



## FACILITATOR MANUAL

### MATERNAL, INFANT YOUNG CHILD & ADOLESCENT NUTRITION (MIYCAN)



Khyber Pakhtunkhwa – Human Capital Investment Project (KP-HCIP) Health Department

**Activity:** Maternal, Infant and Young Child and Adolescent Nutrition (MIYCAN)

**Project Name:** Khyber Pakhtunkhwa Human Capital Investment Project (KP-HCIP)

**Sponsored by:** World Bank

**Adapted from:** UNICEF & WHO guidelines

**Implemented by:** Department of Health, Khyber Pakhtunkhwa, Pakistan

## Table of Contents:

<u>CONTENT</u>	<u>PAGE No</u>
<b>MODULE ONE: Overview of MIYCAN in Pakistan</b>	<b>1</b>
<b>MODULE TWO: Adolescent Nutrition in Pakistan</b>	<b>13</b>
<b>MODULE THREE: Maternal Nutrition in Pakistan</b>	<b>21</b>
<b>MODULE FOUR: Listening and Learning Skills</b>	<b>31</b>
<b>MODULE FIVE: Infant and Young Child Feeding (IYCF)</b>	<b>54</b>
<b>MODULE SIX: Early Childhood Development (ECD)</b>	<b>132</b>

## Executive Summary:

This training manual on Maternal, Infant, Young Child and Adolescent Nutrition (MIYCAN) has been developed under the Human Capital Investment Project in Khyber Pakhtunkhwa (KP), Pakistan, with support from the World Bank. It has been designed to equip primary healthcare workers in KP with the essential skills and knowledge required to address critical maternal and child nutrition challenges in the province. The manual is adapted from the guidelines of the World Health Organization (WHO) and UNICEF, aligning with global best practices in Infant and Young Child Feeding (IYCF) and Early Childhood Development (ECD). It provides a comprehensive approach to improving nutrition outcomes, contributing to the reduction of maternal and child mortality rates and enhancing overall health in KP.

In Pakistan, maternal and child health remain major public health concerns, with high mortality rates driven by factors such as inadequate access to skilled birth attendants, insufficient prenatal care, poor nutrition and the prevalence of infectious diseases. This manual aims to empower healthcare workers to play a key role in addressing these challenges by promoting optimal nutrition practices among pregnant women, mothers and young children. The focus is on critical interventions such as exclusive breastfeeding, appropriate complementary feeding, maternal nutrition and early childhood care and development. By improving the nutritional status of mothers and children, this manual seeks to reduce the risks of malnutrition, anemia, diarrhea, pneumonia and other preventable health issues that contribute to high mortality rates in the region.

The training manual emphasizes the importance of early and continuous breastfeeding, alongside appropriate nutrition during the first 1,000 days from pregnancy to a child's second birthday. It also highlights the need for healthcare workers to identify vulnerable groups, provide targeted nutrition interventions and counsel mothers and caregivers on optimal feeding practices. Additionally, the manual underscores the significance of early childhood development as a key component of nutrition, promoting holistic care that addresses the physical, cognitive and emotional needs of young children. The overarching goal is to strengthen the healthcare system in KP by ensuring that primary healthcare workers are well-equipped to address these essential

nutrition needs, ultimately improving maternal and child health outcomes and supporting the broader goals of the Human Capital Investment Project.

This initiative aligns with global commitments, such as the Sustainable Development Goals (SDGs) and is particularly focused on overcoming the challenges faced by low-resource settings like KP. The manual also addresses the disruptions caused by the COVID-19 pandemic, which has further complicated healthcare access. Through sustained investment in training, healthcare infrastructure and community-based interventions, this manual aims to contribute significantly to the reduction of maternal and child mortality and malnutrition in KP, advancing health equity and empowering women and children in the province.

## **TRAINING MATERIAL:**

- Trainers Manual: A detailed guide (hard and soft copies) as how to conduct each session along with necessary training material will be provided to each facilitator.
- Participants Manual: This booklet will be provided to each participant (both hard and soft copies) containing all the necessary information for future reference.
- Participants Handouts Booklet

### **How to Use this manual?**

This training manual aims to improve the knowledge and awareness about maternal and child health situation in Pakistan. It is intended to serve as a reference guide for trainers with background experience in Primary Health Care system.

### **The Objectives of this MIYCAN Training are:**

#### **1. Enhance Knowledge of Adolescents, Maternal and Child Nutrition**

Equip primary healthcare workers with a comprehensive understanding of the critical importance of maternal, infant, young child and adolescent nutrition (MIYCAN), focusing on optimal feeding practices during pregnancy, breastfeeding, complementary feeding and early childhood nutrition.

#### **2. Promote Exclusive Breastfeeding and Complementary Feeding Practices**

Train healthcare workers to effectively counsel mothers on the importance of exclusive breastfeeding during the first six months and the introduction of appropriate complementary feeding thereafter, with the goal of improving child growth, development and reducing malnutrition-related diseases.

#### **3. Address Maternal Nutrition and Its Impact on Health Outcomes**

Provide healthcare workers with the skills to identify and address common maternal nutritional deficiencies, including anemia and train them in delivering targeted

interventions to improve maternal nutrition during pregnancy and postpartum, ultimately reducing maternal mortality and improving health outcomes.

#### **4. Support Early Childhood Development (ECD) and Holistic Care**

Equip healthcare workers with knowledge and tools to promote early childhood development (ECD), emphasizing the physical, cognitive and emotional growth of children during the critical first 1,000 days and empowering them to support parents and caregivers in fostering healthy developmental environments.

#### **5. Strengthen Healthcare Systems and Community-based Interventions**

Foster a deeper understanding of how to strengthen healthcare delivery by ensuring that healthcare workers are well-equipped to identify vulnerable groups, implement targeted nutrition interventions and support community-based health programs, particularly in rural areas, to reduce maternal and child mortality and malnutrition in Khyber Pakhtunkhwa.

#### **Potential Workshop Participants include:**

- ✓ Primary Healthcare Workers including Medical Officer, Medical Technician, Lady Health Visitor & Lady Health Supervisors
- ✓ Program Managers of district and provincial health departments
- ✓ Organizations working on maternal and child health

#### **Expected Outcomes**

Upon completing the training module on Maternal, Infant, Young Child and Adolescent Nutrition (MIYCAN), participants will possess a comprehensive understanding of the critical nutritional needs of mothers, infants and young children. They will be equipped to effectively promote and support optimal nutrition practices, including exclusive breastfeeding, appropriate complementary feeding and maternal nutrition, thereby contributing to the reduction of malnutrition, anemia and other preventable health issues. Healthcare workers will gain the skills to identify at-risk individuals and communities, implement targeted nutritional interventions and

counsel mothers and caregivers on the importance of nutrition during pregnancy, lactation and early childhood, all aimed at improving maternal and child health outcomes.

Furthermore, participants will develop the capacity to integrate early childhood development (ECD) principles into their daily practice, ensuring that the physical, cognitive and emotional needs of young children are met in line with global best practices. By the end of the training, healthcare workers will be proficient in delivering evidence-based nutrition interventions, engaging effectively with communities to promote health and prevent disease and playing a key role in strengthening the local healthcare system. Ultimately, the training aims to produce a skilled workforce that can lead efforts to reduce maternal and child mortality, improve nutrition and enhance overall well-being in their communities.

## **Training Agenda**

Complete details for each block and its sub sessions with information about methodology, different interactive activities and resource materials required are listed in detail. In this manual, Participatory techniques are adapted to make learning as hands-on as possible. Handouts and annexure have also been provided to aid in conducting the training. The training agenda has been made flexible for the trainers. The training agenda is set for 6 days for healthcare providers working in primary settings including BHUs, RHCs, Civil Dispensaries, Category-C and Category-D hospitals.



## **A. Facilitation Methods**

Trainers should apply adult learning principles while considering the participants' varying levels of experience in the healthcare delivery system. An effective trainer will leverage the skills and personalities within the group to create an engaging and productive workshop. The following participatory training methods can be beneficial:

### ***i. Power Point Presentation***

Often referred to as the "lecture method," this approach has faced criticism for being facilitator-centered and making participants passive listeners. However, it can be effective, particularly when introducing new or unfamiliar topics. The facilitator should present information in a way that encourages group interaction, promoting an interactive learning environment. To enhance presentations, the facilitator can use anecdotes, humor, handouts, PowerPoint slides, audio-visual materials and ask questions to engage participants.

### ***ii. Brainstorming***

Brainstorming encourages quick, collaborative discussions on a topic, fostering creativity and generating ideas swiftly. It's particularly useful for building consensus around contentious issues, with points raised during the session often recorded on a flip chart.

### ***iii. Real Life Experience Sharing***

This method allows selected participants or guest speakers to share relevant life experiences that connect to the topics being discussed, adding a personal touch to the content. It's important to ensure that speakers stay on topic and adhere to their allotted time.

### ***iv. Small Group Discussion***

The primary goal of small group discussions is to maximize participation and foster new insights among participants. Groups of four or five are ideal, as they allow for more personal interaction, reduce intimidation and encourage idea exchange. Considerations for group work include the topic, objectives, assigned tasks, desired participation level, available resources, time

management, group composition (including gender) and seating arrangements. Each group should have a chairperson and a note-taker, with key points recorded on a flip chart for reporting back to the larger group. The facilitator should then synthesize and clarify any emerging issues.

**v. *Case Study***

In this method, participants analyze a real or fictional case in small groups before discussing it with the larger group. The facilitator presents the case details and invites participants to propose solutions and share their opinions without dictating the best answer or critiquing contributions.

**vi. *Role Play***

Role play is a dynamic method that promotes participation and creativity by simulating real-life scenarios. Participants are assigned hypothetical situations and act according to their assigned roles, while non-participants observe and critique. After the role play, the facilitator leads a discussion to reflect on the experience. It's helpful to establish a time limit of 5 to 10 minutes for the exercise and to record key takeaways on a flip chart.

**B. Logistic Support:**

Training arrangements should be made well in advance and all necessary equipment and supplies should be arranged. Required training equipment include:

- Laptop, projector & un-interrupted power supply
- Flip Flowcharts with Stand
- Colored Markers, Sticky Notes
- Necessary Stationary Required for participants (Writing pad, pen, pencil etc)
- Required No. of pre-test and post-test questionnaires copies
- Required No. of participants handouts
- Required No. of Z-Scoring Cards
- MUAC Tape/ strip

### **C. Preparatory Checklist for the trainer**

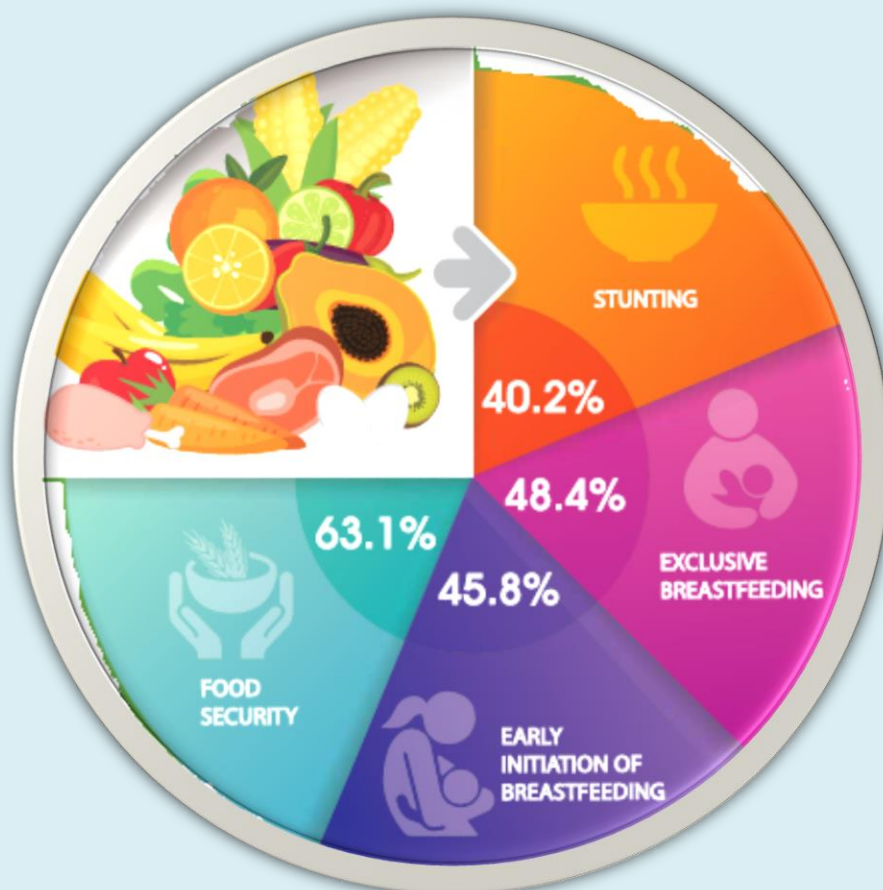
The trainer should:

- Thoroughly understand the training manual's content.
- Review the training objectives, session outlines and activities for each session, including learning goals, time, resources and trainer instructions as detailed in the manual.
- Familiarize themselves with the session slides, particularly those with presentations.
- Review the pre/post-test and course evaluation forms and prepare copies for all participants.
- Make copies of handouts, role-play scenarios and checklists to ensure all audio-visual equipment is functional.
- Check the training venue, including seating arrangements, lighting and fans or air conditioning (for summer).
- Create flip flowcharts as needed for the sessions and write the daily agenda on them.

## MODULE ONE

### Session

## Overview of Maternal, Infant, Young Child and Adolescent Nutrition in Pakistan



## **Session: Overview of Maternal, Infant Young Child and Adolescent Nutrition in Pakistan**

### **Training Methods:**

- Brainstorming and Q&A sessions to explore prior knowledge and stimulate discussion.
- Group work to apply learning to local contexts.
- Presentations using slides and case studies to explain key concepts.
- Role-play and case studies to practice application of knowledge.

### **Training Facilities and Materials:**

- Projector and slides for presentations.
- Flip charts, markers and handouts.
- Handouts on case study materials.
- Case studies for group discussions and role-plays.
- Local statistics and reports on maternal and child nutrition in Pakistan.

### **Session objectives:**

- 1. Understand the Key Indicators of Maternal, Infant and Young Child Nutrition**
  - Participants will be able to identify and describe key nutritional indicators for maternal health, infants and young children in Pakistan, including stunting, wasting, anemia and exclusive breastfeeding rates.
- 2. Analyze the Nutritional Status Based on Recent Data**
  - Participants will review and interpret the latest data from the Pakistan Demographic and Health Survey (PDHS) and the Pakistan National Nutrition Survey, focusing on maternal, infant and child nutritional statistics.
- 3. Examine the Impact of Malnutrition on Maternal and Child Health**
  - Participants will be able to explain the short- and long-term effects of malnutrition on maternal and child health, including cognitive development, immune function and maternal mortality.



## Activity:

### “Planning Nutrition Dream Map”

**Duration: 30-40 minutes**

#### Materials Needed:

- Flip charts
- Sticky notes
- Markers
- Tape or pins to hang charts

#### Objective:

To help participants identify ideal nutrition services and support systems for mothers, infants, young children and adolescents in their local communities. This activity will foster local context awareness, identify priority needs and encourage group discussion on practical, realistic interventions.

#### Instructions to the Trainer (Before the Activity):

- Divide participants into **5 small groups** (4–6 people per group).
- Provide each group with **flip charts, markers and sticky notes**.
- Ensure each group represents a mix of gender and localities (urban/rural, from different districts) to reflect regional diversity in KP.

## Activity Flow:

### Step 1: Introduction & Imaginary Scenario

*"Imagine you've been given the power to create the ideal nutrition system in your village, tehsil, or district. With unlimited support from the government, health workers and your community, what kind of care and services would you design to ensure mothers, infants, young children and adolescents are well-nourished, healthy and thriving?"*

### Step 2: Group Work - Create a Nutrition Dream Map

Assign **each group** a **specific life stage** and ask them to list what comprehensive nutrition care and support would look like for that stage **within the context of KP**.

Group	Assigned Life Stage	Guiding Task
Group 1	Before and During Pregnancy	Identify what nutrition-related care pregnant women in KP should ideally receive: iron/folate supplements, food rations, awareness, anemia screening, access to lady health workers (LHWs), etc.
Group 2	Birth to 6 Months	Focus on exclusive breastfeeding support, early initiation, LHW home visits, support from mothers-in-law, addressing myths, cultural practices.
Group 3	6–24 Months (Infants & Toddlers)	Highlight complementary feeding practices, nutrient-rich foods, fortified products (like WFP's MNPs), awareness through masjid announcements or community events.
Group 4	2–5 Years (Young Children)	Emphasize on growth monitoring, community weighing days, deworming, school readiness nutrition, daycare support.
Group 5	10–19 Years (Adolescents)	Discuss adolescent girls' diet diversity, iron tablets, school health programs, menstrual hygiene, peer-led nutrition education in madrasas/schools.

Each group writes their points on a **flip chart** under headings:

- Ideal Services
- Local Barriers
- Existing Support Systems (LHWs, BHUs, Schools, Religious Leaders, etc.)
- What can be improved?

### Step 3: Reflections

- Ask each group to **put up their flip charts** around the room.
- Encourage all participants to **walk around** and read each group's "Nutrition Dream Map."
- Ask participants to **use sticky notes** to write 1 idea or suggestion they liked from another group's chart.

### Step 4: Group Discussion

- Ask **1–2 volunteers from each group** to share:
  - A **key gap** they identified.
  - A **realistic action** they can take in their role (e.g., field staff, LHW, NGO partner) to improve nutrition in that life stage.

### Trainer prompts to encourage discussion:

- Are the ideal services listed available in your village or health facility?
- What are the most **pressing challenges** to providing or accessing good nutrition in your area?
- Are adolescents and mothers aware of what good nutrition is? How can we raise awareness in mosques, markets and schools?
- Can PRIs, local elders, or women's groups help overcome cultural and social barriers?



## Session Outline:

Activity	Content/Details	Materials/Tools
<b>Introduction &amp; Overview</b>	<p>Introduce the session objectives.</p> <p>Highlight the importance of maternal, infant and child nutrition in Pakistan.</p> <p>Outline key statistics and areas to be covered in the session.</p>	PowerPoint slide with session agenda and objectives
<b>Presentation: Maternal Nutritional Status</b>	<p>Current maternal nutritional status in Pakistan (based on PDHS &amp; Pakistan Nutrition Survey).</p> <p>Key maternal indicators: Anemia, micronutrient deficiencies and maternal mortality.</p> <p>Factors contributing to maternal malnutrition (e.g., socio-economic status, access to healthcare, education).</p> <p>Public health implications of poor maternal nutrition.</p>	PowerPoint presentation with visuals/charts from PDHS and National Nutrition Survey
<b>Presentation: Infant &amp; Child Nutritional Status</b>	<p>Nutritional status of infants and children in Pakistan (stunting, wasting, underweight).</p> <p>Infant and young child feeding practices (e.g., exclusive breastfeeding rates, introduction of complementary feeding).</p> <p>Micronutrient deficiencies in females of reproductive age and children (e.g., vitamin A, iron, zinc).</p> <p>Long-term health and development consequences.</p>	PowerPoint presentation with data from PDHS and National Nutrition Survey
<b>Government Programs &amp; Policies</b>	<p>Review of key policies and national strategies on maternal and child nutrition.</p> <p>Programs: National Nutrition Program, Integrated Nutrition Strategy and role of UNICEF &amp; WHO.</p> <p>Successes and challenges in program implementation.</p>	PowerPoint presentation with key government and organizational initiatives

<b>Activity: Group Case Study on Nutrition Challenges</b>	<p>Engage participants in problem-solving around a case study.</p> <ul style="list-style-type: none"> <li>- Break participants into small groups (5-6 people).</li> </ul> <p>Provide each group with a case study of a community with poor maternal and child nutrition indicators.</p> <p>Groups discuss causes, implications and propose potential interventions.</p> <p>After 20 minutes, each group will present their findings and solutions.</p>	<p>Case study handouts, flipcharts, markers for group work, projector for presentations</p>
<b>Group Presentations &amp; Discussion</b>	<p>Each group presents their case study findings and proposed solutions (3-4 minutes per group).</p> <p>Facilitator provides feedback and the group discusses the feasibility and impact of proposed interventions.</p>	<p>Flipcharts, presentation space for each group</p>
<b>Conclusion &amp; Wrap-Up</b>	<p>Summarize key points covered in the session.</p> <p>Encourage participants to reflect on the importance of addressing maternal and child nutrition.</p> <p>Provide resources for further reading and training.</p> <p>Thank participants for their involvement.</p>	<p>PowerPoint slide with key takeaways and additional resources</p>

## **PowerPoint Presentation Content Breakdown:**

### **1. Maternal Nutritional Status in Pakistan**

- Key statistics: Anemia prevalence, maternal mortality rate, micronutrient deficiencies (iron, folic acid), obesity trends.
- Impact on pregnancy outcomes: low birth weight, preterm births, maternal morbidity.
- Policy response and ongoing efforts to address maternal nutrition.

### **2. Infant and Young Child Nutritional Status in Pakistan**

- Nutritional indicators: Stunting, wasting, underweight, exclusive breastfeeding rates and complementary feeding.
- Micronutrient deficiencies in children: Vitamin A, zinc and iron deficiencies.
- Impact of poor nutrition on cognitive and physical development.
- National and international initiatives to improve child nutrition.

### **3. Government and International Programs**

- Pakistan's National Nutrition Strategy.
- Key government-led nutrition interventions (e.g., food fortification, nutrition education).
- Role of organizations like UNICEF, WHO in improving maternal and child nutrition.
- Current challenges in implementation (e.g., infrastructure, policy integration).

## Activity 2: Group Case Study



### Case Study Example:

- **Scenario:** A rural community with high levels of maternal anemia and child stunting, where access to healthcare and nutrition education is limited.
- **Task:** Identify the causes of these issues (socio-economic, healthcare access, cultural factors), propose potential interventions (government programs, local community involvement) and evaluate the sustainability of the solutions.
- **Group Process:**
  1. **Identification of Issues:** Groups identify the root causes of poor nutrition in the case study community.
  2. **Solution Development:** Groups propose actionable strategies to improve maternal and child nutrition (e.g., improving antenatal care, promoting exclusive breastfeeding, community nutrition education).
  3. **Presentation:** Groups present their solutions, followed by a Q&A session with feedback from other participants and facilitators.

### Expected Outcomes:

- Participants will gain an understanding of the key maternal and child nutritional issues in Pakistan based on recent surveys.
- They will be able to analyze real-world scenarios, identify causes of malnutrition and develop feasible solutions.
- Participants will leave with a better understanding of the policies, programs and interventions aimed at improving maternal and child nutrition in Pakistan.

## Module 1 Slides: Overview of MIYCAN in Pakistan

### Setting the Training Tone

- ✓ Registration
- ✓ Opening prayer and remarks
- ✓ Pre-test assessment
- ✓ Establishment of training rules

### Establishment of training rules



What kind of rules would you like to set in place for the training?

Since these rules have been established through consensus, it is your responsibility to kindly follow them.

### Training Overview



What are your expectations of this training?

Please write down your expectations on a sticky note and place it on the board (parking lot).

### Session: Situation Analysis Overview of Maternal, Child & Adolescent Nutrition in Pakistan



### Objectives

At the end of the session, participants will be able to:

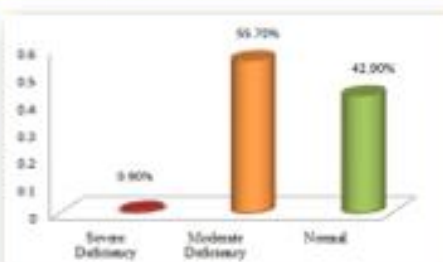
- ✓ Understand the current state of maternal, child & adolescent nutrition in Pakistan, including common issues like malnutrition and breastfeeding practices.
- ✓ Identify the main challenges (social, cultural, economic, and healthcare-related) that affect maternal and child nutrition in Pakistan.
- ✓ Explain the negative effects of poor maternal, child & adolescent nutrition, such as high mortality rates, low birth weight and developmental delays.

### Adolescent Nutrition Status in Pakistan



Source:  
National Nutrition Survey 2008  
<http://www.unicef.org/pakistan/files/2012/07/nutrition/NutritionSurvey2008.pdf>

### Anemia in Adolescent Girls



### Maternal Nutrition Status in Pakistan



Prevalence of Wasting by Province/Region



## Factors Affecting Maternal & Child Nutrition in Pakistan

- ❑ Socioeconomic Factors:
- ❑ Cultural Practices:
- ❑ Healthcare System:
- ❑ Inadequate Infant and Young Child Feeding (IYCF) Practices:
- ❑ Environmental and Sanitation Issues:

## Maternal & Child Nutrition Interventions on Pakistan

### Multiple Micronutrient Supplementation (MMS):

- The **Pakistan National Vitamin A Supplementation Program** aims to reduce the incidence of vitamin A deficiency in children.
- The **Multiple Micronutrients Supplementation Program** is designed to address iron/folic acid deficiency anemia and multiple micronutrients among pregnant women and adolescent girls.

### Breastfeeding Promotion:

- Pakistan has embraced the **Baby-Friendly Community and Hospital Initiative (BFCH & BFHI)**, which promotes exclusive breastfeeding for the first 6 months of life and supports continued breastfeeding for up to 2 years or more.
- The **Infant and Young Child Feeding (IYCF) policy** aims to provide guidelines for breastfeeding, complementary feeding and promoting proper feeding practices.

## Maternal & Child Nutrition Interventions on Pakistan: Continued....

### Community-Based Programs:

- **Benazir Nashonuma Program:** Aims to improve maternal nutrition during pregnancy & breastfeeding and to prevent stunting in children.
- Lady health workers (LHWs) are actively engaged in educating communities about good nutrition practices, including proper maternal diet, breastfeeding and complementary feeding.

