two ways of treating Diarrhoea? A. ORS + Zinc supplementation B. Iodine + Vitamin D supplement **Answers** **A** ☐ **B** ☐
39.	Which one of following is not making water safe to drink? A. boiling B. adding chlorine C. filtration using water filter D. disinfecting it in sunlight- solarisation E. letting particles in the water settle to the bottom-sedimentation **Answers** **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐
40.	What is the safest way to store drinking water? A. Open vessel above ground B. Closed vessel above ground C. Closed vessel with a side tap above ground D. Both B and C **Answers** **A** ☐ **B** ☐ **C** ☐ **D** ☐
41.	What are the essential things that somebody needs to wash their hands?

S. No.	Questions
	A. water B. soap C. both water and soap **Answers** **A** ☐ **B** ☐ **C** ☐
42.	How the cooked food should be stored at the household? A. Covered Container B. Open Container C. Tied in Cloth **Answers** **A** ☐ **B** ☐ **C** ☐
43.	Food served to child should be consumed within ------------------- as germs start growing in the leftover food Open Container A. three hours of cooking B. four hours of cooking C. two hours of cooking **Answers** **A** ☐ **B** ☐ **C** ☐
44.	What should you teach your pregnant / lactating mother about hand washing with soap? a. It is necessary to wash your hands ONLY when you see visible dirt on them. b. Wash your hands for at least 10-15 seconds before eating/handling food/feeding your child, after using toilet, after cleaning your child, after caring for someone who is sick. c. Hand washing is not very important. It is better to spend your time teaching your patients about other health issues. d. I don't know. **Answers** **A** ☐ **B** ☐ **C** ☐ **D** ☐
45.	Which of the following approaches would be the best way to inform your pregnant / lactating mother about proper hygiene? (Choose one) a. Have your patient perform a return-demonstration and give plenty of encouraging feedback. b. Tell patients when they have answered a question wrong. c. Lecture the patients about hand washing with soap. d. It is not necessary to teach them. **Answers** **A** ☐ **B** ☐ **C** ☐ **D** ☐

Answer

Sl	Answer	Sl	Answer	Sl	Answer	Sl	Answer

1	A	13	A	25	A	37	A
2	B	14	B	26	B	38	A
3	B	15	A	27	A	39	E
4	B	16	A	28	B	40	D
5	C	17	D	29	C	41	C
6	B	18	E	30	A	42	A
7	A	19	D	31	B	43	C
8	B	20	B	32	B	44	B
9	B	21	C	33	A	45	A
10	B	22	A	34	A		
11	A	23	D	35	B		
12	A	24	A	36	C		

ASSESSMENT FRAMEWORK			
Category	Range	Action	Result
RED	Less than 45%	Repeat all the sections	Re exam
YELLOW	46 to 79%	Repeat the sections which are not done well	Re exam
GREEN	More than 80%	Practice	Passed no action required

APPENDIX B GAMES MANUAL

Attached

PLAN
INTERNATIONAL