### Integrated Nutrition Programs:

- Programs like the **Pakistan Integrated Nutrition Program (PINS)** have been implemented to address maternal and child malnutrition through a multi-sectoral approach that involves health, agriculture, education and social welfare sectors.

### Food Fortification:

- Efforts to fortify staple foods, such as wheat flour, with micronutrients like iron and folic acid, are underway to combat nutritional deficiencies at the population level.
- **Oil and Salt Iodization**

## Challenges in Maternal and Child Nutrition

- ❑ Low Coverage of Nutrition Services:
- ❑ Gender Inequality:
- ❑ Lack of Awareness:
- ❑ Cultural Beliefs:
- ❑ Economic Constraints:
- ❑ Inadequate Data and Monitoring:

## Way Forward: Priorities for Maternal and Child Nutrition in Pakistan

- ❑ Strengthening Health Systems:
- ❑ Community Engagement:
- ❑ Addressing Socioeconomic Barriers:
- ❑ Policy Support and Advocacy:
- ❑ Improved Monitoring and Evaluation:



## Anemia in Reproductive Age Group Women



## Calcium, Zinc & vitamin D



## Micronutrient Deficiency in Pakistan



## Maternal Reproductive Health Indicators in Pakistan



## Child Nutrition Status



## Child Nutrition Statistics



## Prevalence of Stunting by Province/Region



## MODULE TWO

### ADOLESCENT NUTRITION





## **Adolescent Nutrition:**

Adolescence, defined by the World Health Organization as the period between 10 and 19 years of age, is a critical stage of growth marked by rapid physical, emotional, and cognitive changes. It is the second key window of opportunity in the life cycle for breaking the cycle of intergenerational malnutrition—following the first 1,000 days from conception to age two. Ensuring adequate nutrition during adolescence is essential to support healthy development, prepare young people—especially girls—for safe motherhood, and promote long-term health and productivity.

In Pakistan, adolescents make up 20.57% of the total population, yet their unique nutritional needs have historically been neglected in health programs and policy planning. The National Nutrition Survey (NNS) 2018 presents concerning trends: 21.1% of adolescent boys and 11.8% of girls are underweight; over half (56.6%) of adolescent girls suffer from anemia; and 30.6% of adolescents are either overweight or obese—highlighting the “double burden” of malnutrition. In Khyber Pakhtunkhwa (KP), similar challenges persist, with significant rates of undernutrition, micronutrient deficiencies, and rising overnutrition among both urban and rural adolescents.

These nutritional challenges are driven by poverty, food insecurity, cultural practices, poor dietary choices, and limited access to adolescent-friendly health and nutrition services. Additionally, early pregnancies among adolescent girls—often linked to child marriage and inadequate reproductive health education—compound the risks of poor maternal and child outcomes.

This module will guide facilitators in equipping frontline health workers with the knowledge and tools needed to support adolescent nutrition under the MIYCAN (Maternal, Infant, Young Child, and Adolescent Nutrition) framework. Through practical strategies—such as nutrition counselling, school-based interventions, micronutrient supplementation, deworming, and promoting physical activity—this training aims to strengthen adolescent health services across communities, with a specific focus on adolescent girls. Investing in adolescent nutrition today is an investment in Pakistan’s future human capital, economic growth, and social well-being.

## ✓ Session Objectives

By the end of the session, participants will be able to:

1. Explain the nutritional needs of adolescents and why this stage is critical for long-term health.
2. Identify common forms and causes of malnutrition among adolescents in Pakistan.
3. Promote adolescent-friendly nutrition services within health facilities and communities.
4. Educate adolescents and their families on healthy eating, physical activity, and delaying early pregnancies.

## 🕒 Session Outline (2 Hours)

Time	Content	Method
10 mins	<b>Introduction</b> – Importance of adolescent nutrition in Pakistan; overview of session objectives	Interactive discussion
15 mins	<b>Understanding adolescent nutritional needs</b> –	Flipchart/Presentation
15 mins	<b>Types and causes of adolescent malnutrition</b> (Undernutrition, Overnutrition, Micronutrient Deficiencies)	Guided discussion with visuals
20 mins	<b>Consequences of poor nutrition</b> – Mental health, reproductive health, long-term disease	Group Q&A
45 mins	<b>Group Activity:</b> Identifying local determinants and designing community actions (see below)	Small group work + report back
15 mins	<b>Adolescent-friendly services</b> – IFA supplementation, school programs, nutrition counseling, physical activity, and delaying pregnancies	Case study and discussion
10 mins	<b>Wrap-up and key messages</b>	Summary and reflection

## Group Activity (45 minutes)

### Objective:

To help participants identify social and cultural determinants of adolescent malnutrition and plan local actions to raise awareness and improve services.



### Instructions:

1. **Form small groups** (4–6 participants).
2. Distribute the **contextual table** below.
3. Ask each group to identify **at least 3 social or cultural issues** that affect adolescent nutrition in their local context.
4. Groups must fill out the table with **a task, target audience, collaborators, message, and method** for each issue.
5. Each group will present 1 example from their table during the report-back session.



### Materials Needed

- Flipcharts and markers
- Sample food models or posters
- IFA tablet samples (demo only)
- Projector (if available)
- Handouts of the group activity table

## ◆ Sample Table for Group Work

Task	Target Audience	Collaborators/ Stakeholders	Key Message	Method
<b>Promote IFA supplementation</b>	Menstruating girls (10–19 years)	LHWs, teachers, mothers, BHUs	Iron tablets keep girls strong, focused, and ready for school	Home visits, school health sessions, mother-daughter talks
<b>Delay early pregnancies</b>	Adolescent girls, families, community leaders	Religious leaders, teachers, CBOs	Early marriage and pregnancy harm health – Delay until 18	Parent meetings
<b>Encourage healthy school snacks</b>	School-going adolescents	School canteen managers, teachers, food vendors	Choose fresh, local foods – avoid junk and fizzy drinks	Poster displays, student food committees, competitions
<b>Screen adolescents for nutrition issues</b>	Out-of-school adolescent boys and girls	LHWs, male health mobilizers, NGOs	We check height and weight to support healthy growth	Health camps, community events, mobile screening



## Key Takeaways for Participants:

- Adolescents are growing fast and need **extra nutrition support**.
- Both **undernutrition and overnutrition** are real threats in Pakistan today.
- Adolescent girls face **unique risks**, especially if they become pregnant too early.
- **School, home, and health centers** must work together to promote healthy diets and activity.
- Every contact with a young person is an **opportunity to guide and educate**.

## Key Messages for Health Workers

- ✓ Teach adolescents about balanced diets and hydration
- ✓ Ensure weekly iron and folic acid tablets for menstruating girls
- ✓ Screen for underweight, overweight, and anemia
- ✓ Encourage daily physical activity
- ✓ Counsel families on delaying early marriage and pregnancy
- ✓ Create safe, supportive spaces at health posts and schools for youth

## Module 2 Slides: Adolescent Nutrition

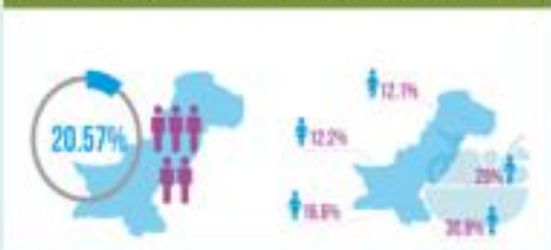
### Session Adolescent Nutrition



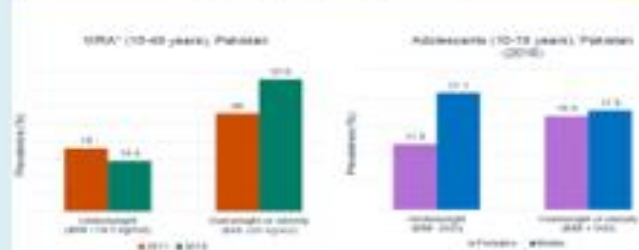
### Objectives

- At the end of the session, participants will be able to:
- Understand the current status of adolescent nutrition in Pakistan
  - Explain the importance of adolescent nutrition.
  - Describe the effects of adolescent malnutrition on long term health on becoming mothers and the children born to them.
  - Provide evidence-based recommendations for improving adolescent nutrition in Pakistan.

### Adolescent Health Indicators in Pakistan



### Malnutrition in Pakistan



### Micronutrients Deficiency

Trend in prevalence (%) of anaemia\* among WRA\*\* (15-49 years) in Pakistan<sup>1</sup>



### Underweight, short stature, overweight and obesity in adolescent boys and girls



### Causes of Adolescent Malnutrition

- Limited Access to Healthy Food**
  - Lack of safe, affordable, and nutritious food options
  - Poor food quality and availability in many areas
- Socioeconomic Factors**
  - Low income and poverty can limit access to proper nutrition
  - Neglect or lack of family support can also contribute
- Cultural Norms and Beliefs**
  - Traditional food practices or gender-based food distribution
  - Misconceptions about food and body image
- Personal Food Choices**

### Double Burden of Adolescent Malnutrition

Type	Common Problems
Undernutrition	<ul style="list-style-type: none"> <li>Wasting or thinness (very low weight)</li> <li>Underweight</li> <li>Stunting (short for age)</li> </ul>
Micronutrient Deficiency	<ul style="list-style-type: none"> <li>Iron deficiency (Anaemia)</li> <li>Iodine deficiency</li> <li>Vitamin A deficiency</li> </ul>
Overnutrition	<ul style="list-style-type: none"> <li>Overweight and obesity</li> <li>Too much sugar, fat and salt in the diet</li> </ul>



## Two Key Windows of Opportunity for Nutrition

### 1. First 1,000 Days (From Conception to 2 Years of Age)

- This is the **most important period** for a child's development.
- Good nutrition during this time supports **brain development, growth, and immunity**.

### 2. Adolescence (Second Window of Opportunity)

The teenage years are a **second critical chance** to:

- Improve nutrition
- Prevent long-term health problems
- Break the cycle of malnutrition, disease, and poverty
- Prepare girls for healthy motherhood in the future



## Consequences of Adolescent Nutrition

Type	Common Problems
Undernutrition	<ul style="list-style-type: none"> <li>✓ Wasting or thinness (very low weight)</li> <li>✓ Underweight</li> <li>✓ Stunting (short for age)</li> </ul>
Micro nutrient deficiency	<ul style="list-style-type: none"> <li>✓ Iron deficiency (anemia)</li> <li>✓ Iodine deficiency</li> <li>✓ Vitamin A deficiency</li> </ul>
Overnutrition	<ul style="list-style-type: none"> <li>✓ Overweight and obesity</li> <li>✓ Too much sugar, fat, and salt in the diet</li> </ul>

### Key Recommendation 1: Promoting Healthy Diet

Area of Focus	Recommended Action
Healthy Eating Education	<ul style="list-style-type: none"> <li>✓ Educate adolescents to eat a variety of foods and to avoid foods high in sugar, fat and salt, low salt drinks, fast food and soft drinks</li> </ul>
Food and Nutrition Security	<ul style="list-style-type: none"> <li>✓ Encourage the use of fortified foods (e.g. fortified wheat flour)</li> </ul>
Iron & Iodine Deficiency	<ul style="list-style-type: none"> <li>✓ Provide weekly iron and folic acid tablets to adolescent girls to help prevent anemia</li> </ul>
Adolescent Nutrition	<ul style="list-style-type: none"> <li>✓ Promote the use of iodized salt at home to prevent iodine deficiency disorders</li> </ul>
Screening	<ul style="list-style-type: none"> <li>✓ Provide screening services every 6 months for adolescents aged 10-19 years</li> </ul>
Physical Activity & Exercise	<ul style="list-style-type: none"> <li>✓ Include nutrition and exercise topics in school curricula, youth clubs, and programs to promote healthy lifestyles among adolescents</li> </ul>

### Key Recommendation 2: Promoting Physical Activity in Adolescents

Focus Area	Recommended Action
Daily Activity	<ul style="list-style-type: none"> <li>✓ Encourage adolescents to do at least 60 minutes of physical activity every day. Most of this should be moderate to vigorous intensity and aerobic.</li> </ul>
Muscle & Bone Strengthening	<ul style="list-style-type: none"> <li>✓ Include vigorous activities that build muscles and bones at least 3 times a week</li> </ul>
Activity Types	<ul style="list-style-type: none"> <li>✓ Promote fun and enjoyable activities like:                             <ul style="list-style-type: none"> <li>- Walking or cycling</li> <li>- Playing sports or games</li> <li>- Recreational activities</li> </ul> </li> </ul>
Involvement in Daily Life	<ul style="list-style-type: none"> <li>✓ Encourage participation in family, school, and community-based activities that involve movement and exercise</li> </ul>
Counseling and Support	<ul style="list-style-type: none"> <li>✓ Provide regular counseling to adolescents and their caregivers on the importance of physical activity for overall health and development</li> </ul>

### Key Recommendation 3: Prevention of STDs

Implementation Area	Activities
Counseling on prevention of STIs including HIV	<ul style="list-style-type: none"> <li>✦ Provide individual and group counseling services</li> <li>✦ Distribute educational materials</li> </ul>
Provision of materials and other interventions	<ul style="list-style-type: none"> <li>✦ Conduct health talks on malaria prevention</li> <li>✦ Delivering programs for food security</li> <li>✦ Environmental sanitation campaigns</li> </ul>
Early and timely management of STDs and infections	<ul style="list-style-type: none"> <li>✦ Routine screening for STDs</li> <li>✦ Prompt treatment and referral</li> <li>✦ Training healthcare workers in syndromic management</li> <li>✦ Community outreach services</li> </ul>

### Key Recommendation 4: Prevention of Early Pregnancy

Implementation Area	Key Activities
Adolescent education and empowerment	<ul style="list-style-type: none"> <li>✓ Encourage adolescents to stay in school longer</li> <li>✓ Provide access to formal and non-formal educational opportunities</li> </ul>
Counseling on family planning and pregnancy prevention	<ul style="list-style-type: none"> <li>✓ Provide adolescent-friendly sexual and reproductive health services</li> <li>✓ Educate on benefits of delaying pregnancy till age 18</li> </ul>
Policy endorsement and community engagement	<ul style="list-style-type: none"> <li>✓ Advocate for enforcement of laws prohibiting child marriage</li> <li>✓ Engage political, community and religious leaders in awareness</li> </ul>
Legal framework enforcement	<ul style="list-style-type: none"> <li>✓ Disseminate information on the Penal Code Act and Uganda's Constitution regarding legal age for marriage and consent</li> </ul>

### Key Recommendation 5: Prevention of Early Marriage

Implementation Area	Key Activities
Adolescent education and empowerment	<ul style="list-style-type: none"> <li>✓ Encourage adolescents to stay in school longer</li> <li>✓ Provide access to formal and non-formal educational opportunities</li> </ul>
Counseling on family planning and pregnancy prevention	<ul style="list-style-type: none"> <li>✓ Provide adolescent-friendly sexual and reproductive health services</li> <li>✓ Educate on benefits of delaying pregnancy till age 18</li> </ul>
Policy endorsement and community engagement	<ul style="list-style-type: none"> <li>✓ Advocate for enforcement of laws prohibiting child marriage</li> <li>✓ Engage political, community and religious leaders in awareness</li> </ul>
Legal framework enforcement	<ul style="list-style-type: none"> <li>✓ Disseminate information on the Penal Code Act and Uganda's Constitution regarding legal age for marriage and consent</li> </ul>

## MODULE THREE

### MATERNAL NUTRITION





## **Session: Maternal Nutrition**

### **Trainer's Notes:**

- Trainees include primary healthcare workers such as obstetricians, pediatricians, lady health visitors and other relevant staff working in hospitals, health centers and community health programs in Pakistan.
- This training will employ a participatory approach, using brainstorming, case discussions, group activities and Q&A to ensure active engagement and understanding.

### **Training Methods:**

- Brainstorming and Q&A sessions to explore prior knowledge and stimulate discussion.
- Group work to apply learning to local contexts.
- Presentations using slides and case studies to explain key concepts.
- Role-play and case studies to practice application of knowledge.

### **Training Facilities and Materials:**

- Projector and slides for presentations.
- Flip charts, markers and handouts.
- Handouts on nutritional guidelines, maternal health policies and case study materials.
- Case studies for group discussions and role-plays.
- Local statistics and reports on maternal and child nutrition in Pakistan.

### **Session Duration:**

- One day (6-8 hours)

## Session Breakdown:

Activity	Content/Details	Methodology
<b>Sub-Session 3.1: Importance of Maternal Nutrition</b>	<ul style="list-style-type: none"> <li>- Define maternal nutrition and its importance.</li> <li>- Discuss how maternal nutrition affects maternal health, pregnancy and fetal development.</li> <li>- Consequences of malnutrition (e.g., low birth weight, preterm birth).</li> </ul>	<p><b>Presentation:</b> Use slides with visuals on the importance of nutrition.</p> <p><b>Discussion:</b> Open for participant questions.</p>
<b>Sub-Session 3.2: Key Nutrients for Pregnant and Lactating Women</b>	<ul style="list-style-type: none"> <li>- <b>Key Nutrients:</b> Folate, iron, calcium, iodine, zinc, vitamin A, protein and energy.</li> <li>- Food sources for each nutrient.</li> <li>- Consequences of deficiencies (e.g., anemia, neural tube defects).</li> </ul>	<p><b>Presentation:</b> Discuss the importance of each nutrient.</p> <p><b>Interactive Q&amp;A:</b> Ask participants to suggest food sources.</p>
<b>Sub-Session 3.3: Impact of Poor Nutrition on Maternal Health and Birth Outcomes</b>	<ul style="list-style-type: none"> <li>- Link between poor nutrition and maternal health issues: anemia, preeclampsia, gestational diabetes.</li> <li>- Impact on fetal health: low birth weight, preterm birth, cognitive delay.</li> </ul>	<p><b>Presentation:</b> Discuss statistical data and case studies.</p> <p><b>Interactive Discussion:</b> Ask participants to share local case examples.</p>
<b>Sub-Session 3.4: Antenatal Assessment</b>	<ul style="list-style-type: none"> <li>- Components of antenatal assessments: weight, hemoglobin levels, blood pressure, fetal growth.</li> <li>- Nutritional screening: identifying risk factors like anemia and low weight.</li> </ul>	<p><b>Role-Play:</b> Participants practice performing nutritional screenings.</p> <p><b>Group Discussion:</b> Discuss the importance of regular check-ups.</p>
<b>Session 3.5: Identifying At-Risk Women</b>	<ul style="list-style-type: none"> <li>- Risk factors: Age, underweight, previous poor pregnancy outcomes, anemia, cultural barriers.</li> </ul>	<p><b>Presentation:</b> Discuss risk factors and screening criteria.</p> <p><b>Group Activity:</b> Small</p>

	<ul style="list-style-type: none"> <li>- Screening tools and criteria for identifying at-risk women.</li> </ul>	groups identify at-risk women from different scenarios.
<b>Sub-Session 3.6: Nutritional Counseling and Interventions</b>	<ul style="list-style-type: none"> <li>- Principles of nutritional counseling: listening, empathy and guidance.</li> <li>- Interventions: dietary changes, supplements, community-based education.</li> </ul>	<p><b>Presentation:</b> Discuss counseling techniques and interventions.</p> <p><b>Role-Play:</b> Participants practice counseling with a focus on motivation.</p>
<b>Group Discussion &amp; Activity: Case Study on Maternal Health and Nutritional Counseling</b>	<ul style="list-style-type: none"> <li>- Present a case of a pregnant woman with poor nutrition (e.g., anemia, low weight).</li> <li>- Groups will identify nutritional risks, recommend interventions and practice counseling techniques.</li> </ul>	<p><b>Group Work:</b> Small groups analyze the case, develop solutions and present their findings.</p> <p><b>Discussion:</b> Provide feedback on each group's approach.</p>
<b>Wrap-Up and Closing Remarks</b>	<ul style="list-style-type: none"> <li>- Recap the importance of proper nutrition during pregnancy and lactation.</li> <li>- Provide additional resources for further study and practice.</li> </ul>	<p><b>Q&amp;A Session:</b> Open floor for final questions and reflections.</p> <p><b>Closing:</b> Thank participants for their active participation.</p>

## Detailed Notes for Group Activities

### 1. Group Activity for Sub-Session 3.5: Identifying At-Risk Women

- **Instructions:** Divide participants into small groups and provide each group with different case scenarios of pregnant women. They should discuss and identify risk factors such as age, nutritional status, cultural practices and socio-economic background.
- **Outcome:** Groups will present their findings and discuss the different risk factors that could affect maternal nutrition.

### 2. Role-Play for Sub-Session 3.6: Nutritional Counseling and Interventions

- **Instructions:** Participants will practice counseling a pregnant woman with poor nutrition (e.g., anemic or low weight). One participant will play the counselor and the other will act as the pregnant woman. The counselor will assess the woman's nutrition, offer suggestions and motivate her to adopt healthy dietary changes.
- **Outcome:** This activity will help participants practice real-life counseling techniques in a supportive environment.

### 3. Group Discussion & Activity for Case Study (Session 3.7)

- **Instructions:** Provide participants with a detailed case study about a pregnant woman facing multiple nutritional challenges (e.g., anemia, low weight, limited access to food). Groups will discuss how to address her nutritional needs, recommend appropriate interventions and design a counseling plan.
- **Outcome:** Each group will present their proposed solutions and the facilitator will provide feedback on each group's approach.

## **Key Learning Points:**

### **1. Nutritional Status of Maternal and Child Health in Pakistan:**

- High rates of malnutrition, anemia, stunting and underweight among mothers and children.
- Socio-economic factors and limited access to healthcare contribute to these challenges.

### **2. Nutritional Needs:**

- **Pregnant Women:** Adequate intake of iron, folic acid, calcium and protein is crucial for maternal health and fetal development.
- **Children Under 5:** Exclusive breastfeeding for the first 6 months, followed by complementary feeding, with adequate nutrients like iron, vitamin A and zinc.

### **3. Common Nutritional Issues in Pakistan:**

- Iron deficiency anemia, vitamin A deficiency, protein-energy malnutrition.
- Low birth weight and stunting due to inadequate maternal nutrition.

### **4. Strategies to Address Nutritional Gaps:**

- Promote exclusive breastfeeding, timely complementary feeding and appropriate maternal nutrition during pregnancy.
- Community-based nutrition education programs.
- Collaboration with local nutrition programs and resources.

### **5. Role of Healthcare Providers:**

- Providing counseling and education to mothers on proper nutrition.
- Identifying and addressing nutritional deficiencies in pregnant women and children.
- Supporting national nutrition programs, such as immunization and vitamin supplementation.

**Follow-up:**

- The trainer will provide additional resources (pamphlets, handouts) on maternal and child nutrition that trainees can refer to in their practice.
- Encourage trainees to implement the knowledge gained and share feedback on how they have applied it in their work.

**Closing Remarks:**

- Conclude the session with a reminder of the significance of improving maternal and child nutrition in Pakistan and the role healthcare workers play in making a difference.
- Encourage trainees to remain updated on local nutrition programs and to continue learning about nutrition-related issues.

## Module 3 Slides: Maternal Nutrition

### Module 3 Maternal Nutrition during Pregnancy



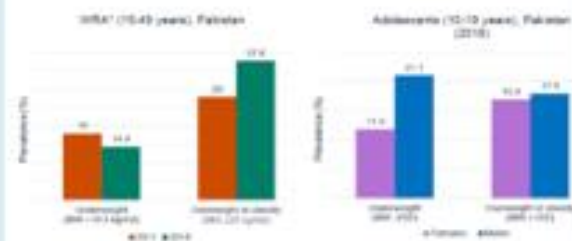
#### Maternal & Child Health Indicators in Pakistan

Neonatal mortality rate is 42/1000 live births. <sup>1</sup>	→ Pakistan ranks as the highest neonatal mortality rate in South Asia. <sup>1</sup>
Maternal mortality ratio (MMR) is 155/100,000 (in 2018). <sup>2</sup>	→ High MMR. Despite significant improvements in MMR from 2000 to 2017, it remains considerably high. <sup>2</sup>
Low birth weight (<2500 g) is 22%. <sup>3</sup>	→ Global data 10% to 20% (2017). <sup>3</sup> → Pakistan's LBR rates are almost double global prevalence.
Wasting children under five (in 2018) is 40.2%. <sup>4</sup>	→ Very high rates. <sup>4</sup> → Trend: average annual reduction rate +0.0% → far below global nutrition targets.

#### Objectives

- At the end of this session, participants will be able to:
  - Understand the current status of maternal nutrition in Pakistan.
  - Explain the importance of maternal nutrition during pregnancy and its role in ensuring the health and well-being of both the mother and the developing child.
  - Identify the specific nutritional requirements during pregnancy, including the essential vitamins, minerals, and macronutrients needed for a healthy pregnancy.
  - Differentiate between iron and folic acid supplements (IMSI), Weekly iron folic acid supplementation (WIFAC) and Multiple micronutrient supplements (MMS).
  - Describe the effects of maternal malnutrition on children, including its impact on birth outcomes, growth, development, and the long-term health of the child.
  - Provide evidence-based recommendations for improving maternal nutrition in Pakistan.

#### Malnutrition in Pakistan



#### Micronutrients Deficiency

##### Trend in prevalence (%) of anaemia\* among WRA\*\* (15-49 years) in Pakistan<sup>1</sup>



Image reproduced from NNS 2018 - Key Findings Report

#### Adequate Nutritious Diet and Adequate Micronutrient Supplementation During Pregnancy

To prevent anaemia and micronutrient deficiencies and decrease the risk of diet-related health conditions, pregnant women are recommended to consume:

- An adequate nutritious diet composed of a variety of foods from the different food groups, with an emphasis on iron-rich foods (such as beef, poultry, and iron-fortified foods).
- Daily micronutrient supplements that includes 30-60 mg of iron and 400 mcg of folic acid as recommended by the WHO.

#### Importance of maternal nutrition

- Before Pregnancy
- During Pregnancy
- During Breastfeeding



#### Micronutrients Deficiency





## Importance of maternal nutrition

❑ The increased nutritional requirements serve several key purposes:

- ✓ Meet Physiological Requirements;
- ✓ Sustain Fetal Growth and Development;
- ✓ Protect the Health of the Mother and Prepare for Breastfeeding;

Meeting the increased nutritional needs during pregnancy is vital not only for the health of the mother but also for the proper growth and development of the baby, ensuring a healthy pregnancy and preventing optimal outcomes in childbirth and breastfeeding.

## Increased Nutritional Needs during Pregnancy

During pregnancy, nutritional needs are increased to:

- Meet physiological requirements
- Sustain fetal growth and development
- Protect the health of the mother during pregnancy and prepare for breastfeeding

Trialweek	Estimated Energy Requirements (kcal/day)	
1 <sup>st</sup> trimester	~	1 food (e.g. 1 cup of milk & a handful of peanuts)
2 <sup>nd</sup> trimester	+ 340	
3 <sup>rd</sup> trimester	+ 450	1 food (e.g. 1 cup of milk, 1 small piece of whole wheat & 1 small piece of vegetable salad)

## Impact of Poor Nutrition on Maternal Health and Birth Outcomes

### Impact on maternal Health

- Anemia
- Preeclampsia
- Postpartum Depression

### Impact on Fetal Health

- Intrauterine Growth Retardation (IUGR)
- Preterm Birth
- Low Birth Weight (LBW)

## Nutritional Needs of a Woman

Recommended Dietary Allowance (RDA) of selected micronutrients

Micronutrient	Non-pregnant		Pregnant	
	Adults (18-50 years)	Women (18-50 years)	Adults (18-50 years)	Women (18-50 years)
Calcium	1000	1000	1000	1000
Folate	400	400	600	600
Iron	8	8	27	27
Vitamin A	5000	5000	5000	5000
Vitamin B1	1.3	1.3	1.3	1.3
Vitamin B2	1.1	1.1	1.1	1.1
Vitamin B6	1.3	1.3	1.3	1.3
Vitamin C	75	75	80	80
Vitamin D	15	15	15	15
Vitamin E	15	15	15	15
Vitamin K	120	120	120	120
Zinc	11	11	11	11
Copper	0.9	0.9	0.9	0.9
Selenium	55	55	55	55
Chromium	35	35	35	35
Manganese	2.3	2.3	2.3	2.3

Non-pregnant vs. Pregnant majority of micronutrient requirements are

Both are increased during pregnancy

Not all women need all these nutrients. Some women may need more of some nutrients than others. Consult your healthcare provider for more information.

## Nutrition during pregnancy

Through food alone, it is difficult for pregnant women to meet their dietary needs.

Poor nutrition status of the mother

Negative consequences on their own health and the health of their baby

To achieve their required nutritional needs, pregnant women are advised to consume an adequate nutritious diet, in addition to daily adequate micronutrient supplementation.

## Group Discussion

Have you provided dietary supplements to pregnant women as part of routine ANC in Pakistan?

❑ If yes, which dietary supplement(s)? Please explain the reason for the provision of this specific supplement.

❑ If you are not providing dietary supplements, could you share why not?



## The impact of poor nutrition on pregnancy and birth outcomes

What are some negative health consequences of anaemia on the pregnant woman and birth outcomes?

- a. Maternal death
  - b. Babies born too small
  - c. Babies born too early
  - d. Maternal tiredness
  - e. All of the above
- Increased risk of maternal death
  - Increased risk of poor pregnancy and birth outcomes,
  - Preterm birth
  - Low birth weight
  - Maternal tiredness, weakness and/or dizziness

## IFAS Vs MMS

IFAS = Iron and Folic Acid Supplementation  
MMS = Multiple Micronutrient Supplementation

- Both are antenatal supplements
- IFAS includes 30-60mg of iron and 400mcg of folic acid.
- MMS provides 13-15 micronutrients, including iron and folic acid (all in one tablet).
- MMS is different from MNP (micronutrient powder) which is used for children.



## IFAS Vs MMS

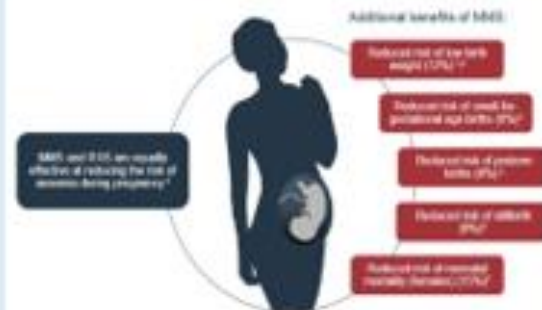


Iron (30-60mg)  
Folic acid (400Ug)



Vitamin B1 (1.4 mg)  
Vitamin B2 (1.4 mg)  
Vitamin B6 (1.9 mg)  
Vitamin B12 (2.6 µg)  
Vitamin A (800 µg)  
Vitamin D (5 µg)  
Vitamin E (10 mg)  
Vitamin C (75 mg)  
Niacin (18 mg)  
Iron (30 mg)  
Folic acid (400 µg)  
Zinc (15 mg)  
Copper (2 mg)  
Selenium (85 µg)  
Iodine (150 µg)

## Effectiveness of MMS & IFAS



## Antenatal Assessment of Maternal Nutritional Status

### A. Anthropometric Measurements

### B. Dietary Assessment

### A. Anthropometric Measurements

#### • **Weight:**

##### – **Recommended Weight Gain:**

- Underweight (BMI < 18.5): 12.5–18 kg weight gain
- Normal weight (BMI 18.5–24.9): 11.5–16 kg weight gain
- Overweight (BMI 25–29.9): 7–11.5 kg weight gain
- Obese (BMI ≥ 30): 5–9 kg weight gain

– Excessive weight gain can lead to complications such as gestational diabetes and hypertension, while insufficient weight gain can result in low birth weight and developmental issues for the baby.

- **Mid Upper Arm Circumference (MUAC):** MUAC is a simple yet effective indicator of nutritional status, particularly for identifying under-nutrition. A MUAC less than 23.5 cm may indicate maternal under-nutrition, requiring intervention.

### B. Dietary Assessment

#### □ **Dietary Recall or Food Frequency:**

- **Nutrient-Rich Foods:** Ensure that the pregnant woman consumes food that provides adequate amounts of key nutrients:

- **Iron-rich foods:** Meat, legumes, spinach, fortified cereals
- **Folate-rich foods:** Leafy greens, citrus fruits, legumes, fortified cereals
- **Calcium-rich foods:** Dairy products, leafy greens
- **Protein-rich foods:** Meat, eggs, beans, nuts

## Identifying At-Risk Women

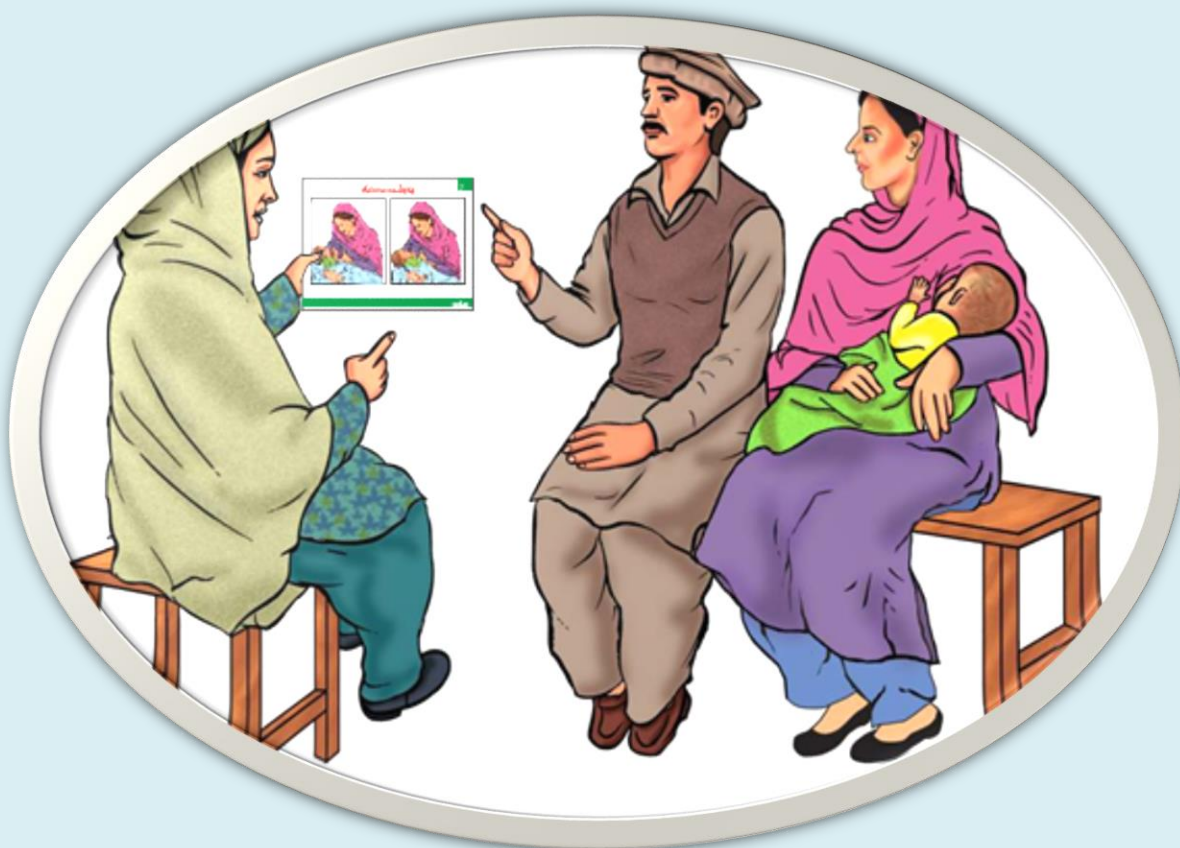
- **Adolescents:**
- **Underweight Women:**
- **Women with Multiple Pregnancies:**
- **Women with Preexisting Health Conditions:**
- **Socioeconomic Factors:**

## Nutritional Counseling and Interventions

- **Dietary Recommendations:**
- **Supplements:**
- **Addressing Barriers:**

## MODULE FOUR

### COUNSELLING: LISTENING & LEARNING SKILLS



## **SESSION: Listening and Learning Skills**

- The trainees are health workers who frequently engage in counseling roles. However, they may not fully recognize the significance and impact of counseling, which leads to inadequate focus on counseling skills. They tend to rely on one-way communication and often use complex terminology.
- The primary objective of this session is to enhance the trainees' ability to apply counseling skills specifically for infant and young child feeding.
- The session will be conducted using case studies of infant and young child feeding counseling, allowing trainees to practice counseling skills through role-play.



**Training Equipment and Materials:** Whiteboard, markers, colored charts, dolls/mannequin and case studies for role-playing.

### **Objectives of the session:**

By the end of this session, participants will be able to:

- List the six listening and learning skills for effective counseling.
- Provide examples of each listening and learning skill.
- Demonstrate the appropriate use of these skills in counseling mothers on infant and young child feeding.

**Session Duration: 120 minutes**

**Session Plan:**

Content	Methodology	Quick Response
<b>Knowledge Assessment</b>	Brainstorming, Q&A, Immediate assessment.	Use results for adjustment during the training process.
<b>Objectives of the session</b>	Co-participation. Instruct trainees to read and comment on the objectives.	Listening and learning.
<b>Listening and Learning Skills</b>	Role-playing with explanations. Present skills one by one.	Trainer and trainees provide feedback.
<b>Listening and Learning Skills</b>	Write the title “Listening and Learning Skills” on an A0 paper. List the 6 skills.	-
<b>Building Confidence and Giving Support Skills</b>	Write the title “Building Confidence and Giving Support Skills” on an A0 paper. List the 6 skills.	Role-play in pairs. Listen to understand each skill clearly.
<b>Building Confidence and Giving Support Skills</b>	After each case study, ask questions and provide feedback to help trainees understand the skills better.	Trainer and trainees provide feedback.
<b>Evaluation</b>	Conduct Q&A with the post-test questions.	-
<b>Summarize the Session</b>	Trainer summarizes the skills and answers any questions.	Recap the session’s key points.

## A. Examples to Demonstrate Listening and Learning Skills

### 1. Effective Non-Verbal Communication:

- **Greeting:**

*“Good morning/afternoon. How has your baby been doing with breastfeeding/eating lately?”*

- **Positioning:**

- *Ineffective:* Standing with your head higher than the mother's.
- *Effective:* Sitting with your head at the same level as the mother's.

- **Eye Contact:**

- *Effective:* Maintaining eye contact and actively listening to the mother.
- *Ineffective:* Looking away or down at your notes while the mother is speaking.

- **Removing Barriers:**

- *Ineffective:* Sitting behind a table or taking notes while talking.
- *Effective:* Sitting at eye level with the mother, without barriers and refraining from taking notes while speaking.

- **Take Time:**

- *Effective:* Make the mother feel your attention by taking time with her, sitting down, smiling and patiently watching as she breastfeeds.
- *Ineffective:* Rushing, showing impatience, or constantly checking the time.

- **Appropriate Communication:**

- *Effective:* Communicate with both the mother and baby in a caring and appropriate manner.
- *Ineffective:* Touching the mother or baby inappropriately.

### 2. Using Open-Ended vs. Close-Ended Questions:

- **Close-Ended Questions:**

- *Health Worker:* "Good morning, I'm the midwife. How's your baby?"
- *Mother:* "S/he is fine, thank you."
- *Health Worker:* "Are you breastfeeding your baby?"
- *Mother:* "Yes."

- *Health Worker:* "Do you have any problems?"
- *Mother:* "No."
- *Health Worker:* "Do you breastfeed regularly?"
- *Mother:* "Yes."
- **Trainer's comment:** The counselor receives only simple "Yes" or "No" responses, missing out on detailed information about how the mother feeds her baby.
- **Open-Ended Questions:**
  - *Health Worker:* "Good morning, I'm the midwife. How is your baby?"
  - *Mother:* "Thank you, s/he is fine but often gets hungry."
  - *Health Worker:* "Can you tell me how you feed your baby?"
  - *Mother:* "I breastfeed, but I also give a bottle of milk in the evening."
  - **Trainer's comment:** The open-ended question prompts a detailed response and helps gather more information.

### 3. Using Words and Gestures to Show Attention:

- **Health Worker:** "Good morning/afternoon. How is your baby now that complementary feeding has started?"
- **Mother:** "Good morning/afternoon. I think s/he is fine."
- **Health Worker:** *Mmm... (smiling and nodding)*
- **Mother:** "Well, I was a bit worried because s/he vomited the other day."
- **Health Worker:** "Really?" *(raising eyebrows, showing attention)*
- **Mother:** "I'm wondering if it was because I fed him/her fish."
- **Health Worker:** "Aha." *(nodding to show sympathy)*
- **Trainer's comment:** The counselor encourages the mother to continue speaking by using words and gestures to show attentiveness.

### 4. Repeating What the Mother Says:

- **Health Worker:** "Good morning/afternoon. How are you and your baby today?"
- **Mother:** "S/he wants to feed too much and is always on my breast!"
- **Health Worker:** "Does s/he always want to feed?"
- **Mother:** "Yes. S/he seemed to be hungrier this week. I think I don't have enough milk."



- **Health Worker:** "During this week, s/he seemed hungrier, didn't s/he?"
- **Mother:** "My sister suggested I feed him/her formula a few times a day."
- **Health Worker:** "Your sister said your baby needed formula?"
- **Mother:** "Yes. Can you tell me which formula milk is best?"
- **Trainer's comment:** The counselor repeats the mother's statements, prompting the mother to provide more detailed information.

#### 5. Empathizing – Showing Understanding of the Mother's Feelings:

- **Health Worker:** "Good morning/afternoon. How are you and your baby today?"
- **Mother:** "S/he refused to eat and I'm worried s/he's sick."
- **Health Worker:** "Are you concerned about your baby?"
- **Mother:** "Yes, some children in my village are also sick and I'm afraid s/he might have caught something."
- **Health Worker:** "That must be very worrying for you."
- **Trainer's comment:** The counselor shows empathy for the mother's concerns with statements like "Are you worried about your baby?" and "That must be very worrying for you."

#### 6. Using Judgmental vs. Non-Judgmental Words:

- **Using Judgmental Words:**
  - **Health Worker:** "Good morning/afternoon. Is your baby breastfeeding well?"
  - **Mother:** "Yes, I think so."
  - **Health Worker:** "Do you think you have enough milk for your baby?"
  - **Mother:** "I'm not sure... I hope I do, but maybe not..." (*looking worried*)
  - **Health Worker:** "Has your baby gained weight well this month?"
  - **Mother:** "I'm not sure..."
  - **Health Worker:** "Can I see the growth chart?"
  - **Trainer's comment:** The health worker doesn't learn anything useful but makes the mother feel more anxious.

- **Using Non-Judgmental Words:**
  - **Health Worker:** "Good morning/afternoon. How are you and your baby managing breastfeeding?"
  - **Mother:** "Everything seems fine. I haven't fed him/her anything else."
  - **Health Worker:** "How is his/her weight? Can I see the growth chart?"

## B. Examples Illustrating the Skills of Building Confidence and Providing Support

### 1. Accepting the Mother's Opinion:

- **Mother:** "My milk is so thin that I have to feed my baby with formula milk."
  - **Health Worker:** "Oh, no! It looks like that but it is not thin at all." (*nodding your head, smiling*)
  - **Trainer's Question:** Does the health worker agree, disagree, or accept the mother's opinion?
  - **Trainer's Comment:** This response is not effective as it shows disagreement with the mother's concerns.
- **Mother:** "My milk is so thin that I have to feed my baby with formula milk."
  - **Health Worker:** "Oh, yes! Thin milk might be a problem."
  - **Trainer's Question:** Does the health worker agree or disagree?
  - **Trainer's Comment:** This response is not effective as it shows agreement without addressing the mother's feelings or providing guidance.
- **Mother:** "My milk is so thin that I have to feed my baby with formula milk."
  - **Health Worker:** "I know! You're worried about your milk, aren't you?"
  - **Trainer's Question:** Does the health worker agree, disagree, or accept the mother's opinion?
  - **Trainer's Comment:** This is an effective response as it acknowledges and accepts the mother's concern, showing empathy and understanding.



## 2. Illustration for Identifying and Praising What the Mother Is Doing Well:

- Scenario: A health worker is measuring a baby who is exclusively breastfed, but the growth chart shows poor growth, with a slight rise that's different from the reference line.
  - **Health Worker:** "Your baby's weight gain this month is due to your breast milk."
  - **Trainer's Comment:** This is a positive, affirming statement, praising the mother's efforts in breastfeeding, even though the baby's growth is slower than expected.

## 3. Illustration for Providing Short and Appropriate Information:

- **Mother:** "My baby has diarrhea. Should I stop breastfeeding him/her?"
  - **Health Worker:** "It's great that you're seeking advice before making a decision. Typically, diarrhea improves faster if you continue breastfeeding your baby."
  - **Trainer's Comment:** The health worker provides brief and clear advice, reassuring the mother without making her feel guilty or wrong.
- **Health Worker:** "Oh no, don't stop breastfeeding. Diarrhea will get worse if you do."
  - **Trainer's Comment:** This response is inappropriate because it's judgmental and makes the mother feel like she's made a mistake.

## 4. Illustration for Using Simple Language:

- **Health Worker:** "Good morning/afternoon. How can I help you?"
  - **Mother:** "My baby is 6 months old. Can you give me advice on complementary foods?"
  - **Health Worker:** "I'm glad you asked. At six months, babies need complementary foods because breast milk alone doesn't provide all the nutrients. For example, breast milk only provides 1mg of iron and about 450 calories, which isn't enough for babies who need 700 calories. It also lacks enough vitamin A, zinc and other micronutrients needed after six months."
  - **Trainer's Question:** What do you observe in the health worker's response?

- **Trainer's Comment:** The health worker gives too much unnecessary detail and uses technical terms that could confuse the mother. A simpler, clearer explanation would be more effective.

### **Skill 1: Use Helpful Non-Verbal Communication**

Non-verbal communication is an essential tool for conveying empathy and attentiveness. It involves showing your interest and care through body language, facial expressions and other physical cues. Non-verbal communication can help a mother feel more comfortable and encourage her to share more openly.

#### **Examples of Helpful Non-Verbal Communication:**

- **Maintain eye contact** to show attentiveness.
- **Keep your posture open and relaxed**, which signals approachability and understanding.
- **Use facial expressions** that convey empathy and concern (e.g., nodding, showing concern, smiling).
- **Remove physical barriers**, such as desks or other objects, to create a more open and comfortable space.
- **Appropriate use of touch**, such as a gentle touch on the arm, can be reassuring when culturally appropriate.

By using these cues, you are telling the mother that you are genuinely engaged and interested in what she has to say.

### **Skill 2: Ask Open Questions**

Open-ended questions encourage detailed responses and help you gather more information about the mother's feelings, experiences and challenges. These questions often start with "how," "what," "when," "where," "why," or "who," prompting mothers to explain their situation in more depth.

### Examples of Open Questions:

- "How are you feeding your baby?"
- "What challenges are you facing with breastfeeding?"
- "Can you tell me about your baby's feeding routine?"
- "What are your thoughts on introducing complementary foods?"

### Why Open Questions Matter:

- They provide deeper insight into the mother's situation.
- They help avoid yes/no answers that don't offer useful information.
- They foster a more natural and engaging conversation.

Closed questions can also be helpful in certain situations, such as verifying facts. However, open questions are generally more effective for starting and continuing conversations.

### Skill 3: Use Responses and Gestures that Show Interest

Active listening involves more than just hearing words—it requires responding in ways that show you are fully engaged. Simple responses like nodding, smiling and verbal acknowledgments such as “Aha,” or “Mmm,” signal to the mother that you are paying attention and that her words are valued.

### Examples of Responses and Gestures:

- **Nodding** while the mother speaks to show you are following her.
- **Saying "Mm-hmm"** or “I understand” to acknowledge what she's saying.
- **Smiling** to provide warmth and reassurance.
- **Using encouraging phrases** like "Tell me more" to invite further discussion.

These non-verbal and verbal cues help create a supportive and empathetic environment.

#### **Skill 4: Reflect Back What the Mother/Caregiver Says**

Reflection involves repeating or paraphrasing what the mother has said to ensure that you have understood correctly and to encourage her to elaborate. This technique shows the mother that her concerns are being heard and valued.

##### **Example of Reflecting Back:**

- Mother says: "I don't know what to give my baby, she refuses everything."
- You reflect: "Your baby is refusing all the food you offer her?"

By rephrasing her words, you demonstrate active listening and invite her to elaborate further.

##### **Why Reflection Matters:**

- It clarifies and confirms the information.
- It reassures the mother that she is being heard.
- It encourages the mother to open up more about her situation.

#### **Skill 5: Empathize – Show that You Understand How the Mother/Caregiver Feels**

Empathy is about putting yourself in the mother's shoes and understanding her emotions. It's more than just acknowledging facts—it's about recognizing the emotional experience behind those facts.

##### **Example of Empathy:**

- Mother says: "My baby wants to feed very often and it makes me feel so tired."
- You respond: "You must be feeling very tired from constant feeding, I understand how that can be overwhelming."

##### **Why Empathy is Crucial:**

- It builds trust and rapport with the mother.
- It makes the mother feel supported and understood.

- It opens the door for her to discuss her emotions and challenges without feeling judged.

### **Skill 6: Avoid Using Words that Sound Judging**

Avoiding judgmental language is crucial to maintaining a supportive and non-critical environment. Words such as "right," "wrong," "good," or "bad" can make a mother feel as though she is being evaluated. Instead, use neutral, non-judgmental language to encourage a more open conversation.

#### **Examples of Judging Words to Avoid:**

- "You should be doing this right."
- "That's wrong; you should feed your baby like this."
- "You're not doing it well."

Instead, use neutral phrases:

- "What are your thoughts on feeding your baby?"
- "What challenges have you experienced with feeding?"
- "How can I help you with this?"

#### **Why Avoiding Judging Words Matters:**

- It prevents the mother from feeling criticized or inadequate.
- It promotes a more open and honest discussion.
- It supports a collaborative approach to problem-solving.

### **Conclusion**

Listening and learning skills are fundamental to effective counseling, especially when working with mothers on infant and young child feeding. By using non-verbal communication, open-ended questions, empathetic responses, reflection and neutral language, healthcare workers can foster an environment of trust and support. These skills help mothers feel heard, understood and empowered to make informed decisions about their infant's feeding practices.

## **Group Activity:**

### **Training Module Activity: Maternal and Young Child Feeding in Pakistan**

**Target Audience:** Primary Healthcare Workers

**Objective:** To enhance listening, learning and communication skills in the context of maternal and young child feeding (IYCF) in Pakistan.

## **Duration:**

60 minutes (Including discussions, group work and feedback)

### **Scenario 1: Breastfeeding Challenges in Rural Areas**

**Background:** A mother from a rural village has just delivered her first baby. She is facing difficulties with breastfeeding because she is unsure of how to latch her baby correctly. Additionally, she mentions that there are no breastfeeding support groups in her community and she is hesitant to ask for help because of traditional beliefs that breastfeeding only works if the mother eats specific foods.

## **Key Skills:**

- **Listening:** Focus on hearing both the mother's concerns and the underlying emotional context.
- **Learning:** Understand the mother's lack of support and knowledge and identify the gap in breastfeeding information.
- **Communication:** Provide clear, culturally sensitive advice and reassurance, using simple language to help her overcome the challenge.

## **Discussion Points:**

- How would you listen to the mother's concerns and build rapport?
- How would you address the traditional beliefs surrounding breastfeeding, providing evidence-based information?

## Scenario 2: Early Introduction of Solid Foods

**Background:** A mother comes to your clinic with her 6-month-old infant and mentions that she has started giving her baby mashed rice and other soft foods. She says that her mother-in-law and neighbors advised her to start early because the baby is "too hungry" and not satisfied with breastfeeding alone.

### Key Skills:

- **Listening:** Pay attention to the mother's reasoning behind early introduction of solids and her concerns about her baby's hunger.
- **Learning:** Understand the cultural practices influencing the early introduction of solid foods and any misunderstandings about infant feeding.
- **Communication:** Provide guidance on the recommended age for introducing solids and explain the importance of exclusive breastfeeding for the first six months.

### Discussion Points:

- How do you listen to the mother's concerns without judgment, while addressing the misinformation about early solids?
- What culturally appropriate methods can you use to explain the importance of exclusive breastfeeding until 6 months?
- How would you communicate the potential risks of introducing solids too early?



### Scenario 3: Dealing with Malnutrition Concerns

**Background:** A mother brings her 2-year-old child to the clinic, concerned that her child is not gaining weight and looks undernourished. The mother is following the local practice of feeding the child a basic diet of rice and lentils but is unsure if this is enough. She mentions that she has heard conflicting advice about how to feed her child from family members and neighbors.

#### Key Skills:

- **Listening:** Understand the mother's emotional state (concern, confusion) and her desire to improve her child's health.
- **Learning:** Recognize the potential causes of malnutrition, including the limited diversity in the child's diet.
- **Communication:** Use simple, clear communication to explain the need for a diverse diet and introduce complementary foods, focusing on the nutritional value of local foods.

#### Discussion Points:

- How would you listen to the mother's concerns and assess her understanding of her child's nutritional needs?
- How can you use the opportunity to educate the mother about the importance of a balanced diet and the introduction of nutritious, locally available foods?
- How would you involve the family, especially the mother-in-law, in understanding the importance of diverse nutrition for children?

## Scenario 4: Maternal Health and Nutrition During Pregnancy

**Background:** A pregnant woman visits the clinic for a routine check-up. She mentions feeling weak and tired all the time and is concerned that she's not getting the nutrients she needs. She expresses that she cannot afford expensive foods and is unsure about what to eat for better health during her pregnancy. Her family believes that eating "heavy foods" will help her feel stronger, but she is not sure what that means.

### Key Skills:

- **Listening:** Pay attention to the woman's health concerns and financial limitations regarding nutrition.
- **Learning:** Recognize the social and economic barriers to proper maternal nutrition and the misconceptions about what constitutes "heavy foods."
- **Communication:** Provide clear, culturally sensitive guidance on affordable and nutritious foods that are accessible to her, while also addressing her fatigue and health.

### Discussion Points:

- How would you listen to the woman's health concerns and validate her feelings without making her feel inadequate or guilty?
- What affordable, locally available foods can you recommend to improve her nutrition during pregnancy?
- How would you communicate the importance of nutrition for both her health and the baby's development, while respecting cultural beliefs?

### Conclusion:

Each scenario encourages the participants (primary healthcare workers) to practice listening, learning and communication skills, helping them to: Listen empathetically and understand the needs of mothers and caregivers, learn about cultural beliefs and challenges that may affect maternal and child nutrition and Communicate effective, evidence-based practices in a culturally sensitive and understandable manner.

## **Infant and Young Child Feeding (IYCF)**

### **Session 4.1: IYCF Statistics in Pakistan & Window of Opportunity**

#### **Facilitator Tips:**

- Be interactive and encourage participant engagement throughout the session.
- Use local examples or anecdotes to make the content more relatable.

Keep the discussions focused and respectful of diverse opinions and practices related to infant feeding.

#### **Session Objectives:**

By the end of the session, participants will:

1. Understand the current statistics related to Infant and Young Child Feeding (IYCF) in Pakistan.
2. Gain insight into the importance of the "Window of Opportunity" for optimal feeding practices.
3. Identify the challenges and opportunities in improving IYCF in Pakistan.
4. Be equipped with data to support advocacy for better IYCF practices at various levels (community, district, national).

#### **Materials Needed:**

- Projector and screen for presentations.
- Flipchart or whiteboard for group discussions and brainstorming.
- Handouts with IYCF statistics, a summary of the window of opportunity and key resources for further reading.
- Markers and sticky notes for group work and brainstorming.

**Session Duration:** 90 minutes

## Session Plan:

Activity	Details	Facilitator Notes
<b>Introduction &amp; Icebreaker</b>	<ul style="list-style-type: none"> <li>- Welcome participants and outline the session objectives.</li> <li>- Ask participants to share their experiences with IYCF.</li> </ul>	<p>Create an open, welcoming atmosphere.</p> <p>Use a relevant icebreaker.</p>
<b>IYCF Statistics in Pakistan</b>	<ul style="list-style-type: none"> <li>- Present key IYCF statistics in Pakistan (breastfeeding rates, complementary feeding, child growth, micronutrient deficiencies).</li> <li>- Discuss the significance of the data.</li> </ul>	<p>Use visuals (charts, graphs) for engagement.</p> <p>Highlight key figures.</p>
<b>Window of Opportunity for IYCF</b>	<ul style="list-style-type: none"> <li>- Explain the concept of the “Window of Opportunity” for optimal feeding from birth to 2 years.</li> <li>- Discuss breastfeeding, exclusive breastfeeding and complementary feeding.</li> </ul>	<p>Use a visual representation of the "Golden Window" for clarity.</p>
<b>Challenges and Opportunities for IYCF in Pakistan</b>	<ul style="list-style-type: none"> <li>- Facilitate group discussion on the challenges to IYCF (cultural, socioeconomic, health system barriers).</li> <li>- Brainstorm opportunities to address these challenges.</li> </ul>	<p>Use real-life examples to drive home points.</p>
<b>Conclusion &amp; Action Steps</b>	<ul style="list-style-type: none"> <li>- Summarize key takeaways: IYCF statistics, window of opportunity, challenges and opportunities.</li> <li>- Encourage participants to apply learnings in their work.</li> </ul>	<p>Reinforce the importance of IYCF and community action.</p>

### Local Nutrition Status and Common Practices (Activity):

In this session, we will explore the local nutrition situation in your community. You will have the opportunity to reflect on your experiences with both good and poor nutrition practices.

In the table below, you will find several questions regarding the current nutrition situation. For each question, there are three response options: "few," "half," and "most." Based on your experience, select the option that best represents the situation in your area by marking the corresponding box:

	Few	Half	Most
How many children aged under 5 years have acute severe malnutrition?			
How many children aged under 5 years have acute moderate malnutrition?			
How many children aged under 5 years are overweight/obese?			
How many women of childbearing age are overweight/obese?			
How many children aged under 5 years of age have anaemia?			
How many women of childbearing age have anaemia?			
How many children start solid/semi-solid foods at 6 months of age?			

### Common Practices:

In the table below, there are several questions related to infant feeding practices. Next to each question, you'll find three options: "few," "half," and "most." Select the answer that best reflects your experience by marking the appropriate box.

	Few	Half	Most
How many babies have immediate skin-to-skin contact?			
How many breastfeed within 1 hour after delivery?			
How many have other foods or drinks before they start breastfeeding?			
How many breastfeed exclusively for 6 months?			
How many have other foods or drinks before:			
1 day?			
1 month?			
2 months?			
3 months?			
4 months?			
6 months?			
How many continue to breastfeed for more than:			
6 months?			
12 months?			
24 months?			
How many children start solid/semi-solid foods:			
Before 6 months of age?			
Between 6 and 8 months of age?			
After 8 months of age?			
How many children aged 6 up to 24 months:			
Receive an appropriate variety of foods? <sup>1</sup>			
Receive an appropriate frequency of foods? <sup>2</sup>			
Receive an appropriate amount of food for each meal? <sup>3</sup>			
Receive an appropriate consistency of foods? <sup>4</sup>			

## Module 4 Slides: Listening & Learning Skills

### Module Four Listening and Learning Skills



### The Role of Listening and Learning in Counseling

- ✓ Essential to create a comfortable, non judgmental space
- ✓ Workers can build trust and help mothers
- ✓ Important when discussing sensitive topics

### Skill 2: Ask Open Questions

#### Examples:

- "How are you feeding your baby?"
- "What challenges are you facing with breastfeeding?"
- "Can you tell me about your baby's feeding routine?"
- "What are your thoughts on introducing complementary foods?"

### Objectives

By the end of this session, participants will be able to:

1. List the six listening and learning skills for effective counseling.
2. Provide examples of each listening and learning skill.
3. Demonstrate the appropriate use of these skills in counseling mothers on infant and young child feeding.

### Skill 1: Use Helpful Non-Verbal Communication

- **Maintain eye contact** to show attentiveness.
- **Keep your posture open and relaxed**, which signals approachability and understanding.
- **Use facial expressions** that convey empathy and concern (e.g., nodding, showing concern, smiling).
- **Remove physical barriers**, such as desks or other objects, to create a more open and comfortable space.
- **Appropriate use of touch**, such as a gentle touch on the arm, can be reassuring when culturally appropriate.

### Why Open Questions Matter:

- They provide deeper insight into the mother's situation.
- They help avoid yes/no answers that don't offer useful information.
- They foster a more natural and engaging conversation.

### Skill 3: Use Responses and Gestures that Show Interest

- **Nodding** while the mother speaks to show you are following her.
- **Saying "Mm-hmm"** or "I understand" to acknowledge what she's saying.
- **Smiling** to provide warmth and reassurance.
- **Using encouraging phrases** like "Tell me more" to invite further discussion.



#### Skill 4: Reflect Back What the Mother/Caregiver Says

##### Example of Reflecting Back:

- Mother says: "I don't know what to give my baby, she refuses everything."
- You reflect: "Your baby is refusing all the food you offer her?"

#### Why Reflection Matters:

- It clarifies and confirms the information.
- It reassures the mother that she is being heard.
- It encourages the mother to open up more about her situation.

#### Skill 5: Empathize

- Mother says: "My baby wants to feed very often and it makes me feel so tired."
- You respond: "You must be feeling very tired from constant feeding, I understand how that can be overwhelming."

#### Why Empathy is Crucial:

- It builds trust and rapport with the mother.
- It makes the mother feel supported and understood.
- It opens the door for her to discuss her emotions and challenges without feeling judged.

#### Skill 6: Avoid Using Words that Sound Judging

##### Examples of Judging Words to Avoid:

- "You should be doing this right."
- "That's wrong; you should feed your baby like this."
- "You're not doing it well."

##### Instead, use neutral phrases:

- "What are your thoughts on feeding your baby?"
- "What challenges have you experienced with feeding?"
- "How can I help you with this?"

#### Why Avoiding Judging Words Matters:

- It prevents the mother from feeling criticized or inadequate.
- It promotes a more open and honest discussion.
- It supports a collaborative approach to problem-solving.

#### Activity: Group Work

Refer to "Participant's Manual" Annexure 4

## Let's practice: Case scenario

I am expressing milk during the day for him while I am at work, and I breastfeed at night. Am I breastfeeding enough?



## Which response is most helpful?

- "You need to breastfeed your baby more often."
- "It is better to breast feed rather than give your baby a bottle during the day."
- "It is good that you are continuing to breast feed your baby at night."

## Let's practice: Case scenario

No, I have not breastfed my baby yet. My breasts are empty and it is too painful to sit up!



## Which response is most helpful?

- "You should let your baby suckle now to help your breast milk to come in."
- "Let me try to make you more comfortable, and then I'll bring you a drink."



© WHO/Christopher Clark

## Which response is most helpful?

- "You must feed Aahana at least 10 times a day."
- "It might help if you feed Aahana more often."



## Counselling skills: Building confidence and giving support

- Accept what a mother/parent/caregiver thinks and feels
- Recognize practices and praise a mother/parent/caregiver
- Give practical help
- Provide relevant information
- Use simple language
- Offer suggestions, not commands

## MODULE FIVE

### Infant and Young Child Feeding (IYCF)



# INFANT & YOUNG CHILD FEEDING:

## Session 5.1: IYCF Statistics in Pakistan

## Session 5.2: Exclusive Breast Feeding for First 6 Months

### Trainer's Notes:

### Training Methods & Approach:

- **Brainstorming and Q&A:** Before presenting content, engage the participants in **brainstorming** about breastfeeding practices, challenges and solutions in Pakistan. Follow this up with an interactive **Q&A** session.
- **Discussion:** Throughout the session, encourage open dialogue, especially on local cultural practices, challenges and experiences with breastfeeding. Foster a participatory learning environment where trainees can exchange insights.
- **Slide Presentation:** Use clear and concise slides with visuals, infographics and statistics to explain key concepts, including the benefits of breastfeeding, changes in milk composition and the disadvantages of bottle-feeding and BMS.
- **Interactive Learning:** After each presentation, engage trainees with questions or prompts related to their experiences in the field to encourage them to apply their knowledge practically.
- **Wrap-Up:** Recap of key points, feedback and post-test.

### Session Objectives:

- Trainees will be able to **identify benefits of breastfeeding (BF)**.
- Trainees will be able to **explain the recommended practices for breastfeeding** during various stages of infant development.
- Trainees will be able to **list disadvantages** associated with the use of breast milk substitutes for infants.

### Training Materials Needed:

- **Projector and Slides:** Visual presentations covering breastfeeding statistics, benefits, milk composition changes and risks of BMS.
- **Boards and Markers:** For brainstorming, noting responses and summarizing key points.
- **Handouts:** Summarized key facts, BF recommendations and the disadvantages of BMS.
- **Colored Charts & Sticky Notes:** For group activities or visual brainstorming.

### Duration:

- 120 minutes

### Training Session: Importance of Breastfeeding (BF)

Content/Topic	Activities	Methodology/Process
<b>Introduction to Breastfeeding (BF)</b>	<ul style="list-style-type: none"><li>- Introduce the session objectives.</li><li>- Ask initial questions about participants' knowledge of breastfeeding and its benefits in Pakistan.</li></ul>	<b>Brainstorming &amp; Q&amp;A:</b> Trainees are asked questions like: “Why is breastfeeding important in Pakistan?” and “What are the challenges faced by mothers in breastfeeding?”
<b>Protecting Babies Against Infections</b>	<ul style="list-style-type: none"><li>- Present slides explaining the role of breastfeeding in</li></ul>	<b>Presentation + Discussion:</b> Explain research on the relationship between

	<p>protecting babies from infections.</p> <p>- Show statistics or research on how breastfeeding reduces the incidence of diarrhea and other infections in Pakistan.</p>	<p>diarrhea rates and Infant and Young Child Feeding (IYCF) practices in Pakistan.</p>
<b>Benefits of Breastfeeding (BF)</b>	<p>Show and explain slides on the <b>6 key benefits of breastfeeding</b>:</p> <ol style="list-style-type: none"> <li>1. Protection against infections</li> <li>2. Optimal growth and development</li> <li>3. Bonding between mother and child</li> <li>4. Economic benefits for families</li> <li>5. Improves cognitive development</li> <li>6. Helps with postpartum recovery for mothers</li> </ol>	<p><b>Q&amp;A and Explanation:</b> Trainer presents benefits using case studies from Pakistan, highlighting how breastfeeding improves maternal and child health in local settings.</p>
<b>Changes in Breast Milk Components</b>	<p>- Show a slide comparing <b>colostrum</b> vs <b>mature milk</b>.</p> <p>- Discuss how colostrum offers unique benefits (e.g., immunity).</p>	<p><b>Presentation + Explanation:</b> Highlight the changing composition of breast milk over the first year and its impact on baby's health.</p>
<b>Breastfeeding in the First Week After Delivery</b>	<p>- Present a table summarizing <b>breastfeeding recommendations for the first week</b>: frequency, duration and techniques.</p> <p>- Emphasize early initiation</p>	<p><b>Q&amp;A and Presentation:</b> Discuss practical aspects of breastfeeding during the first week, such as proper latch, milk production and common issues faced by mothers (e.g., nipple pain, engorgement).</p>

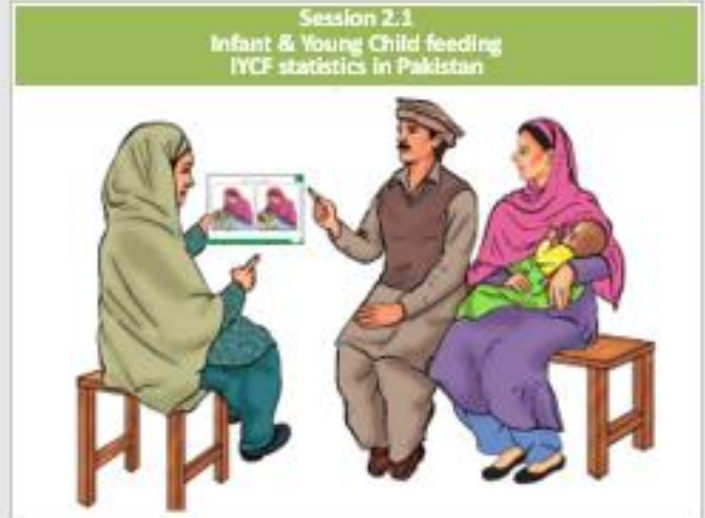
	within the first hour and exclusive breastfeeding.	
<b>Nutritional Role of Breast Milk in the Second Year</b>	<ul style="list-style-type: none"> <li>- Show slides on how <b>breast milk continues to provide essential nutrients</b> in the second year.</li> <li>- Discuss the <b>energy requirements</b> of children aged 1-2 years and how breastfeeding contributes to these needs.</li> </ul>	<b>Presentation:</b> Highlight how breast milk continues to meet key nutritional needs for toddlers in Pakistan, especially in low-resource settings.
Disadvantages of Feeding Children with Breast Milk Substitutes and Bottle-Feeding	<ul style="list-style-type: none"> <li>- Show and explain slides on the <b>disadvantages of feeding with breast milk substitutes (BMS)</b> and the risks of bottle-feeding and using pacifiers/dummies.</li> <li>- Discuss the risks of contamination, improper preparation and the economic burden of BMS.</li> </ul>	<b>Presentation + Q&amp;A:</b> Emphasize the higher rates of infection and poor health outcomes associated with BMS use in Pakistan.
Post-Test & Review	<ul style="list-style-type: none"> <li>- Ask questions to assess participants' understanding.</li> <li>- Provide feedback and correct any misconceptions.</li> </ul>	<b>Q&amp;A:</b> Review key points by asking questions related to breastfeeding benefits, recommendations and disadvantages of BMS.
Summary of the Session	<ul style="list-style-type: none"> <li>- Provide a brief summary of the key takeaways.</li> </ul>	<b>Summary:</b> Highlight the six benefits of breastfeeding, the importance of exclusive breastfeeding in the first 6 months and the dangers of BMS and bottle-feeding.



## Session 5.1 Slides: IYCF Statistics in Pakistan



1



2

### Objectives

- At the end of the session, participants will be able to:
  - Understand the importance of optimal IYCF practices for the health and development of infants and young children in Khyber Pakhtunkhwa, including exclusive breastfeeding and appropriate complementary feeding.
  - Identify the common challenges and barriers to proper IYCF practices in Khyber Pakhtunkhwa, such as cultural beliefs, socio-economic factors, and limited healthcare access.
  - Demonstrate effective counseling techniques for supporting mothers in adopting recommended IYCF practices, including breastfeeding initiation, exclusive breastfeeding for the first 6 months, and timely introduction of nutritious complementary foods.
  - Recognize the impact of poor IYCF practices on child health and understand the long-term consequences, including malnutrition, stunting, and developmental delays.

3

### Statistics about IYCF in Pakistan

Selected infant and young child feeding indicators	
Percentage who were breastfed in first hour of birth	45.4%
Exclusive breastfeeding (0-5 months)	48.4%
Initiation of solid, semi-solid and soft foods (at infants aged 6-8 months)	10.7%
Minimum meal frequency (6-23 months)	13.4%
Minimum dietary diversity	19.2%
Minimum acceptable diet	3.1%

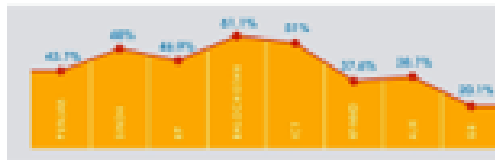
**Breastfeeding Trends**

Reference: National nutrition survey 2020  
<https://www.unicef.org/pakistan/news/2021/05/15/2020-nutrition-survey-2020-2020-18.pdf>

4

### Statistics about IYCF in Pakistan

Early initiation of breastfeeding (within first hour of birth) by Province/Region



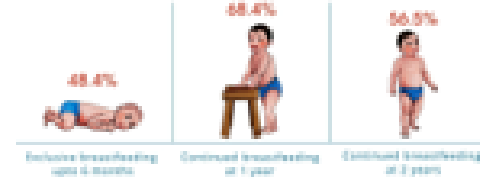
The practice of early initiation of breastfeeding varies from 40.1% in Gilgit-Baltistan to 51.7% in Balochistan.

<https://www.who.int/south-asia/nutrition/infant-feeding/practices/early-initiation>

5

### Statistics about IYCF in Pakistan

Breastfeeding Practices in Pakistan



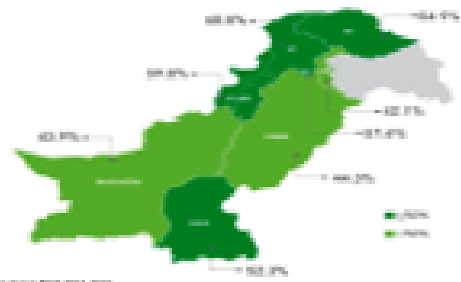
<https://www.who.int/south-asia/nutrition/infant-feeding/practices/continued-breastfeeding>

6

### Statistics about IYCF in Pakistan

Exclusive Breastfeeding by Province and Region

The proportion of children who are exclusively breastfed for the first six months of life compares to around 48% in Pakistan, and is higher in some regions than others.



<https://www.who.int/south-asia/nutrition/infant-feeding/practices/exclusive-breastfeeding>

7

### Window of Opportunity

The early years, particularly the first 1,000 days, are a critical period for ensuring healthy growth, which helps prevent obesity and chronic diseases later in life. Poor nutrition during this time can cause lasting brain damage, impairing a child's ability to succeed academically and economically and may lead to health problems such as obesity and diabetes.



8

### Window of Opportunity



9

### IYCF Recommendations

Recommendation	Details
Start breastfeeding within 1 hour after birth	<ul style="list-style-type: none"> <li>Ensure immediate skin-to-skin contact between mother and baby.</li> <li>Begin breastfeeding within the first hour after birth.</li> <li>Avoid giving any food or drink before breastfeeding or before mother's milk comes in.</li> </ul>
Exclusive breastfeeding up to 6 months of age	<ul style="list-style-type: none"> <li>Babies should be exclusively breastfed for the first 6 months.</li> <li>No other foods or liquids should be given during this period.</li> </ul>
Introduce complementary foods at 6 months	<ul style="list-style-type: none"> <li>Begin providing complementary foods to all children from 6 months of age alongside continued breastfeeding.</li> </ul>
Continue breastfeeding up to 2 years and beyond	<ul style="list-style-type: none"> <li>Continue breastfeeding with complementary feeding, until at least 2 years of age and beyond if possible, for optimal growth and development.</li> </ul>

10

## Module 5: IYCF

### Session 5.2: Breast Feeding

#### Sub-Session 5.2.1: Exclusive Breastfeeding (EBF) for the First 6 Months



## **Infant and Young Child Feeding (IYCF)**

### **Session 5.2: Breast Feeding**

#### **Sub-Session 5.2.1: Exclusive Breast Feeding for the First 6 Months**

#### **Understanding the Anatomy and Physiology of Breastfeeding, Emotional Impact, Reflexes and Good Attachment**

##### **Session Objective:**

By the end of this session, participants will have a thorough understanding of:

1. The anatomy and physiology involved in breastfeeding.
2. How breast milk production is initiated and sustained through suckling.
3. The emotional impact on the oxytocin reflex during breastfeeding.
4. The reflexes of a baby during breastfeeding.
5. Best practices for ensuring good attachment during breastfeeding.

##### **Materials Needed:**

- Flipchart/whiteboard and markers
- Projector or visual aids (diagrams, videos)
- Handouts on breastfeeding anatomy, milk production and reflexes
- Props for group activity (e.g., dolls, breast models, or other educational materials)
- Pen and notepads for participants
- Video (Early initiation and good attachment)

## Session Overview:

Topic	Methodology	Activity/Description
<b>Welcome &amp; Icebreaker</b>	Introduction & Group Interaction	Icebreaker activity to introduce participants and establish rapport.
<b>Anatomy and Physiology of Breastfeeding</b>	Presentation & Discussion	Facilitator-led presentation of anatomy, followed by Q&A.
<b>Breast Milk Production and Suckling</b>	Presentation & Video Demonstration	Explain milk production process with video or diagrams. Discuss the importance of suckling.
<b>Emotional Impact on the Oxytocin Reflex</b>	Presentation & Discussion	Discuss the role of oxytocin in milk release and emotional impacts.
<b>Reflexes of the Baby During Breastfeeding</b>	Presentation & Interactive Discussion	Explanation of baby reflexes like rooting and sucking reflex.
<b>Good Attachment During Breastfeeding</b>	Hands-on Group Activity	Group practice on correct latch and positioning. Demonstration with props.
<b>Wrap-up &amp; Q&amp;A</b>	Open Discussion & Reflection	Summary of key points, open Q&A session for clarity.

## Session Breakdown:

### 1. Welcome & Icebreaker

**Objective:** Establish rapport and create a comfortable environment for learning.

**Activity:**

- Facilitator introduces themselves and shares a brief personal story or fact related to breastfeeding to create engagement.

- Icebreaker: Ask participants to share one thing they know or have experienced about breastfeeding.
- Set expectations for the session.

## 2. Anatomy and Physiology of Breastfeeding

**Objective:** Educate participants on the physical process of breastfeeding.

**Activity:**

- **Presentation:** Use visuals (diagrams of the breast, nipple, areola and lactation glands) to explain the anatomy. Describe the role of the mammary glands, alveoli and ducts in milk production.
- **Discussion:** Invite participants to share any prior knowledge of breastfeeding anatomy. Use a diagram to show the process of milk ejection and explain how hormones like prolactin and oxytocin contribute.
- **Q&A:** Allow for any questions related to anatomy and physiology.

## 3. Breast Milk Production and Suckling

**Objective:** Explain the process of milk production and the role of suckling in sustaining lactation.

**Activity:**

- **Presentation:** Use a detailed diagram or video to demonstrate how breast milk is produced in response to suckling. Include explanations of the feedback loop: from suckling, to milk production, to the release of milk.
- **Discussion:** Ask participants to consider how frequent suckling can impact milk supply. Discuss common challenges and solutions related to milk production.

## 4. Emotional Impact on the Oxytocin Reflex

**Objective:** Help participants understand how emotions influence breastfeeding.

**Activity:**

- **Presentation:** Explain how the hormone oxytocin is released in response to physical touch and how it is key in the let-down reflex. Discuss how stress or positive emotional states affect breastfeeding.
- **Group Discussion:** Share personal experiences (or hypothetical scenarios) of how emotional states (stress, joy, connection) impact breastfeeding. Ask participants to reflect on how to manage stress for successful breastfeeding.
- **Video:** Show a video of a mother breastfeeding with emphasis on oxytocin release (both physically and emotionally).

**5. Reflexes of the Baby During Breastfeeding**

**Objective:** Explain the reflexes involved in the baby's behavior during breastfeeding.

**Activity:**

- **Presentation:** Explain the rooting reflex, sucking reflex and swallowing reflex. Show visuals or video of a newborn demonstrating these reflexes during breastfeeding.
- **Interactive Discussion:** Engage the group in discussing how they can recognize and support these reflexes during breastfeeding.
- **Q&A:** Clarify any questions regarding how these reflexes help with effective breastfeeding.

**6. Good Attachment During Breastfeeding**

**Objective:** Demonstrate the importance of proper attachment for successful breastfeeding.

**Activity:**

- **Demonstration:** Use dolls or breast models to demonstrate proper latch and positioning techniques. Show different positions for breastfeeding (cradle hold, cross-cradle hold, side-lying, etc.).

- **Group Activity:** Participants break into small groups. Each group practices correct attachment techniques with the provided dolls or models.
- **Facilitator Feedback:** Walk around to each group and provide individualized feedback.
- **Discussion:** After the activity, ask participants to share any challenges they faced while practicing the latch.

## 7. Wrap-up & Q&A

**Objective:** Summarize the session and address any remaining questions.

**Activity:**

- **Summary:** Review key points covered during the session: anatomy and physiology, milk production, oxytocin, baby reflexes and good attachment.
- **Q&A:** Open the floor for any final questions or comments.
- **Closing Remarks:** Encourage participants to continue learning and seeking support if needed. Provide handouts or resources for further reading.

**Additional Notes:**

- Encourage participants to take notes throughout the session and ask questions when they need clarification.
- Keep the session interactive by encouraging personal sharing, questions and active participation in group activities.
- Be mindful of time, ensuring each section flows smoothly without rushing, while allowing ample time for group discussion and hands-on activities.
- Show below pictures of good and bad attachments during breast feeding and discuss.





<p style="text-align: center;"><b>Picture 1</b></p> <p><b>Signs that you can see clearly are:</b></p> <ul style="list-style-type: none"> <li>✓ The baby's mouth is quite wide open.</li> <li>✓ The baby's lower lip is turned outwards.</li> <li>✓ The baby's chin is almost touching the breast.</li> <li>✓ There is more areola above the baby's top lip than below the bottom lip.</li> </ul> <p><b>Other signs:</b></p> <ul style="list-style-type: none"> <li>✓ The baby's cheeks are round.</li> <li>✓ The baby is close to the breast and facing it.</li> </ul> <p>These signs show that the baby is <b>well attached</b> and <b>well positioned</b> at the breast.</p>	<p style="text-align: center;"><b>Picture 2</b></p> <p><b>Signs of attachment:</b></p> <ul style="list-style-type: none"> <li>✓ The baby's mouth is pointing forward.</li> <li>✓ The lower lip is partly turned outwards.</li> <li>✓ The baby's chin is not touching the breast.</li> <li>✓ It is difficult to see the areola clearly.</li> </ul> <p><b>Other signs:</b></p> <ul style="list-style-type: none"> <li>✓ The baby's cheeks are pulled in.</li> </ul> <p>This baby is <b>poorly attached</b></p>
<p style="text-align: center;"><b>Picture 3</b></p> <p><b>Signs of attachment:</b></p> <ul style="list-style-type: none"> <li>✓ The baby's mouth is not wide open, the lips are pointing forward.</li> <li>✓ The baby's lower lip is turned outwards.</li> <li>✓ The baby's chin is not touching the breast.</li> <li>✓ There is as much or more areola below the baby's mouth as above it.</li> </ul> <p><b>Other signs:</b></p> <ul style="list-style-type: none"> <li>✓ The baby's cheeks are round.</li> <li>✓ The baby is not close to the breast.</li> <li>✓ The position of the baby's hands shows that the body is twisted away and not facing the mother.</li> </ul>	<p style="text-align: center;"><b>Picture 4</b></p> <p><b>Signs of attachment:</b></p> <ul style="list-style-type: none"> <li>✓ The baby's chin is touching the breast.</li> <li>✓ There is a little areola above the baby's mouth.</li> <li>✓ As the baby is very close to the breast, it makes it difficult to see many</li> </ul> <p><b>Other signs:</b></p> <ul style="list-style-type: none"> <li>✓ It is difficult to see the baby's mouth, but the little crease (fold) in his chin suggests that his mouth is wide open.</li> <li>✓ You cannot see the baby's lower lip (difficult if the baby is very close to the breast).</li> </ul> <p>The position of the baby's hand shows that he is facing the mother and not twisted.</p>

<p>This baby is <b>poorly attached</b> and <b>poorly positioned</b>. The baby looks as though he is feeding from a bottle.</p>	<p>This baby is <b>well attached</b> and <b>well positioned</b>.</p>
<p style="text-align: center;"><b>Picture 5</b></p> <p><b>Signs of attachment:</b></p> <ul style="list-style-type: none"> <li>✓ The baby's mouth is not wide open.</li> <li>✓ The lower lip is pointing forward, not fully outwards.</li> <li>✓ The baby's chin is not touching the breast.</li> <li>✓ There is as much areola below the baby's bottom lip as above the top lip.</li> </ul> <p><b>Other signs:</b></p> <ul style="list-style-type: none"> <li>✓ The baby's cheek is slightly pulled in.</li> <li>✓ The baby's body is twisted away and not close to the mother.</li> </ul> <p>This baby is <b>poorly attached</b> to the breast.</p>	<p style="text-align: center;"><b>Picture 6</b></p> <p><b>Signs of attachment:</b></p> <ul style="list-style-type: none"> <li>✓ The baby's mouth is wide open.</li> <li>✓ The baby's lower lip is turned outwards.</li> <li>✓ The baby's chin is close to the breast.</li> <li>✓ There is more areola above the baby's mouth than below it.</li> </ul> <p><b>Other signs:</b></p> <ul style="list-style-type: none"> <li>✓ The baby's cheek is round.</li> <li>✓ The baby's body is turned slightly away from the mother and her neck is slightly twisted, but this is not very clear.</li> </ul> <p>This baby is <b>well attached</b>, but her <b>body position</b> is not very good.</p>

## Session 5.2: Breast Feeding

### Sub-Session 5.2.1: Exclusive Breast Feeding for First 6 Months

#### Sub-Themes: Understanding the Importance, Anatomy & Physiology of Breastfeeding, Emotional Impact, Reflexes and Good Attachment



1



2

### Objectives

At the end of the session, participants will be able to:

- Understand the importance of optimal IYCF practices for the health and development of infants and young children in Khyber Pakhtunkhwa, including exclusive breastfeeding and appropriate complementary feeding.
- Identify the common challenges and barriers to proper IYCF practices in Khyber Pakhtunkhwa, such as cultural beliefs, socio-economic factors, and limited healthcare access.
- Demonstrate effective counseling techniques for supporting mothers in adopting recommended IYCF practices, including breastfeeding initiation, exclusive breastfeeding for the first 6 months, and timely introduction of nutritious complementary foods.
- Recognize the impact of poor IYCF practices on child health and understand the long-term consequences, including malnutrition, stunting, and developmental delays.

3

### Benefits of exclusive breastfeeding for the first six months

#### Advantages of breastfeeding

Breast milk	Breastfeeding
<ul style="list-style-type: none"><li>Perfect nutrients</li><li>Easily digested, efficiently used</li><li>Protects against infection</li><li>Protects against long-term noncommunicable diseases</li></ul>	<ul style="list-style-type: none"><li>Helps bonding and development</li><li>Helps delay a new pregnancy</li><li>Protects mothers' health</li></ul>

Costs less than artificial feeding

4

## Benefits of exclusive breastfeeding for the first six months

### Protection against infection

1. Mother infected



2. White cells in the mother's body make antibodies to protect her

4. Antibodies to the mother's infection secreted in milk to protect her baby

3. Some white cells go to her breasts and make antibodies there

5

## Risk of Artificial Feeding

### Risks of Artificial Feeding:

#### Maternal Risks:

- Increased risk of anaemia, ovarian and breast cancer
- Mother may become pregnant sooner
- Obesity
- Increased risk of some chronic diseases

#### Newborn Risks:

- Lower scores on intelligence tests
- Malnutrition, vitamin A deficiency
- More allergies and milk intolerance
- Higher likelihood of diarrhea
- More frequent respiratory infections
- Interferes with bonding

6

## Variations in Breast Milk Composition

### Colostrum

#### Property

- Antibody rich
- Many white cells
- Purgative
- Growth factors
- Rich in vitamin A

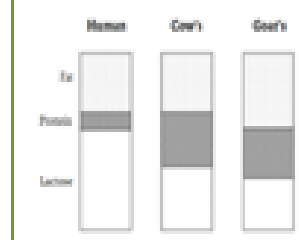
#### Importance

- protects against allergy & infection
- protects against infection
- clears meconium
- helps to prevent jaundice
- helps intestine to mature
- prevents allergy, intolerance
- reduces severity of infection
- prevents eye disease

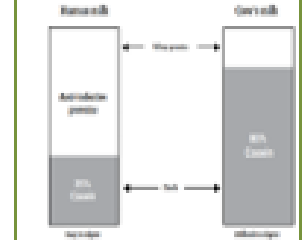
7

## Composition of Formula Milk and Its Differences from Human Milk

### Nutrients in human and animal milks



### Quality of proteins in different milks



8



1



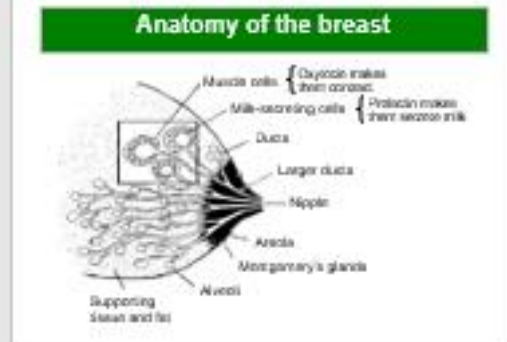
2

### Section Objectives

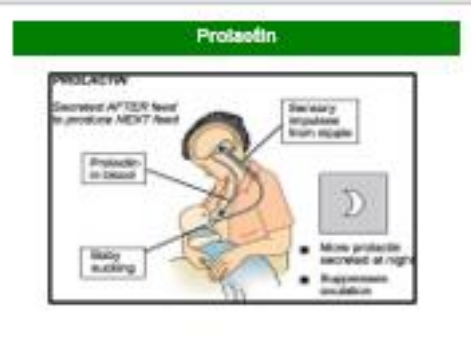
After completing this session participants will be able to:

- Name the main parts of the breast and describe their function
- Describe the hormonal control of breast milk production and ejection
- Describe the difference between good and poor attachment of a baby at the breast
- Describe the difference between effective and ineffective suckling

3



4



5



6

### Helping and hindering of oxytocin reflex

These *help* reflex

- Feels baby's body
- Feels baby's face
- Feels baby's head
- Feels baby's body
- Feels baby's body



These *hinder* reflex

- Worry
- Stress
- Pain
- Doubt



7

### Inhibitor in breast milk



If breast remains full of milk, secretion stops

8

### Attachment to the breast



9

### Good and poor attachment

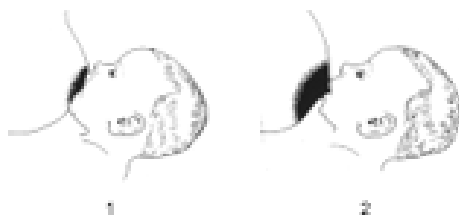
What differences do you see?



10

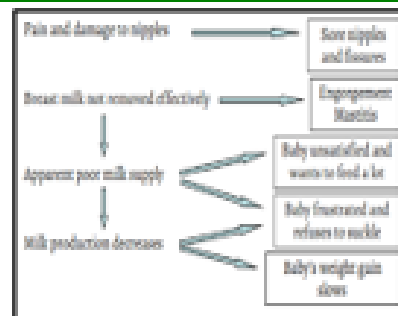
### Attachment (outside appearance)

What differences do you see?



11

### Results of poor attachment



12



## Breast Feeding: Positioning & Good Attachment



1

### Assessing a breastfeeding

After completing this session participants will be able to:

- Explain the 4 key points of attachment
- Assess a breastfeeding by observing a mother and baby
- Identify a mother who may need help
- Recognize signs of good and poor attachment and positioning
- Explain the contents and arrangements of the BREASTFEED OBSERVATION JOB AID

2

### Assessing a breastfeeding



3



4



5



6





7



8



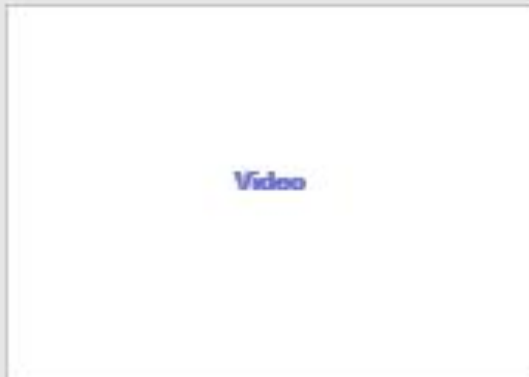
9



10



11



12

## **Infant and Young Child Feeding (IYCF)**

### **Sub-Session 5.2.1: Exclusive Breast Feeding for First 6 Months**

#### **Sub-Themes: Common Breast Conditions & Breastfeeding Difficulties**

##### **Tips for the Trainer:**

- **Preparation:** Review the session contents and slides ahead of time. Avoid reading slide titles aloud before prompting trainees for responses. Familiarize yourself with the "Further Reading" section to be well-prepared to answer any questions trainees may have.
- **Training Materials:** Ensure the following materials are available for the session:
  - Projector and slides for presentations.
  - Board markers and A0 paper for group activities or discussions.
  - Dolls for demonstrating breastfeeding positions and techniques.
  - A breast model for visualizing breast-related issues and proper attachment.
  - 20 cc syringes and a knife for demonstrating techniques such as milk expression.

##### **Knowledge Assessment:**

- At the start of the session, ask trainees a few questions from the pre- and post-test. Pay special attention to any content areas trainees struggle with, as these should be emphasized during the session to reinforce understanding.

##### **Session Objectives:**

By the end of the session, trainees should be able to:

1. Provide clear instructions to mothers on breastfeeding in cases of insufficient milk, crying babies and breast refusal.
2. Effectively manage common breast conditions that may interfere with breastfeeding.

**Session Duration:** 2 hours

**Session Overview:**

Content	Trainer's Activities	Trainees' Activities
<b>Knowledge assessment</b>	- Brainstorming and Q&A. Assess immediate knowledge.	- Trainees answer trainer's questions.
<b>Objectives of the Session</b>	- Trainer presents or asks trainees to read the session objectives.	- Listen or read as required.
<b>Breastfeeding in Case of Insufficient Milk</b>	- Presentation with Q&A. Show and present slides on insufficient milk, signs, reasons and solutions.	- Listen, view slides and answer.
<b>Breastfeeding in Case of Breast Refusal</b>	- Presentation on signs of breast refusal and reasons. Demonstrate how to help a mother with breast refusal.	- Listen, answer questions and provide input.
<b>Helping a Mother to get her baby to Breastfeed again</b>	- Presentation on techniques to help mothers encourage breastfeeding.	- Listen, answer questions and provide input.
<b>How to Deal with Crying Babies Related to Breastfeeding</b>	- Presentation with Q&A. Discuss reasons babies cry during breastfeeding. Demonstrate how to hold a crying baby.	- Listen, respond to questions, practice holding baby using a doll.
<b>Breastfeeding When Mothers have Breast Problems</b>	- Presentation on common breastfeeding issues: flat/inverted nipples, engorged breasts, mastitis and cracked nipples.	- Listen, answer questions and share input.
<b>Feedback</b>	- Use the same questions as the pre-test to assess learning progress.	- Do the written test.
<b>Session summary</b>	- Trainer gives a brief summary of the session.	- Listen and rephrase key points.

## **Detailed Trainer's Guide:**

### **1. Knowledge Assessment**

#### **Trainer Activity:**

- Engage participants in a brainstorming session where they share their prior knowledge about common breastfeeding difficulties.
- Ask a few questions to assess their baseline knowledge.

#### **Trainee Activity:**

- Trainees answer the trainer's questions, sharing what they know about breastfeeding challenges.

#### **Quick Response:**

- Use answers to gauge understanding and adjust the session as needed.

### **2. Objectives of the Session**

#### **Trainer Activity:**

- Present or ask trainees to read through the session objectives so they know what they'll be learning.
- Trainees listen or read the objectives to understand the scope of the session.

### **3. Breastfeeding in Case of Insufficient Milk**

#### **Trainer Activity:**

- Present information about insufficient milk supply, including signs that a baby is not getting enough milk, possible causes and practical solutions.
- Show slides with visuals explaining these concepts.

**Trainee Activity:**

- Listen, view slides and actively answer questions from the trainer regarding insufficient milk.
- Provide input based on personal or professional experience.

**Quick Response:**

- Allow trainees to give input and use their answers to adapt the session where needed.

**4. Breastfeeding in Case of Breast Refusal****Trainer Activity:**

- Present signs of breast refusal and the common reasons why a baby might refuse the breast.
- Show methods for encouraging a baby to breastfeed again.

**Trainee Activity:**

- Listen, answer questions and provide input based on their experiences.
- Discuss strategies to help mothers whose babies refuse breastfeeding.

**Quick Response:**

- Trainees provide feedback and the trainer uses that feedback to adjust examples or strategies shared.

## **5. Helping a Mother to Get Her Baby to Breastfeed Again**

### **Trainer Activity:**

- Present practical steps and techniques for helping mothers get their babies to breastfeed after refusal.
- Listen to the presentation, answer questions and provide input on best practices.

### **Quick Response:**

- Trainees share any techniques they've found helpful in the field.

## **6. How to Deal with Crying Babies Related to Breastfeeding**

### **Trainer Activity:**

- Present the common reasons why babies cry during breastfeeding (e.g., hunger, discomfort, latching issues).
- Use a doll to demonstrate holding techniques for babies who cry, especially those with colic.
- Ask a male trainee to demonstrate proper baby-holding techniques.
- Listen to the presentation, practice baby-holding techniques with a doll.
- Share any insights or personal experiences with crying babies during breastfeeding.

### **Quick Response:**

- Observe trainees' techniques for holding babies and provide feedback to ensure correct posture and handling.

## **7. Breastfeeding When Mothers Have Breast Problems**

### **Trainer Activity:**

- Present on common breastfeeding issues such as flat/inverted nipples, engorgement, mastitis and cracked nipples.
- Discuss solutions for each problem, referencing the manual for detailed steps.
- Listen and engage in Q&A, providing input based on experiences with mothers facing breastfeeding issues.
- Use the manual to follow along with the trainer's explanations.

### **Quick Response:**

- Trainees actively contribute solutions and ask for clarification on complex problems.

## **8. Post-test**

### **Trainer Activity:**

- Administer the post-test using the same questions as the pre-test to assess the knowledge gained during the session.
- Complete the written test to demonstrate the knowledge acquired.

### **Quick Response:**

- Trainer assesses the progress and adjusts any areas of the session that need clarification based on test results.

## Session 5.2.1: Exclusive Breast Feeding for First 6 Months

### Sub-Themes Slides: Common Breast Conditions & Breastfeeding Difficulties



1

#### Objectives

At the end of the session, participants will be able to:

Recognize and manage these common breast conditions:

- ✓ Flat and inverted nipples
- ✓ Engorgement
- ✓ Blocked duct and mastitis
- ✓ Sore nipples and nipple fissure

2



3



4



5

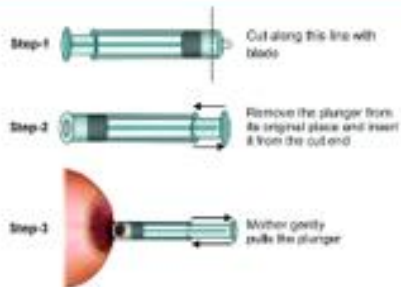
#### Management of flat and inverted nipples

During Antenatal Check-up	Not helpful
Seen after Delivery	Build the mother's confidence – breasts will improve! Explain that the baby suckles BEST out nipple. Let the baby explore breast skin-to-skin. Help the mother to position her baby on the first day. Try different positions, e.g. ultrasound. Help her to make the nipple stand out more. Use a pump or syringe.
For first 1-2 weeks, if necessary	Express breast milk and feed with a cup. Express breast milk into the baby's mouth.

6



### Syringe Method for Treating Inverted Nipples



7

### Long Nipples



8

### Large Fibrous Nipples

#### Large fibrous nipples



- Help the baby to open the mouth wide to attach
- Let the baby have skin-to-skin contact and try to find their own way
- Try different positions, e.g. mother leaning over the baby, or underarm
- Express milk and feed with a cup until the baby grows and their mouth is large enough

9

### Full and Engorged Breasts



Picture 1

Picture 2

10

### Comparison of Full and Engorged Breasts

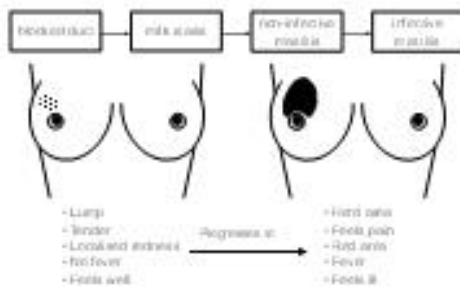
Characteristic	Full Breasts	Engorged Breasts
<b>Feeling</b>	Hot, heavy and hard	Painful
<b>Texture</b>	Milk flowing freely	Oedematous (swollen with fluid)
<b>Nipple</b>	No specific change	Tight, especially the nipple
<b>Appearance</b>	No redness	Shiny appearance
<b>Milk Flow</b>	Milk flowing well	Milk may not flow, but may drip
<b>Fever</b>	No fever	Possible fever for 24 hours

11



12

### Symptoms of blocked duct and mastitis



13

### Causes of blocked duct and mastitis

#### Poor drainage of whole breast:

- infrequent feeds
- short feeds

#### Poor drainage of part of breast:

- ineffective suckling
- pressure from clothes
- pressure from fingers during feeds

14

### Treatment of blocked duct and mastitis

- Most important – improve drainage of milk
- Look for cause and correct
- Suggest:
  - frequent feeds
  - gentle massage towards nipple
  - warm compresses
  - Start feed on unaffected side; vary position
- Antibiotics, analgesics, rest

15

### Sore Nipples & Fissures



16

### Candida infection (Thrush) in the Breastfeeding Mother



17

### Symptoms of Nipple Thrush



18

## Infant and Young Child Feeding (IYCF)

### Session 5.2.1: Exclusive Breast Feeding for First 6 Months

#### Sub-Theme: Taking Breast Feeding History & how to Increase Breast Milk Supply

##### Tips for the Trainer:

- **Preparation:** Review the session contents and slides ahead of time. Avoid reading slide titles aloud before prompting trainees for responses. Familiarize yourself with the "Further Reading" section to be well-prepared to answer any questions trainees may have.
- **Engagement:** Use participatory methods like role-playing, group discussions and Q&A to keep participants engaged and promote hands-on learning.
- **Practical Demonstrations:** Make sure to demonstrate techniques like expressing milk to ensure that participants feel confident in guiding others.
- **Cultural Sensitivity:** Ensure that the language used is culturally appropriate and inclusive, respecting various backgrounds and experiences with breastfeeding.
- **Timing:** Be mindful of the time to ensure that each section stays within its allocated time frame while allowing for adequate discussion and questions.

##### Training Materials: Ensure the following materials are available for the session:

- Projector and slides for presentations.
- Board markers and A0 paper for group activities or discussions.
- Dolls for demonstrating breastfeeding positions and techniques.
- A breast model for visualizing breast-related issues and proper attachment.
- 20 cc syringes and a knife for demonstrating techniques such as milk expression.

**Knowledge Assessment:**

- At the start of the session, ask trainees a few questions from the pre- and post-test. Pay special attention to any content areas trainees struggle with, as these should be emphasized during the session to reinforce understanding.

**Session Objectives:**

By the end of the session, trainees should be able to:

**Objectives for the Session:**

1. **Conduct a Comprehensive Feeding History:** Enable participants to take a detailed feeding history, identifying key aspects such as infant's feeding patterns, maternal health and any challenges or concerns, to assess the baby's nutritional needs.
2. **Master Breast Milk Expression Techniques:** Equip participants with the knowledge and skills to guide mothers on proper techniques for expressing breast milk, including hand expression, using pumps and proper storage methods.
3. **Support Increasing Milk Supply and Relactation:** Train facilitators on how to support mothers in increasing milk supply through various strategies like frequent breastfeeding, proper latch and using galactagogues, as well as how to assist in the relactation process if necessary.
4. **Address Concerns About Low Milk Supply:** Prepare facilitators to identify signs of insufficient milk supply, provide emotional support to mothers and discuss practical solutions, including supplementary feeding options, to help overcome the challenges of low milk production.

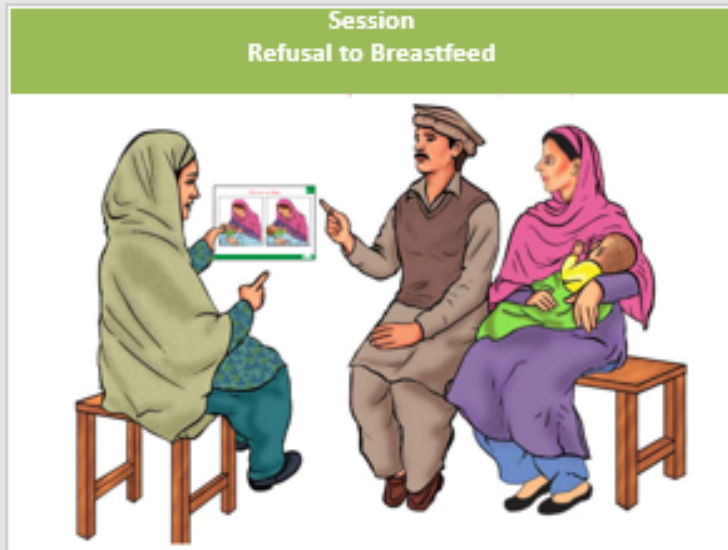
**Session Duration:** 2 hours

Topic	Methodology	Participant Engagement	Materials/Resources Needed
<b>Introduction</b>	<p>Welcome participants, provide an overview of session goals.</p> <p>Icebreaker (Optional): Ask participants to introduce themselves and share their experience with breastfeeding.</p>	<p>Brief introduction of self and purpose.</p> <p>Icebreaker activity for bonding.</p>	<p>PowerPoint/Slides summarizing session outline.</p>
<b>Introduction to Taking a Feeding History</b>	<p>Discuss what a feeding history includes (e.g., maternal health, infant health, feeding patterns, any challenges).</p> <p><b>Discussion:</b> Explain how this helps identify breastfeeding issues.</p>	<p><b>Activity:</b> Role-play in pairs/small groups: One plays the role of a mother and the other asks questions for a feeding history.</p> <p><b>Debrief:</b> Share insights and challenges encountered during role-play.</p>	<p>Handouts with sample feeding history questions.</p> <p>Flipchart/Whiteboard for listing challenges and tips.</p>
<b>Expressing Breast Milk</b>	<p>Explain expressing techniques (manual vs pump) and key considerations for milk storage.</p> <p>Show how to express milk manually and using a pump.</p>	<p><b>Q&amp;A:</b> Encourage participants to ask about challenges or tips regarding expressing milk.</p>	<p>Breast pump (manual &amp; electric), breast model (optional), milk storage containers.</p> <p>Handouts on expressing milk and storage guidelines.</p>

<b>Increasing Breast Milk Supply &amp; Relactation</b>	<p>Discuss causes of low milk supply, how to increase supply and strategies for relactation.</p> <p><b>Case Study:</b> Share a scenario and discuss how to address low milk supply using these strategies.</p>	<p><b>Group Discussion:</b> In small groups, participants discuss practical tips they use or would use for increasing milk supply.</p> <p><b>Practical Tips:</b> Review methods and tools for supporting relactation.</p>	<p>Handouts on increasing milk supply and relactation strategies.</p> <p>Case study handouts.</p>
<b>Not Enough Milk</b>	<p><b>Lecture:</b> Explain common reasons for perceived low milk supply and how to address these myths.</p> <p><b>Practical Tips:</b> Focus on actions and strategies to reassure and help mothers.</p>	<p><b>Activity:</b> Role-play scenario where one participant expresses concerns about not having enough milk and the other provides supportive advice.</p>	<p>Handouts on common myths and facts about milk supply.</p> <p>Flipchart/Whiteboard for myth-busting.</p>
<b>Closing &amp; Final Q&amp;A</b>	<p><b>Wrap-up:</b> Summarize key points from each section.</p> <p><b>Q&amp;A:</b> Open floor for final questions, concerns and reflections on how to use the information in practice.</p>	<p>Reflect on personal learnings and how they would apply them in their roles.</p> <p>Fill out feedback forms (optional).</p>	<p>Feedback forms (optional).</p> <p>Summary slides.</p>

## Session 4.2.1: Exclusive Breast Feeding for First 6 Months

### Sub-Themes Slides: Taking Breast Feeding History & how to Manage Refusal to Breastfeed



1

**Objectives**

☐ At the end of the session, participants will be able to:

- ✓ Identify and Differentiate Causes of Breastfeeding Refusal
- ✓ Apply Effective Assessment Techniques to Determine the Cause of Refusal
- ✓ Implement Practical Management Strategies to Support Mothers and Re-establish Breastfeeding

2

**Causes of Refusal to Breastfeed**

- A. Illness, Pain, or Sedation
- B. Difficulty with Breastfeeding Technique
  - A. Bottle or pacifier use
  - B. Poor attachment
  - C. Engorgement
- C. Changes in Baby's Environment
  - A. Separation from the mother
  - B. Routine changes
  - C. Changes in mother's smell
- D. Apparent Refusal
  - A. Rooting behavior in newborns:
  - B. Distraction (4-8 months)
  - C. Self-weaning (after 1 year)

3

Identifying Why a Baby is Refusing to Breastfeed	
Question	Possible Cause
Is the baby sick or in pain?	Illness, pain from delivery (vacuum extraction, bruises), sedation due to medications.
Is the baby having difficulty with breastfeeding?	Poor attachment, difficulty in positioning, separation after birth, or using bottles/pacifiers.
Is there any significant change in the baby's environment or routine?	Separation from mother, new caregiver, change in family routine, or changes in the mother's scent.
Is the baby distracted or weaning naturally?	Normal rooting behavior, distraction due to developmental stages, or self-weaning after one year.

4



### Management of Refusal to Breastfeed

#### A. Treat or Remove the Cause if Possible

- **Illness:**
  - Refer the baby to a healthcare facility for treatment if needed.
  - In cases of infection, provide appropriate treatment and assist with expressing breast milk to feed the baby via a cup or tube.
- **Pain:**
  - Ensure that the baby is positioned comfortably and that no painful areas (such as bruises from a difficult delivery) are being pressed during breastfeeding.
- **Sedation:**
  - If the mother is on medication, advise her to consult with her healthcare provider to find an alternative, if possible.
  - Support the mother until the medication is cleared from her system.

5

### Management of Refusal to Breastfeed

#### • Breastfeeding Difficulty:

- Teach the mother how to express milk to maintain milk supply.
- Assist with positioning and attachment techniques.
- Encourage more frequent feeding, skin-to-skin contact and ensure that the baby is not being restricted in terms of feeding time or frequency.

#### • Blocked Nose or Sore Mouth:

- Teach the mother how to clear the baby's blocked nose.
- Advise short and frequent feeds if the baby has a sore mouth due to thrush or teething.

#### • Changes That Upset the Baby:

- Discuss the situation with the mother and try to minimize changes in the baby's environment.
- Reassure the mother that this phase is temporary and it's important to keep the baby close.

6

### Management of Refusal to Breastfeed

#### B. Help the Mother and Baby to Enjoy Breastfeeding Again

- **Close Contact:** Ensure that the baby remains close to the mother, with plenty of skin-to-skin contact. Encourage the mother to sleep with the baby and handle the baby herself as much as possible.
- **Support System:** Advise the mother to take sick leave from work if necessary and ask family members (father, grandparents) to help with non-breastfeeding tasks.
- **Offer the Breast:** Encourage the mother to offer the breast when the baby is sleepy or after cup feeding. Suggest a variety of feeding positions to help the baby latch comfortably.
- **Express Milk:** If the baby is not breastfeeding, the mother should express her milk to maintain supply and feed it to the baby via cup or spoon.
- **Avoid Bottles and Pacifiers:** Discourage the use of bottles and pacifiers, as they can interfere with breastfeeding.

7

### Management of Refusal to Breastfeed

Management Strategy	Cause Addressed	Description
Express Milk	Difficulty with attachment or weak baby	Maintain milk supply and offer milk via cup or spoon.
Skin-to-Skin Contact	Separation from mother, emotional stress	Increase bonding and comfort to encourage breastfeeding.
Offer the Breast Frequently	Apparent refusal, distraction	Encourage feeding when the baby is calm or sleepy.
Change Environment	Stress, changes in routine	Reduce stressors like environmental changes or caregiver transitions.

8



## **Infant and Young Child Feeding (IYCF)**

### **Session 5.2: Exclusive Breast Feeding for First 6 Months**

#### **Sub-Theme: Comprehensive Feeding approaches for Vulnerable Infants**

**Session Duration: 2 Hours**

#### **Session Objectives:**

1. **Understand the Challenges and Strategies for Feeding Low-Birth-Weight and Sick Babies:** Identify feeding difficulties and develop strategies to support the nutrition of vulnerable infants.
2. **Breastfeeding during Jaundice and Hypoglycemia:** Learn the principles of breastfeeding management in infants with jaundice and hypoglycemia, including when to intervene and how to support the mother.
3. **Identify and Implement Alternative Feeding Methods:** Discuss alternative feeding methods and provide practical solutions when direct breastfeeding is not possible.

#### **Materials Needed:**

- Whiteboard and markers for key points.
- Handouts on jaundice, hypoglycemia and feeding alternatives.
- Samples of formula and donor milk (if available).
- Feeding bottles, cups and spoons for demonstration.
- Case study handouts for group discussion.
- Feedback forms for session evaluation.

## Session Plan:

Topic	Content	Activity/Method
<b>Introduction &amp; Overview</b>	<ul style="list-style-type: none"> <li>- Brief introduction to the topics: Feeding Low-Birth-Weight (LBW) and Sick Babies, breastfeeding during Jaundice and Hypoglycemia and Alternative Feeds.</li> <li>- Icebreaker: Ask participants to share any challenges they've faced with feeding vulnerable infants.</li> </ul>	Welcome and introductions. Icebreaker discussion on participant experiences.
<b>Feeding Low-Birth-Weight and Sick Babies</b>	<p><b>Causes of LBW and Sick Babies:</b> Prematurity, infections, congenital conditions.</p> <p><b>Feeding Challenges:</b> Poor sucking reflex, weak latch, fatigue, difficulty coordinating feeding.</p> <ul style="list-style-type: none"> <li>- <b>Feeding Strategies:</b> Tube feeding, cup feeding, expressed breast milk or formula.</li> <li>- Frequent small feedings, proper positioning, pacing.</li> </ul>	<p><b>Case Study Discussion:</b></p> <p>Present a case study of a sick or LBW baby and discuss strategies in small groups. Groups share solutions with the larger group.</p>
<b>Breastfeeding during Jaundice and Hypoglycemia</b>	<p><b>Jaundice:</b> Causes (physiological vs. pathological), importance of frequent breastfeeding for bilirubin elimination.</p> <p><b>Hypoglycemia:</b> Causes of neonatal hypoglycemia, early and frequent feeding to maintain blood sugar.</p> <p><b>Breastfeeding Guidance:</b> Supporting mothers, ensuring proper latch and increasing feeding frequency.</p>	<p><b>Role Play:</b> Participants role-play counseling a mother on breastfeeding during jaundice or hypoglycemia. Focus on reassuring the mother and explaining the importance of breastfeeding.</p>

<p><b>Alternative Feeds When Breastfeeding Is Not Possible</b></p>	<p><b>Reasons for Inability to Breastfeed:</b> Maternal illness, insufficient milk supply, infant difficulties.</p> <p><b>Alternative Feeding Options:</b> Formula feeding, donor milk, tube feeding, cup/spoon feeding.</p> <p><b>Safe Feeding Practices:</b> Hygiene, sterilization, storage and proper positioning during feedings.</p>	<p><b>Demonstration and Practice:</b> Show how to prepare formula or donor milk.</p> <p>Participants practice safe bottle feeding and alternative feeding methods.</p>
<p><b>Q&amp;A, Discussion and Closing</b></p>	<p><b>Open Forum:</b> Participants ask questions about the session content, challenges, or real-life scenarios.</p> <p>- Recap: Key takeaways on LBW, jaundice, hypoglycemia and alternative feeds.</p> <p>Provide additional resources for further learning.</p>	<p><b>Evaluation and Feedback:</b></p> <p>Collect participant feedback on the session.</p> <p>Closing remarks and thank participants.</p>

## Facilitator Guide:

### Introduction

Welcome and brief overview of the session topics.

- Icebreaker activity: Ask participants to share a quick experience or question they have about feeding challenges in newborns. This can help tailor the session to their needs.

## **Part 1: Feeding Low-Birth-Weight and Sick Babies**

### **Objectives:**

- Recognize the feeding challenges for low-birth-weight and sick babies.
- Learn effective feeding strategies for this vulnerable group.

### **Content:**

- **Definition and Causes of Low Birth Weight (LBW) and Sick Infants:**
  - Explore the medical and environmental factors leading to LBW.
  - Discuss common conditions (e.g., prematurity, infections, or congenital disorders).
- **Feeding Challenges for LBW/Sick Babies:**
  - Poor sucking reflex, fatigue and weak latch.
  - Difficulty maintaining body temperature and coordinating feeding.
- **Feeding Strategies for LBW/Sick Babies:**
  - Use of expressed breast milk or formula if breastfeeding is not possible.
  - Methods such as tube feeding or cup feeding.
  - Ensuring proper positioning and pacing of feedings.
  - Frequent, small feedings to meet the infant's nutritional needs.

### **Interactive Activity:**

- **Case Study Discussion:** Present a case study of a low-birth-weight or sick baby and have participants discuss strategies for feeding in small groups. Each group presents their strategy to the larger group.

## **Part 2: Breastfeeding during Jaundice and Hypoglycemia**

### **Objectives:**

- Understand the relationship between jaundice, hypoglycemia and breastfeeding.
- Learn to support mothers in feeding infants with jaundice and hypoglycemia.

### **Content:**

- **Jaundice:**
  - Types of jaundice (physiological vs. pathological).
  - Why breastfeeding is important for babies with jaundice (helps eliminate bilirubin).
  - Managing jaundice through frequent breastfeeding to aid in bilirubin elimination.
- **Hypoglycemia:**
  - Causes of neonatal hypoglycemia.
  - Importance of early and frequent feeding to maintain blood glucose levels.
  - Signs of hypoglycemia and when to seek medical help.
- **Breastfeeding and Medical Support:**
  - How to support mothers with babies experiencing jaundice or hypoglycemia.
  - If breastfeeding is difficult, explore options like expressed milk or formula.

### **Interactive Activity:**

- **Role Play:** Participants practice a counseling session where they educate a mother about breastfeeding during jaundice or hypoglycemia. Discuss how to address concerns and emphasize the benefits of breastfeeding for these conditions.

### **Part 3: Alternative Feeds When Breastfeeding Is Not Possible**

#### **Objectives:**

- Explore alternative feeding options for mothers who cannot breastfeed.
- Understand how to support families in choosing appropriate alternatives.

#### **Content:**

- **When Breastfeeding is Not Possible:**
  - Common reasons: maternal illness, low milk supply, or infant feeding difficulties.
  - Importance of maintaining adequate nutrition for the infant in these cases.
- **Alternative Feeding Options:**
  - Formula feeding: types, preparation and storage.
  - Donor breast milk: how to find and use it safely.
  - Feeding techniques: cup feeding, spoon feeding and bottle feeding.
- **Safe Feeding Practices:**
  - Hygiene, sterilization and safe storage of alternative feeds.
  - Correct positioning and pacing during feedings to reduce the risk of aspiration.

#### **Interactive Activity:**

- **Demonstration and Practice:** Show how to safely prepare formula and donor milk.  
Allow participants to practice proper bottle-feeding techniques and handling of feeding equipment.

## **Module 5: IYCF**

### **Session 5.2: Breast Feeding**

#### **Sub-Session 5.2.2: Baby Friendly Hospital Initiative**





## **Module 5: Infant and Young Child Feeding (IYCF)**

### **Session: Breast Feeding**

#### **Sub-Session 5.2.2: Baby-Friendly Hospital Initiative (BFHI) & KP Breast Feeding Act**

**Duration:** 1 hour

### **Learning Objectives**

By the end of this session, participants will be able to:

1. Explain the significance of exclusive and continued breastfeeding.
2. Summarize the WHO/UNICEF Global Strategy for Infant and Young Child Feeding.
3. Describe the key components of the Baby-Friendly Hospital Initiative (BFHI).
4. Identify and list the Ten Steps to Successful Breastfeeding.

## **Session Outline**

### **1. Introduction and Brainstorming**

**Activity:** Ask participants to share:

- One benefit of breastfeeding they tell mothers in their community or clinic.
- One challenge mothers face when trying to breastfeed exclusively.

#### **Facilitator Note:**

Acknowledge contributions and note the role of the healthcare system in supporting or hindering successful breastfeeding. Introduce the concept of BFHI as a key strategy to address these challenges.

## 2. Presentation: Overview of BFHI

### Key Talking Points:

- **What is the BFHI?**
  - Launched in 1991 by WHO/UNICEF to support breastfeeding in hospitals and health centers.
  - By 2007, over 20,000 hospitals in 152 countries certified as baby-friendly.
  - BFHI ensures that maternity facilities support mothers to initiate and sustain exclusive breastfeeding for 6 months and continued breastfeeding for 2 years or more.
- **Purpose of the BFHI:**
  - To implement the **Ten Steps to Successful Breastfeeding** as global standards.
  - Update: Ten Steps revised in 2009 and again in 2018 to reflect current evidence and rights-based care.
- **Core Requirements:**
  - Facilities must fully implement the Ten Steps.
  - Inclusive care for mothers who may not be breastfeeding (e.g., HIV, medical conditions).
  - Promote respect, dignity, and evidence-based support.

## 3. Group Activity: The Ten Steps

**Materials:** Printed handouts or flipchart with the Ten Steps to Successful Breastfeeding

### Activity Instructions:

- Divide participants into 5 small groups.
- Assign 2 of the Ten Steps to each group.
- Ask them to briefly discuss:
  - What each step means in practice.
  - How it can be implemented in their own facility or health post.

**Debrief:** Have each group present a quick summary of their assigned steps.

## 4. Global and Local Strategy for Infant and Young Child Feeding

### Key Talking Points:

- Introduced by WHO/UNICEF in 2002 and Khyber Pakhtunkhwa Breast Feeding Act 2015.
- Encourages countries to protect, promote and support optimal feeding practices.
- Emphasis on:
  1. Expanding BFHI to more facilities.
  2. Training all health workers in breastfeeding and lactation.
  3. Collecting accurate breastfeeding data.
- In 2012, WHO set **Global Nutrition Targets**, including increasing the global rate of exclusive breastfeeding in the first six months.

## 5. Discussion: Creating Supportive Environments

### Prompted Discussion Questions:

- How does your facility currently support breastfeeding?
- What policies or systems help or hinder successful breastfeeding support?
- How can community-based support and workplace policies improve breastfeeding outcomes?

**Facilitator Tip:** Highlight the role of primary health care workers in linking mothers with supportive services and advocating for enabling environments.

## 6. Summary and Key Takeaways

### Facilitator Recap:

- BFHI is a proven strategy to support exclusive and continued breastfeeding.
- The Ten Steps serve as the backbone of baby-friendly maternity care.

- Primary health care workers have a vital role in advocating for, implementing, and supporting BFHI practices.

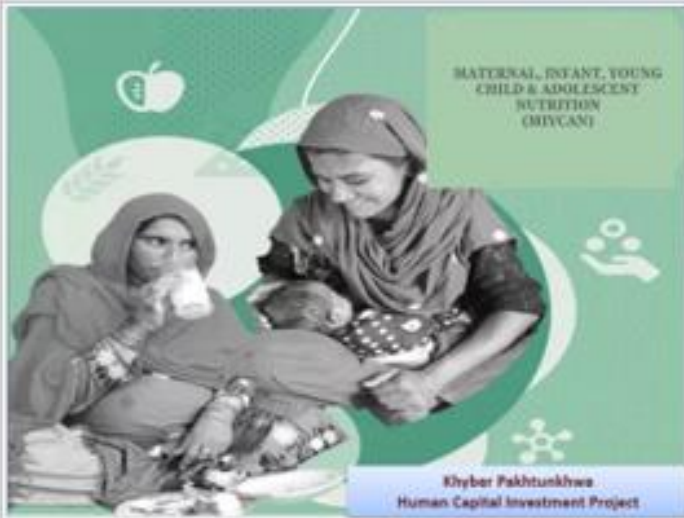
**Encourage Action:** Ask participants to think of one BFHI-related improvement they could help introduce or strengthen at their facility.

## **The Ten Steps to Successful Breastfeeding**

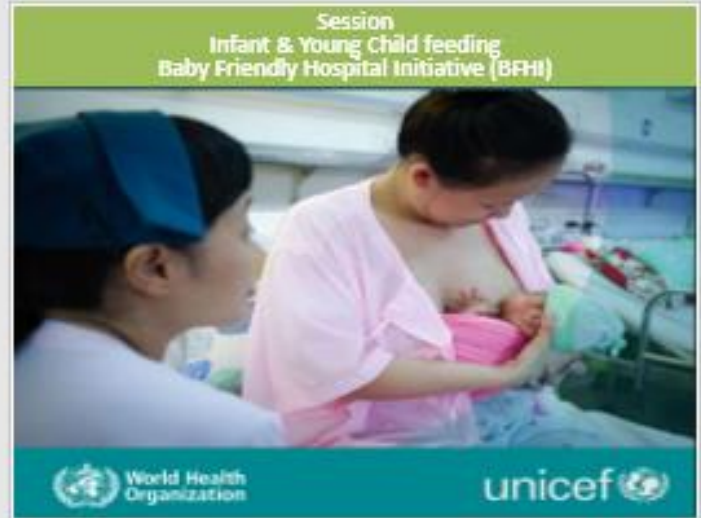
### **(2018 WHO/UNICEF)**

1. Comply fully with the International Code of Marketing of Breast-milk Substitutes.
2. Ensure staff have sufficient knowledge, competence, and skills to support breastfeeding.
3. Discuss the importance and management of breastfeeding with pregnant women and families.
4. Facilitate immediate and uninterrupted skin-to-skin contact and support initiation of breastfeeding.
5. Support mothers to initiate and maintain breastfeeding and manage difficulties.
6. Do not provide breastfed newborns any food or fluids other than breast milk unless medically indicated.
7. Enable mothers and their infants to remain together and to practice rooming-in 24 hours a day.
8. Support mothers to recognize and respond to their infants' cues for feeding.
9. Counsel mothers on the use and risks of feeding bottles, teats, and pacifiers.
10. Coordinate discharge to ensure parents and babies have timely access to ongoing support.

## BFHI Session Slides:



1



2

### Objectives

After completing this session, participants will be able to:

- describe the importance of exclusive and continued breastfeeding;
- discuss the WHO/UNICEF Global Strategy for Infant and Young Child Feeding;
- outline the Baby-friendly Hospital Initiative;
- list the Ten Steps to Successful Breastfeeding; and



3

### WHO & UNICEF Recommendations

**To enable mothers/parents/caregivers to establish and sustain exclusive breastfeeding for six months, WHO and UNICEF recommend:**

- immediate and uninterrupted skin-to-skin contact from birth and initiation of breastfeeding within the first hour of life;
- exclusive breastfeeding – the infant only receives breast milk, and no other foods or fluids;
- breastfeeding responsively – that is, as early and often, and as long as the baby wants, day and night;
- counselling mothers on the risks and use of feeding bottles, teats or pacifiers.

4

## WHO & UNICEF Global Strategy Goal

- Improve the nutritional status, growth and development, health, and survival of infants and young children through optimal feeding practices.
- Support exclusive breastfeeding for six months, followed by timely, adequate, safe, and appropriate complementary feeding.
- Breastfeeding should continue for up to two years and beyond.
- Support maternal nutrition through social and community support initiatives.

10

5

## Baby Friendly Hospital Initiative

# The TEN STEPS to Successful Breastfeeding

6

## TEN STEPS OF BFHI



7

## TEN STEPS OF BFHI



8

## TEN STEPS OF BFHI



9

## TEN STEPS OF BFHI



10

## TEN STEPS OF BFHI



11

## TEN STEPS OF BFHI



12



## TEN STEPS OF BFHI



13

## TEN STEPS OF BFHI



14

## TEN STEPS OF BFHI



15

## TEN STEPS OF BFHI



16



Khyber Pakhtunkhwa Protection of Breast-Feeding and Child Nutrition Act, 2015		
Body	Composition	Key Functions
Khyber Pakhtunkhwa Infant Feeding Board	<ul style="list-style-type: none"> <li>Minister for Health (Chairman)</li> <li>Representatives from: Health, Home Depts, Pakistan Paediatric Association, Khyber Medical University, Provincial Health Services Academy, Food Safety Authority, Infant Food Industry</li> <li>Govt-nominated experts</li> </ul>	<ul style="list-style-type: none"> <li>✓ Receive and act on violation reports</li> <li>✓ Educate and train health workers</li> <li>✓ Advise govt on breastfeeding and child nutrition policies</li> </ul>
District Infant Feeding Committee	<ul style="list-style-type: none"> <li>District Nazim (Chairman)</li> <li>Deputy Commissioner</li> <li>DHO (Secretary)</li> <li>Female Council Members</li> <li>Religious Leader</li> <li>Public Health Coordinator</li> <li>NGO reps and Social Workers</li> </ul>	<ul style="list-style-type: none"> <li>✓ Promote breastfeeding in communities</li> <li>✓ Train health workers</li> <li>✓ Report violations to the Board</li> <li>✓ Perform additional duties from the Board</li> </ul>

17

Prohibited Practices under the Infant Feeding Act	
Category	Prohibited Practice
Promotion	No advertising or promotional activities unless allowed by the Act
Misleading Claims	Cannot claim products are equal to or better than mother's milk
Gifts & Incentives	No benefits to health workers, families, or board/committee members
Donations	No donations of products/services to health facilities or associations
Instruction	Only independent health workers can advise on product use
Healthcare Facility Access	Manufacturers/distributors may not interact with the public in health facilities
Educational Material	Only factual, approved material allowed; no public distribution

18

## Module 5: IYCF

### Session 5.3: Complementary Feeding after 6 Months



## **Infant and Young Child Feeding (IYCF)**

### **Session 5.3: Complementary Feeding after 6 Months**

#### **Sub-Theme: The Importance of Complementary Feeding**

**Session Duration: 2 Hours**



#### **Trainer Notes:**

Upon completing this training program, participants will be equipped for providing interpersonal counseling, care and treatment to mothers or caregivers of young children who are about to begin complementary feeding or are currently feeding their children with complementary foods. It is essential for these trainees to gain the knowledge about significance of complementary feeding (CF) and the appropriate timing for its introduction, to ensure that proper feeding practices are followed.

#### **Session Objectives:**

By the end of this session, you should be able to:

- Explain the importance of continuing breastfeeding.
- Define complementary feeding.
- Explain why 6 months is the optimal age to start complementary feeding
- List the key messages from this session.
- Assess your current practices related to complementary feeding.

#### **Training Materials Needed:**

- Projector and slides for presentation.
- A0 papers for group discussions and brainstorming.
- Board and markers for summarizing key points.
- Pre- and post-test papers.

Session Component	Training Methodology	Trainees' Activity
<b>Introduction to Training</b>	Direct instruction, overview of training	Trainer introduces the session, objectives and importance of complementary feeding.
<b>Sustaining Breastfeeding</b>	Presentation with Q&A	Listen to the presentation, ask questions and discuss breastfeeding recommendations.
<b>What is Complementary Feeding?</b>	Presentation with Q&A	Listen to the definition of complementary feeding, ask questions and participate in discussion.
<b>Why 6 Months is the Optimal Age</b>	Presentation with examples and Q&A	Listen to the explanation of why 6 months is the optimal age to begin complementary feeding.
<b>Signs a Child is Ready for Complementary Foods</b>	Interactive discussion	Participate in listing and discussing the signs that indicate a child is ready for complementary foods.
<b>Risks of Starting Complementary Foods Too Early/Too Late</b>	Presentation with Q&A	Discuss the risks of starting complementary feeding too early or too late and share experiences.
<b>Guidelines for Complementary Feeding</b>	Presentation and discussion	Listen to and discuss the guidelines for successful complementary feeding.
<b>Group Activity: Role-Playing &amp; Case Studies</b>	Group discussion, role-playing and problem-solving	<ul style="list-style-type: none"> <li>- Break into small groups (4-5 trainees per group).</li> <li>- Each group will receive a case study related to complementary feeding.</li> <li>- Trainees role-play as counselors or healthcare workers, advising mothers or caregivers in the case study on how to introduce complementary feeding.</li> <li>- After role-playing, groups will discuss what went well and areas of improvement.</li> </ul>

Group Activity Debrief	Group sharing and trainer-led feedback	Each group shares their role-play experience and key takeaways. Trainer provides feedback and clarification.
Q&A and Recap of Key Points	Trainer-led Q&A and summarization	Ask questions and clarify doubts from the entire session. Summarize key points of the session.

## Details of Group Activity (Role-Playing & Case Studies)

### Objective:

- Encourage trainees to practice and apply the knowledge gained during the session.
- Develop skills in counseling and advising caregivers on complementary feeding.
- Foster collaboration and peer learning in addressing real-world situations.

### Activity Breakdown:

#### 1. Case Study Distribution

- Groups of 4-5 trainees are given case studies related to complementary feeding (e.g., a mother unsure when to introduce solid foods, or a caregiver introducing solids too early).

#### 2. Role-Playing

- Within each group, trainees take on different roles (healthcare worker, caregiver, or mother).
- The healthcare worker role will involve counseling the caregiver on when and how to introduce complementary feeding based on the case study.
- The role-playing should incorporate real-life scenarios, including challenges caregivers face when starting complementary feeding.

#### 3. Group Discussion

- After the role-play, each group discusses:
  - What went well during the role-play.
  - What could be improved.

- How they would apply the information from the session to similar real-life situations.

#### 4. **Group Presentations**

- Each group briefly presents their case, role-play approach and discussion points to the rest of the trainees.
- The trainer provides feedback and suggestions for improvement.

#### **Key Takeaways for Trainers:**

- Emphasize the **importance of appropriate complementary feeding** in a child's early life.
- Focus on the **timing** of CF initiation (around 6 months), as well as the **principles** and risks related to early or late CF.
- Ensure trainees engage actively in discussions and clarify any misunderstandings during the Q&A or feedback sessions.

## Infant and Young Child Feeding (IYCF)

### Session 5.3: Complementary Feeding after 6 Months

#### Sub-Session: The Importance of Complementary Feeding

##### Complementary Feeding



1

##### Assessing a breastfeed

After completing this session participants will be able to:

##### ✓ Understand the Importance of Timely Introduction of Complementary Foods:

Explores the significance of introducing complementary foods at the right time (around 6 months) to support optimal growth and development, according to IYCF guidelines.

##### ✓ Learn Key Nutritional Components for Complementary Feeding:

Highlight the essential nutrients required in complementary foods, such as iron, protein, vitamins, and fats, to meet the growing nutritional needs of infants.

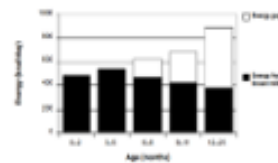
2

##### Key Message 1

*Breastfeeding for 2 years or longer helps a child to develop and grow strong and healthy.*

3

Energy required by age and the amount supplied from breast milk



4

##### Key Message 2

*Starting other foods in addition to breast milk at 6 completed months helps a child to grow well.*

5

##### Signs to begin Complementary Foods

- Showing interest in the food others are eating.
- Reaching out for food.
- Putting objects into their mouth.
- Developing better tongue control to move food around their mouth.
- Beginning to make munching movements with their jaws.

6

### Risks of Starting Complementary Foods Too Early

- Breast milk may be replaced
- Nutrient deficiencies
- Increased risk of illness
- Digestive issues
- Allergic reactions



7

### Risks of Starting Complementary Foods Too Late

- Growth issues
- Malnutrition
- Slower Development
- Prone to Diseases

8

6 سے 9 ماہ کی عمر کا غذائی خوراک



9

9 سے 12 ماہ کا غذائی خوراک



10

12 سے 24 ماہ کی عمر کا غذائی خوراک



11

مکمل خوراک کی عمر



12



## **Infant and Young Child Feeding (IYCF)**

### **Session 5.3: Complementary Feeding after 6 Months**

#### **Sub-Session: Foods to Fill the Energy Gap**

**Session Duration: 2 Hours**

#### **Trainer Notes:**

This session will ensure that health workers are equipped with practical skills and knowledge to guide caregivers on addressing both the energy and iron gaps in a child's diet. They need to understand the quantity and quality of CF in order to be able to give instructions to mothers/caregivers on appropriate practices, particularly on how to increase the density of complementary foods and on vitamin A and iron-rich foods.

#### **Session Objectives:**

By the end of this session, you should be able to:

- List the local foods that can help fill the energy gap.
- Explain the reasons for recommending foods of a thick consistency.
- Describe ways to enrich a child's food.
- Identify key messages from this session.

#### **Training Materials Needed:**

- Projector and slides for presentation.
- Colored charts and sticky notes for group discussions and brainstorming.
- Board and markers for summarizing key points.
- Pre- and post-test papers.

## Session Breakdown

Topic	Facilitator Activity	Materials/Tools
Introduction to Training	<ul style="list-style-type: none"> <li>- Introduce the session's objectives.</li> <li>- Overview of the importance of complementary feeding.</li> </ul>	Whiteboard/Flipchart, markers
<b>Understanding the Energy Gap</b>	<ul style="list-style-type: none"> <li>- Present the concept of the <b>energy gap</b> that arises after 6 months.</li> <li>- Explain the child's growing energy needs.</li> <li>- Discuss the size of a child's stomach at 8 months and the importance of introducing thick foods.</li> </ul>	Projector/slides, whiteboard
<b>Foods to Fill the Energy Gap</b>	<ul style="list-style-type: none"> <li>- List common local foods to help fill the energy gap, emphasizing staple foods and those to supplement them.</li> <li>- Highlight the importance of pairing staple foods with nutrient-rich foods.</li> </ul>	Projector/slides, list of local foods
<b>The Importance of Thick Consistency Foods</b>	<ul style="list-style-type: none"> <li>- Explain why thicker foods are better for energy absorption and satisfying hunger.</li> <li>- Discuss why thin foods don't provide enough energy for growth.</li> </ul>	Flipchart, examples of foods
<b>Ways to Enrich a Child's Food</b>	<ul style="list-style-type: none"> <li>- Introduce methods of enriching foods such as using fats and oils, toasting cereal grains and adding legumes, milk, or nut pastes to meals.</li> </ul>	Projector/slides, handouts on enrichment methods
<b>Iron Gap and the Role of Iron in Child Growth</b>	<ul style="list-style-type: none"> <li>- Explain the <b>iron gap</b> that appears after 6 months, why iron is essential and how it supports growth and immunity.</li> </ul>	Projector/slides, whiteboard, handouts on iron sources

	- Introduce the key iron-rich food sources, both animal-based and plant-based.	
<b>Combining Foods for Better Nutrient Absorption</b>	- Present how combining foods, such as cereals with legumes or adding dairy to plant-based foods, improves iron absorption.	Flipchart/whiteboard, handouts
<b>Group Activity: Designing Energy &amp; Iron-Rich Meals</b>	<ul style="list-style-type: none"> <li>- Divide trainees into small groups.</li> <li>- Give each group a case study involving a child who is ready for complementary feeding.</li> <li>- Ask groups to design a balanced meal plan that addresses both the energy and iron gaps, based on local foods.</li> </ul>	Case studies, flipcharts, markers, sample food lists
<b>Group Presentations and Debrief</b>	<ul style="list-style-type: none"> <li>- Each group presents their meal plan.</li> <li>- Facilitate a group discussion about the meals presented.</li> </ul>	Flipchart/whiteboard
<b>Summary and Q&amp;A</b>	<ul style="list-style-type: none"> <li>- Recap the key concepts discussed in the session (energy gap, iron gap, importance of thick and nutrient-dense foods).</li> <li>- Open the floor to any remaining questions.</li> </ul>	Whiteboard/Flipchart

### Details of the Group Activity: Designing Energy & Iron-Rich Meals

**Objective:** To give trainees practical experience in designing complementary feeding plans that address both energy and iron needs using local foods.

#### Activity Breakdown:

1. **Group Division:** (5 minutes)
  - Divide trainees into small groups (4-5 people per group).

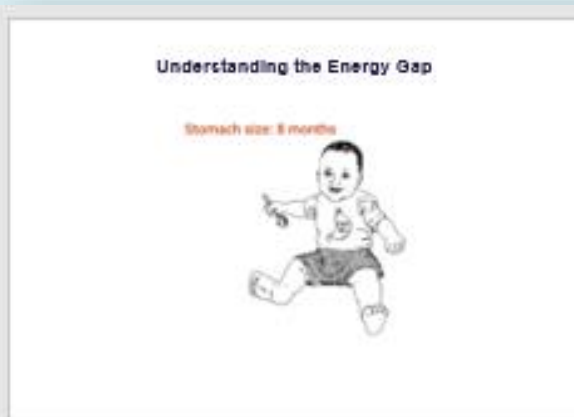
- Provide each group with a case study that describes a child's age, weight, health and potential challenges with complementary feeding.
2. **Meal Planning:** (20 minutes)
- Ask each group to design a sample day of meals for the child in the case study.
  - The meals must include energy-dense, thick foods and iron-rich foods to meet the child's nutritional needs.
  - Groups will also need to think about food preparation methods that enhance nutrient absorption (e.g., pairing iron-rich foods with vitamin C sources to improve iron absorption).
3. **Presentation and Discussion:** (5 minutes)
- Each group presents their meal plan to the larger group.
  - Facilitator provides feedback and discusses the rationale behind the meals presented.
  - Trainees share thoughts on how they approached designing meals that address both energy and iron gaps.

### **Key Takeaways:**

1. **Energy Gap:** Recognizing and addressing the growing energy needs of children after 6 months by introducing nutrient-dense, thick foods.
2. **Iron Gap:** Understanding the need for iron-rich foods after 6 months and knowing which foods can help fill the iron gap.
3. **Complementary Foods:** The importance of combining both local staple foods and additional nutrient-rich foods (animal-based and plant-based) to ensure a balanced diet.
4. **Food Pairing:** Encouraging the pairing of foods to enhance nutrient absorption, particularly for iron.

## Session 5.3: Complementary Feeding after 6 Months

### Sub-Session Slides: Foods to Fill the Energy Gap



1



2

**Key Takeaways and Nutrient Gaps**

Nutrient	Food Sources	Additional Notes
<b>Iron</b>	Animal meats (liver, meat, poultry), fish, eggs, legumes (beans, lentils, peas), nuts, seeds	Animal-source foods are best for absorption; legumes are great for vegetarians.
<b>Zinc</b>	Meat, fish, legumes, seeds, nuts	Zinc often accompanies iron in foods, improving overall health.
<b>Vitamin A</b>	Liver, eggs, dairy, carrots, dark leafy greens	Vital for growth and immunity; often found in animal foods.
<b>Protein</b>	Meat, poultry, fish, eggs, legumes, nuts, seeds	Essential for growth, repair and immunity.

3



4



5



6

AMOUNTS OF FOOD TO OFFER			
Age	Texture	Frequency	Amount of food an average child will usually eat at each meal
6-8 months	Start with thick purridge, well-mashed foods. Continue with mashed family foods.	2-3 meals per day plus frequent breastfeeds. Depending on the child's appetite, 1-2 meals may be offered.	Start with 2-3 tablespoons, per feed increasing gradually to 4-6 per day.
9-11 months	Finely chopped or mashed foods and foods that baby can pick up.	3-4 meals plus breastfeeds. Depending on the child's appetite, 1-2 meals may be offered.	4-6 or 6-8 oz cup/food.
12-24 months	Family foods, chopped or mashed if necessary.	3-4 meals plus breastfeeds. Depending on the child's appetite, 1-2 meals may be offered.	6-8 or 8-10 oz cup/food.

If the baby is not breastfed, give in addition 1-2 cups of milk per day, and 1-2 extra meals per day.

### Recommendations for feeding the non-breastfed child aged 6-24 months

The non-breastfed child should receive:

- extra water each day (2-3 cups in temperate climate and 4-6 cups in hot climate)
- essential fatty acids (animal-source foods, fish, avocado, vegetable oil, nut pastes)
- adequate iron (animal-source foods, fortified foods or supplements)
- milk (1-2 cups per day)
- extra meals (1-2 meals per day)

### 6 سے 9 ماہ کی عمر تک خدائی خوراک



### 9 سے 12 ماہ تک خدائی خوراک



### 12 سے 24 ماہ کی عمر تک خدائی خوراک



### Hygienic Preparation of Feeds

- ✓ Clean Hands
- ✓ Clean Utensils
- ✓ Safe Water and Food
- ✓ Safe Storage



## **Infant and Young Child Feeding (IYCF)**

### **Session 5.3: Complementary Feeding after 6 Months**

#### **Sub-Session: Variety, Frequency and Quantity of Complementary Feeding**

**Session Duration: 1.5 Hours**

#### **Trainer Notes:**

This session provides the participants with practical, hands-on experience in planning meals that meet the nutritional needs of young children while emphasizing the key concepts of variety, frequency and quantity of complementary foods. They need to understand the responsive feeding technique in order to give instructions to mothers/caregivers on appropriate CF practices and ways to prevent fussy/ freaky eating among young children.

#### **Session Objectives:**

By the end of this session, you should be able to:

1. Explain the importance of offering a variety of foods to children.
2. Describe the appropriate frequency of feeding complementary foods.
3. Outline the recommended quantity of complementary food to offer.
4. List recommendations for feeding non-breastfed children.
5. Summarize the key messages from the session.

#### **Training Materials Needed:**

- Projector and slides for presentation.
- Colored charts and sticky notes for group discussions and brainstorming.
- Board and markers for summarizing key points.
- Pre- and post-test papers.

## Session Breakdown

Topic	Facilitator Activity	Materials/Tools
<b>Introduction to Session</b>	<ul style="list-style-type: none"> <li>- Greet trainees and introduce the session objectives.</li> <li>- Provide an overview of complementary feeding's importance in supporting growth.</li> </ul>	Whiteboard/Flipchart, markers
<b>The Importance of Variety in Feeding</b>	<ul style="list-style-type: none"> <li>- Explain why offering a variety of foods is essential for meeting nutritional needs.</li> <li>- Highlight that a mix of foods ensures a balanced diet with all necessary nutrients.</li> </ul>	Projector/slides, handouts with food examples
<b>Frequency of Feeding Complementary Foods</b>	<ul style="list-style-type: none"> <li>- Discuss how often complementary foods should be offered.</li> <li>- Highlight the importance of spacing out meals to ensure steady nutrition and energy levels.</li> </ul>	Flipchart, projector/slides
<b>Quantity of Complementary Foods</b>	<ul style="list-style-type: none"> <li>- Explain the correct portion sizes based on the child's age and developmental stage.</li> <li>- Discuss the balance between overfeeding and underfeeding.</li> </ul>	Handouts with portion size guides for different ages
<b>Snacks: A Vital Source of Energy</b>	<ul style="list-style-type: none"> <li>- Explain the role of nutrient-dense snacks between meals.</li> <li>- Provide examples of healthy snacks and emphasize that they should not replace main meals.</li> </ul>	Projector/slides, flipchart, snack examples
<b>Daily Recommendations</b>	<ul style="list-style-type: none"> <li>- Discuss the daily food recommendations for young children: dark-green vegetables, yellow-colored</li> </ul>	Handouts with daily food recommendations



	fruits or vegetables, animal-source foods and staple foods.	
<b>Activity: Designing a Meal Plan</b>	<ul style="list-style-type: none"> <li>- Divide the group into smaller teams and provide a scenario of a child's age, growth needs and feeding requirements.</li> <li>- Ask groups to design a daily meal plan that meets the variety, frequency and quantity needs.</li> </ul>	Flipchart, markers, sample meal plan templates
<b>Presentations and Debrief</b>	<ul style="list-style-type: none"> <li>- Groups present their meal plans.</li> <li>- Facilitate feedback and discussion on the choices made by each group.</li> </ul>	Whiteboard/Flipchart, handouts
<b>Conclusion and Key Takeaways</b>	<ul style="list-style-type: none"> <li>- Summarize the key messages of the session.</li> <li>- Provide additional resources for caregivers on variety, frequency and quantity of complementary foods.</li> </ul>	Whiteboard/Flipchart

### **Details of the Group Activity: Designing a Meal Plan**

**Objective:** To allow participants to apply their knowledge by creating a balanced and varied meal plan that meets the frequency and quantity needs of young children.

#### **Activity Breakdown:**

##### **1. Group Division**

- Divide trainees into smaller groups (4-5 participants per group).
- Provide each group with a scenario involving a child between 6-24 months old. The scenario will include information on the child's age, growth needs and any specific feeding challenges.
- Examples of scenarios:
  - A 9-month-old baby who is breastfeeding but needs complementary foods to fill the energy and iron gap.

- A 12-month-old child who is being weaned off breast milk and has dietary preferences.

## 2. Meal Plan Design

- Each group will design a daily meal plan that includes:
  - Three main meals with appropriate variety and energy-dense foods (e.g., cereals, animal-source foods, vegetables).
  - Two nutrient-rich snacks between meals.
  - The meal plan should be balanced to provide enough energy, iron and protein for the child.

## 3. Group Presentations

- Each group will present their meal plan to the rest of the participants.
- Facilitator will give feedback and allow time for a group discussion. Trainees will discuss the rationale behind their food choices and any challenges they faced in balancing the variety, frequency and quantity.

## 4. Debrief

- Facilitator will summarize key points from the activity, reinforcing the importance of offering a variety of foods, feeding at the right frequency and serving appropriate portions.

## Key Takeaways:

1. **Variety:** Offering a range of different foods ensures a balanced intake of energy, vitamins and minerals.
2. **Frequency:** Young children need regular meals throughout the day, spaced appropriately, to support growth and development.
3. **Quantity:** Portion sizes should match the child's age and appetite, with adjustments made as necessary based on growth and activity.
4. **Daily Recommendations:** Ensure that children receive dark-green vegetables, yellow-colored fruits/vegetables, animal-source foods and staple foods daily.

## **Infant and Young Child Feeding (IYCF)**

### **Session 5.3: Complementary Feeding after 6 Months**

#### **Sub-Theme: Hygienic Preparation of Feeds**

#### **Trainer Notes:**

At the end of the session, participants will be better equipped with practical knowledge and skills to ensure that the feeding of young children is done in the safest and most hygienic way possible. The hands-on activities, including the cleaning demonstration, will reinforce the key messages of the session and give participants the confidence to implement these practices in their communities.



#### **Session Objectives:**

By the end of this session, you should be able to:

- Explain the ways of ensuring clean and safe feeding of young children.
- Demonstrate how to prepare a cup hygienically for feeding a baby.

#### **Training Materials Needed:**

- Projector and slides for presentation.
- Colored charts and sticky notes for group discussions and brainstorming.
- Board and markers for summarizing key points.
- Pre- and post-test papers.

**Duration:** 1.5 hours

#### **Objective:**

By the end of this session, participants will be able to:

1. Explain the ways of ensuring clean and safe feeding of young children.
2. Demonstrate how to prepare a cup hygienically for feeding a baby.

## Session Breakdown

Topic	Facilitator Activity	Materials/Tools
<b>Introduction to Hygienic Preparation</b>	<ul style="list-style-type: none"> <li>- Welcome participants and introduce session objectives.</li> <li>- Briefly explain the importance of hygienic feeding practices for reducing infections.</li> </ul>	Whiteboard/Flipchart, markers
<b>Clean Hands</b>	<ul style="list-style-type: none"> <li>- Explain the importance of handwashing in preventing contamination.</li> <li>- Discuss when and how caregivers should wash hands.</li> </ul>	Flipchart, handouts with handwashing guidelines
<b>Clean Utensils</b>	<ul style="list-style-type: none"> <li>- Discuss how to keep utensils clean and safe.</li> <li>- Highlight the importance of cleaning immediately after use and covering utensils to avoid contamination.</li> </ul>	Whiteboard/Flipchart, handouts with utensil cleaning tips
<b>Safe Water and Food</b>	<ul style="list-style-type: none"> <li>- Explain how to ensure water and food are safe for babies.</li> <li>- Discuss how to boil and store water and milk safely.</li> <li>- Talk about preparing and storing complementary foods.</li> </ul>	Handouts on water and milk safety, flipchart
<b>Safe Storage</b>	<ul style="list-style-type: none"> <li>- Explain the guidelines for safely storing foods, including fresh milk, dry foods and prepared meals.</li> </ul>	Flipchart, handouts with storage guidelines
<b>Disadvantages of Feeding Bottles</b>	<ul style="list-style-type: none"> <li>- Discuss the disadvantages of feeding bottles and why they should be avoided when possible.</li> </ul>	Handouts on bottle care, flipchart

	- Explain proper care and sterilization of bottles.	
<b>Activity: Cup vs. Bottle Cleaning Demonstration</b>	<ul style="list-style-type: none"> <li>- Demonstrate how to hygienically clean and prepare a cup for feeding a baby.</li> <li>- Also demonstrate cleaning and sterilizing bottles for comparison.</li> </ul>	Cups, bottles, soap, water, cloths, cleaning brushes
<b>Leaving Prepared Ingredients for Caregivers</b>	<ul style="list-style-type: none"> <li>- Explain how mothers can prepare ingredients ahead of time for caregivers.</li> <li>- Discuss the storage of pre-measured ingredients.</li> </ul>	Whiteboard, flipchart, handouts with guidelines
<b>Summary and Key Points</b>	<ul style="list-style-type: none"> <li>- Summarize the key messages of the session.</li> <li>- Emphasize the importance of safe feeding practices and hygienic preparation.</li> </ul>	Whiteboard/Flipchart

### **Detailed Activity Breakdown: Cup vs. Bottle Cleaning Demonstration**

**Objective:** To ensure that participants understand the proper techniques for hygienically preparing a cup and a bottle for feeding young children. The activity will demonstrate how to clean and sterilize both and will give participants the opportunity to practice.

#### **Steps of the Activity:**

##### **1. Group Explanation**

- Introduce the activity by briefly explaining why cups are generally preferred over bottles, due to ease of cleaning and the risk of contamination.
- Explain that participants will observe a demonstration on cleaning both a cup and a bottle.

## **2. Demonstration of Cup Cleaning**

- Show participants how to clean a cup:
  - Rinse with cold water immediately after use to remove leftover food.
  - Scrub with hot, soapy water using a brush, especially around the rim and handle.
  - Optionally, pour boiling water over the cup for an extra layer of sanitation before use.
  - Let it air dry or dry with a clean cloth.
- Explain why these steps are crucial for hygiene and safety.

## **3. Demonstration of Bottle Cleaning**

- Show participants how to clean and sterilize a bottle:
  - Rinse the bottle and teat immediately after use to remove milk residues.
  - Use hot, soapy water and a bottle brush to clean the inside thoroughly, ensuring no milk or food particles are left behind.
  - Sterilize the bottle by boiling it for 10 minutes, ensuring it is completely submerged.
  - For those who prefer not to boil, demonstrate how to soak in a diluted bleach solution, then rinse thoroughly.
- Discuss the importance of regular sterilization to prevent harmful bacteria build-up.

## **4. Hands-on Practice**

- Ask each participant to practice cleaning a cup and a bottle using the techniques demonstrated.
- Walk around, providing feedback and assistance as needed.

## **5. Group Discussion and Q&A**

- After practice, facilitate a brief discussion about challenges participants may face in cleaning cups and bottles and answer any remaining questions.

**Key Points to Emphasize Throughout the Session:**

**1. Hygienic Practices:**

- Proper handwashing before food preparation and feeding.
- Immediate cleaning of utensils and feeding items after use to prevent contamination.
- Storing food and water properly to maintain safety.
- Boiling and storing milk and water safely to avoid harmful microorganisms.
- Avoiding feeding bottles due to difficulties in cleaning and risks of contamination.

**2. Hygienic Feeding Tools:**

- Using cups rather than bottles when possible and ensuring thorough cleaning and sterilization if bottles are used.

**3. Storage and Preparation:**

- Keeping food ingredients safe through proper storage.
- Preparing fresh food when possible and avoiding storing leftovers for babies.
- Leaving pre-measured ingredients for caregivers with proper instructions for hygienic preparation.

**4. The Importance of Hygiene:**

- Reducing the risk of infections and illnesses in young children through clean and safe feeding practices.

## Module 5 Slides: IYCF Counselling Cards



1



2



3



4



5



6



7



8



9





10



11



12



13



14



15



16



17



18



19



20



21



22



23



24



25



26



27

## MODULE SIX

### EARLY CHILDHOOD DEVELOPMENT



## Early Childhood Development (ECD)

### Session 6.1: Importance & Factors Affecting ECD



#### Trainer Notes:

- Encourage group discussion and sharing of personal experiences.
- Use real-life examples and interactive activities to keep the session engaging.
- Monitor time to ensure each section is covered without rushing the important discussions.
- Be open to participants' questions and provide as much practical advice as possible.

#### Session Objectives:

By the end of this session, you should be able to:

- ✓ Define the early childhood period and early childhood development (ECD).
- ✓ Recognize the critical situation of young children in Pakistan regarding ECD indicators.
- ✓ Highlight the significance of investing in comprehensive early childhood development care services.
- ✓ Learn about the key factors influencing early childhood development, including nutrition, parenting, environment, healthcare and stimulation.
- ✓ Understand the foundational role of nutrition in healthy brain and physical development, focusing on the importance of essential nutrients and breastfeeding.
- ✓ Explore how love, care, positive interactions and a safe, stimulating environment contribute to a child's socio-emotional and cognitive growth.
- ✓ Examine how malnutrition and insufficient stimulation during the early years negatively impact brain development and cognitive function and learn about strategies for early intervention.

#### Training Materials Needed:

- Projector and slides for presentation.
- Colored charts and sticky notes for group discussions and brainstorming.
- Board and markers for summarizing key points.

**Duration:** 3 hours

**Session Plan:**

Activity	Description/Details
<b>Introduction to Early Childhood Development</b>	
<b>Welcome and Icebreaker</b>	<ul style="list-style-type: none"> <li>- Activity: "Two Truths and a Lie" (Participants share 3 statements, 1 being a lie, others guess).</li> <li>- Purpose: Engage participants and create a comfortable learning atmosphere.</li> </ul>
<b>Introduction to Early Childhood Development</b>	<ul style="list-style-type: none"> <li>- Facilitator Talk: Discuss the physical, socio-emotional, cognitive and motor growth.</li> <li>- Emphasis: The critical development period (0-2 years), brain adaptability and the role of a nurturing environment.</li> </ul>
<b>Discussion</b>	<ul style="list-style-type: none"> <li>- <b>Prompt:</b> "What do you think is most important for a child's development in the first two years?"</li> <li>- Group Sharing: Participants share their experiences and thoughts.</li> </ul>
<b>Key Factors Affecting Early Childhood Development</b>	
<b>Nutrition: Foundation for Healthy Development</b>	<ul style="list-style-type: none"> <li>- Facilitator Talk: Discuss importance of nutrition for brain development and growth (proteins, iron, zinc, omega-3, vitamins).</li> <li>- Group Discussion: "How can you ensure children receive balanced nutrition in your community?"</li> </ul>
<b>Parenting: Love, Care and Interaction</b>	<ul style="list-style-type: none"> <li>- Facilitator Talk: Importance of responsive parenting (talking, playing, comforting) and emotional bonds for cognitive growth.</li> <li>- Group Activity: Role-play parenting interactions (e.g., singing, talking, reading) and discuss impacts.</li> </ul>



<b>Environment: Safe, Stimulating and Supportive Spaces</b>	<ul style="list-style-type: none"> <li>- Facilitator Talk: Discuss the importance of a safe environment and the benefits of a stimulating one.</li> <li>- Group Discussion: Share tips for creating a safe and stimulating home for children.</li> </ul>
<b>Healthcare: Regular Check-ups and Early Intervention</b>	<ul style="list-style-type: none"> <li>- Facilitator Talk: Role of health check-ups, immunizations and early detection of issues.</li> <li>- Q&amp;A (5 minutes): Open floor for questions about local healthcare services and vaccination schedules.</li> </ul>
<b>Interactive Group Activity and Practical Application</b>	
<b>Group Activity: Designing a “Nurturing Environment”</b>	<ul style="list-style-type: none"> <li>- Objective: Design a nurturing environment plan based on discussed factors (nutrition, parenting, environment, healthcare).</li> <li>- Instructions: Groups of 4-5 people use materials (paper, markers, etc.) to create the plan. Presentations follow.</li> <li>- Presentation (10 minutes): Groups present their plans and facilitator provides feedback.</li> </ul>
<b>Impact of Malnutrition and Lack of Stimulation on Brain Development</b>	<ul style="list-style-type: none"> <li>- Facilitator Talk: Discuss consequences of malnutrition and lack of stimulation on brain development.</li> <li>- Activity: Participants reflect on signs of malnutrition and developmental delays, sharing strategies to address these issues.</li> </ul>
<b>Q&amp;A and Closing</b>	<ul style="list-style-type: none"> <li>- Open floor for questions/clarifications.</li> <li>- Summary: Key takeaways: ECD is foundational for lifelong health and success.</li> <li>- Closing Remarks: Encourage participants to apply knowledge and promote ECD in their communities.</li> </ul>

#### Key Messages:

- ✓ Child Development spans from conception (pregnancy) to the age when a child enters primary school (0-8 years).

- ✓ Early Childhood Development (ECD) includes integrated services such as good health, balanced nutrition, child safety and security, positive parent-child interactions and plenty of play and communication.
- ✓ Ensuring that children receive these services promotes their health, academic success, enjoyment of school, reduces the need for grade repetition, helps them complete their education and prepares them to be responsible citizens capable of caring for their own families.
- ✓ The first three years of life are especially crucial for providing nurturing care, as over 80% of brain development occurs during this critical period.

### **Session Activities:**

#### **Activity 1:**

#### **Activity Plan: Concept of Early Childhood and Development**

**Duration:** 30 minutes

#### **Materials Needed:**

- PowerPoint slides
- Flip chart and markers
- Handouts (optional)

#### **Methodology:**

- Presentation
- Group discussions
- Brainstorming

#### **Objective:**

To explore participants' understanding of the concept of early childhood and Early Childhood Development (ECD) within the context of Pakistan and to highlight parental expectations and the role of parents in supporting children's development.

### **Activity Breakdown:**

#### **1. Introduction**

- Begin with a brief presentation to introduce the concept of early childhood development (ECD), its importance and the critical stages from conception to primary school entry.
- Emphasize the role of parents and caregivers in ensuring healthy development.

#### **2. Group Work**

- Divide participants into 4-5 groups.
- Assign each group a specific question related to early childhood development and parental expectations in Pakistan:
  1. **Group 1:** What is the concept of the child in the Pakistan context?
  2. **Group 2:** What are parental expectations of a child (0-8 years of age) in Pakistan?
  3. **Group 3:** What should parents do to ensure that these expectations are met?
- **Instructions:**
  - Each group will brainstorm and discuss their assigned question.
  - Write down key points, ideas and answers on a flip chart.
  - Encourage open discussion and ensure all participants are actively contributing.

#### **3. Group Presentations**

- Ask each group to nominate one member to present their findings to the whole group.
- Presentations should be concise, summarizing the key points from their discussions.

#### **4. Discussion and Summary**

- After each group presents, facilitate a group discussion on the shared answers.



- Highlight the integrated nature of early childhood development: health, nutrition, safety, stimulation and parent-child interaction.
- **Facilitator Input:** Emphasize how these factors are interconnected in fostering a child's healthy development and the importance of the first 0-3 years for brain development.

### **Expected Outcomes:**

- Participants will better understand the concept of early childhood development and its significance.
- They will recognize the importance of setting realistic parental expectations and the role of parents in supporting their child's development.
- Participants will be more aware of the integrated nature of child development and how nurturing care impacts lifelong success.

### **Facilitator Tips:**

- During group presentations, encourage participants to share real-life examples or experiences that relate to the questions.
- After each group shares, provide feedback and encourage further reflection on the cultural context of early childhood in Pakistan.
- Ensure that the discussion stays focused on the integrated approach to child development and how various factors like nutrition, safety and emotional support contribute to a child's growth.

### **Closing Remarks:**

Conclude the activity by summarizing the importance of early childhood care and the active role parents play in meeting developmental needs. Encourage participants to reflect on their own experiences and share them within their communities.

## **Activity No 2: Situation of Young Children in Pakistan with Respect to ECD Indicators**

**Duration:** 30 minutes

**Materials Needed:**

- PowerPoint slides or projection for data
- Flip charts and markers
- Training cards (for province-specific data)
- Handouts (optional)

**Methodology:**

- Presentation
- Group discussion
- Brainstorming

**Objective:**

To engage participants in understanding the critical Early Childhood Development (ECD) indicators in Pakistan, explore the current situation of young children and identify areas of strength and areas needing improvement.

**Activity Breakdown:**

**1. Introduction and Presentation**

○ **Facilitator's Presentation:**

- Provide a projection of critical ECD indicators relevant to Pakistan. Focus on:
  - Population of Pakistan under 5 years
  - Number of births
  - Under-five morbidity and mortality rates
  - Stunting and malnutrition rates
  - Underweight and wasting statistics
  - Initiation of breastfeeding after birth
  - Exclusive breastfeeding rates

- Low Birth Weight (LBW)/Preterm birth rates
- **Use Training Cards:** Share Khyber Pakhtunkhwa specific data where the training is taking place to make it more localized and relevant.

- **Purpose:**

- Help participants understand the current situation of young children in terms of health, nutrition and early development in Pakistan.
- Highlight the gaps in ECD indicators and the importance of addressing these challenges.

## 2. Questions and Clarifications

- After the presentation, allow participants time to ask questions.
- Provide clarifications on any points regarding the data, indicators, or context.

## 3. Discussion on Child Development in Relation to the Situation

- Facilitate a discussion on how the presented indicators impact child development.
- **Questions to Guide the Discussion:**
  - How do high rates of malnutrition, stunting and low birth weight affect a child's brain and physical development?
  - What role does breastfeed play in improving child health and development?
  - How do high morbidity and mortality rates impact a child's emotional and social development?

## 4. Identifying Strong and Weak Areas

- Ask the participants:
  - "Which ECD indicators in Pakistan are we doing well in?"
  - "Which ECD indicators do we need to improve on?"
- Encourage participants to reflect on their knowledge of the local situation and their own experiences.
- **Brainstorming:** Have the group write their responses on the flip chart.
  - Divide responses into two sections: **Strengths** (Where progress has been made) and **Challenges** (Where improvement is needed).

## 5. Group Discussion and Summarization

- After the responses are written on the flip chart, discuss the following:

- What factors contribute to the strengths in certain ECD indicators?
- What challenges contribute to the weaker areas in ECD indicators?
- How can these challenges be addressed through community-based action, policy change, or improved services?
- Summarize the key points discussed, emphasizing the importance of improving ECD indicators for better child development outcomes in Pakistan.

#### 6. Closing Remarks and Questions

- Answer any final questions that participants may have regarding the session or the data presented.
- Remind participants that addressing these ECD indicators is crucial for the health, growth and future success of children in Pakistan.
- Encourage participants to consider how they can contribute to improving the situation in their communities.

#### Facilitator Tips:

- **Local Context:** Ensure to tailor the data and discussion to the province where the training is taking place. Use the training cards for more detailed local statistics to make the discussion more meaningful.
- **Engagement:** Since some participants may not be able to read or write, emphasize discussion and group brainstorming. Let the group collaborate and share their thoughts freely.
- **Summarizing:** After brainstorming, summarize the key responses to guide the discussion towards practical solutions and improvements.
- **Use Visual Aids:** Use flip charts to write down key responses and data points. Visual aids can help participants better understand and connect with the information.

## Early Childhood Development:

## Early Childhood Development Key Family Care Practices



1

## Basic Concepts

- Early Childhood Development and its importance
- Introduction to nurturing care, positive parenting and key family care practices
- Family and harmonious relationship

2

2

## Learning Objectives

- Upon completion of this session participants should be able to:
- Explain what is early childhood period and early childhood development
- Understand the critical situation of young children in Pakistan with respect to ECD
- indicators
- Explain the importance of investing in comprehensive early childhood development
- care services
- Duration: 90 mins

7/8/2025

3

3

## EARLY CHILDHOOD DEVELOPMENT (ECD) AND ITS IMPORTANCE

Concept of early childhood and ECD

Situation of young children in Pakistan with respect to ECD indicators

Integrated early childhood development and key components

7/8/2025

4

4

## Activity

- Concept of the child in Pakistan context
- What are parental expectations of a child (0-8 years of age) in Pakistan?
- What should parents do to ensure that these expectations are met?

7/8/2025

5

5



## What is Early Childhood Development?

- An **Outcome** – all children should:
  - Survive – an imperative..
  - Be physically healthy, mentally alert, emotionally sound, socially competent and ready to learn
- A **Process** - intertwined interventions of:
  - Health, nutrition, education and child protection services
  - Key family care practices – improved knowledge, practices and attitudes
  - Creation of conducive/enabling policy environment

7/8/2025

6

6

## Continuum of Child Development along the Life Cycle..

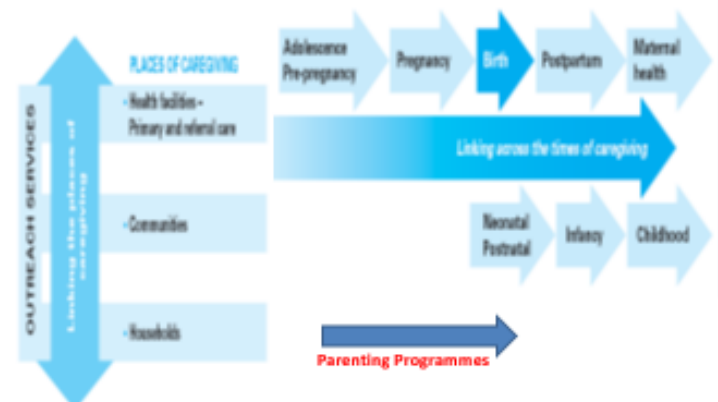


7/8/2025

7

7

## Continuum of Care in Time and Place



7/8/2025

Source: PHNCH ([www.phnch.gov.pk/publications/continuum-of-care.pdf](http://www.phnch.gov.pk/publications/continuum-of-care.pdf)), accessed 30 September 2007.

8

8

## Bonding and Attachment

### Two imperatives

for

### Quality Maternal/Newborn and Child Care

7/8/2025

9

9

## Bonding

The caregiver's process forming a  
relationship with her new infant

(mother/caregiver to infant)

Begins during the  
first few hours  
after birth

7/8/2025

10

10

## Attachment

infant's process forming a relationship with his or her  
mother/caregiver (infant to mother/caregiver), and  
reinforced by the responses of the mother/ caregiver

- Occurs in first two years of life, but especially  
between 2 and 7 months of age
- Child's personal communication system  
with the primary caregiver...

7/8/2025

11

11



## Care for Child Development therefore are...

Strengthen home care to improve the child's  
chances to survive

To stimulate the development of the child's full  
potential

7/8/2025

12

12



## Facts

It is the period of **most rapid brain development**. About 80% of the human brain has already developed by age 5.

The early years constitute the period of **highest sensitivity** to the both enriching environments and adverse environments.

This period of development **only comes once**; if you miss it, there are some fairly long-term consequences for life course outcomes.

**Improves equity:** Research shows that EARLY CHILDHOOD interventions benefit the poorest and most disadvantaged children the most even though these children currently are the least likely to have access to them. In addition, it is more difficult and costlier to intervene later in children's lives.

7/8/2025

13

13

## Continued...

**Return on investment for societies:** Investments in early childhood programmes, starting with the youngest, yield more than a 13% return in reduced poverty and income gaps and increased prosperity and economic competitiveness.

**Cost savings for society:** Quality early childhood environment and education will translate into better health, fewer illnesses, good academic skills, and fewer school drop outs and repetition, preparing the child to become a productive citizen. This means less cost to communities.

**Poverty reduction:** Quality early childhood development experiences and education lead to better success in school, which in turn prepares the child to become an adult with higher employment and earnings, better health, and lower levels of dependency on families and society as well as lower crime rates compared to children who don't have these opportunities.

7/8/2025

14

14

## What Brain Needs in the early Years?

**Stimulation** sparks connections between brain cells.

Talking to, singing with, cuddling, and playing with children may seem like simple actions — but they serve an important function by building and strengthening neural connections in a baby's developing brain. Without them, brain development can be hindered.

**Adequate nutrition** also fuels connections between brain cells.

In early childhood, the brain consumes almost 50 to 75 per cent of the energy that a baby's body absorbs from food.

A lack of nutrition in early childhood can lead to stunting — a condition that affects almost one quarter of children under five worldwide. Stunting is characterized by low height for age, and cognitive deficits that hinder learning in school and earning in adulthood.

Early brain development depends on **protection from violence**.

When an infant or young child experiences violence, abuse or neglect, it can result in abnormally high levels of stress — "toxic" stress — that can disrupt brain connectivity.

Healthy brain development depends on **protection from air pollution and other environmental hazards**.

Emerging research shows that small particles of pollution can break down critical barriers in a child's brain, leading to the loss and damage of neural tissue.

7/8/2025

15

15



## KEY MESSAGES

- ✓ Child development is the period from conception (pregnancy) to primary school entry age (0-8 years)
- ✓ Early Childhood development (ECD) consists of integrated services such as good health, balance nutrition, safety and security of child, clean and good parent-child interaction with lots of play and communication
- ✓ Ensure your child has these services to be healthy, perform well in school, like school with reduced repetition of class, complete school to job, and become a good citizen, and take be able to take care of his/her own family.
- ✓ From conception to three years of life are very important in the provision of nurturing care because more than 80% of brain develops during this time and is a critical period.

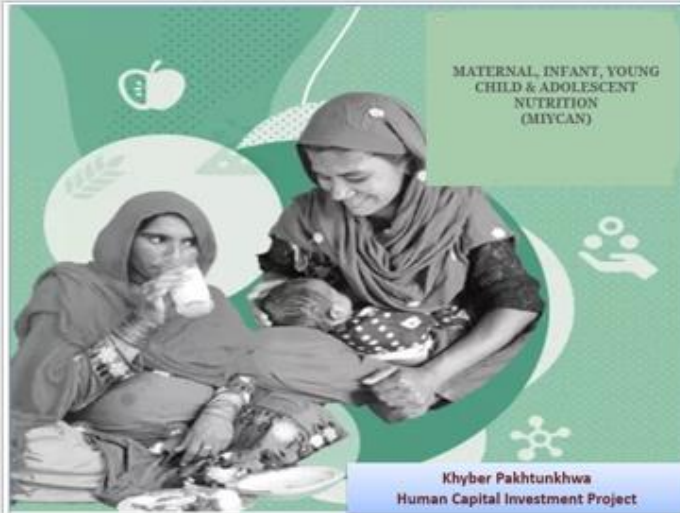
7/8/2025

16

16



## Early Childhood Development:



1



2

### Learning Objectives

- Explain that educating care givers is beyond just giving information
- Will have improved skills on counselling
- Will be able to practice using the ABC of counseling

3

### Activity

- Identify traditional/local games that parents/caregivers can involve their children of different ages conception:
  - Birth – 1 year
  - 1 year - 3 years
  - 4-6 years
  - 7-8 years
- Identify traditional children songs/rhymes and at the end of the training catalogue them for community use.

4

### Activity

- **Role play:** Divide participants in groups of 5s and ask them come up with plays/games and explain which domain of child development ( Cognitive, motor, social and emotional and language competencies) is the play promoting.
- (The aim of this role play is to show parents that child different domains need to be promoted in different ways because all the developmental domains are intertwined because one cannot function well without the other)

5

### Key Messages

- The new born **brain develops** at a fast rate.
- Brain development is directly influenced by the quality of relationships and how s/he is cared in terms of body contact warm and loving care and **stimulation of the senses**- make child hear sounds, see colours etc.
- Children need proper **nutrition, good health, positive parenting** through stimulation for sensory experiences and **protection** from abuse, neglect and toxins for the brain to develop healthily.
- **Sensitive and critical periods** of development impact lifelong development and achievements.
- Young children need lots of **quality interactions** to build connections in their brains for learning and healthy development.

6

### Key Messages

- Healthy environment that stimulate all the senses through singing, story-telling, reading, playing, smelling, tasting, listening, touching, interacting with adults and other children build a healthy brain.

7

### Key Messages

- Talk to the child during breastfeeding, feeding while having eye contact.
- Talk to the child every day by repeating and adding other words, tell stories to the child to help stimulate the brain.
- Take time to have some contact and affective moments with the child while looking into his eyes- laughing and making the child to smile/laugh.
- Every day a parent should have some interaction at least 30 minutes per day with the child- doing something together that will make the child feel happy.

8

## Early Childhood Development (ECD)

### Session 5.2: Key Milestones in Early Childhood Development

**Session Duration: 2 hours**

#### **Tips for the Facilitator:**

- **Engagement:** Use real-life examples and case studies to keep participants engaged and ensure that the material resonates with their daily practice.
- **Interactive Delivery:** Encourage questions and create opportunities for discussions around the topics.
- **Inclusivity:** Adapt the session to meet the learning needs of the audience, using simple language and offering additional support to those who might need it.
- **Clarification:** Always pause to clarify concepts when introducing new tools or technical terms related to developmental milestones.

#### **Session Objectives:**

1. Understand the key physical, cognitive, social and emotional milestones in early childhood development (0-5 years).
2. Learn how to monitor and assess a child's growth and development through various methods, including growth charts and developmental screening tools.
3. Gain practical knowledge on how healthcare providers can support parents in fostering healthy development and identify signs of potential delays.

#### **Materials Required:**

- PowerPoint slides to visually present key milestones and charts.
- Flip charts and markers for group discussions.
- Handouts with developmental milestone summaries.
- Growth charts (printed or digital) for demonstration.
- Standardized developmental screening tools (e.g., Denver Developmental Screening Test).

- Videos or images showcasing children at different developmental stages (optional).

### Session Outline:

Content	Activity	Methodology/Details
Introduction	Brief Introduction & Icebreaker	<ul style="list-style-type: none"> <li>- Overview of the session's objectives.</li> <li>- Importance of monitoring childhood development.</li> <li>- <b>Icebreaker:</b> Participants share a milestone they've observed or experienced.</li> </ul>
Understanding Key Milestones	Physical Development	<ul style="list-style-type: none"> <li>- Overview of key physical milestones (birth to 5 years).</li> <li>- Focus on motor skills, coordination and growth.</li> <li>- PowerPoint slides and visual examples for illustration.</li> </ul>
	Cognitive Development	<ul style="list-style-type: none"> <li>- Overview of cognitive milestones (birth to 5 years).</li> <li>- Focus on language, memory, problem-solving and curiosity.</li> <li>- Group activity: Discuss how cognitive skills impact development.</li> </ul>
	Social Development	<ul style="list-style-type: none"> <li>- Review social milestones (e.g., social interactions, emotional regulation).</li> <li>- Group discussion on how social skills develop through play and peer interactions.</li> </ul>
	Emotional Development	<ul style="list-style-type: none"> <li>- Discuss how emotional awareness and self-regulation evolve.</li> <li>- <b>Optional Video:</b> Show a clip of a toddler's emotional response in a challenging situation.</li> </ul>
Monitoring Growth	Why Monitoring is	<ul style="list-style-type: none"> <li>- Discuss the importance of tracking milestones</li> </ul>

<b>&amp; Development</b>	Important	<p>and identifying delays.</p> <ul style="list-style-type: none"> <li>- Explain how early intervention leads to better outcomes.</li> </ul>
	How to Monitor Growth	<ul style="list-style-type: none"> <li>- Demonstrate the use of growth charts (height, weight, head circumference).</li> <li>- Overview of developmental screening tools (e.g., Denver Developmental Screening Test).</li> </ul>
	Parental Input & Observation	<ul style="list-style-type: none"> <li>- Teach how to involve parents in monitoring.</li> <li>- Discuss documenting and assessing growth through observations during routine check-ups.</li> </ul>
<b>Group Activity: Monitoring Development</b>	Activity Instructions	<ul style="list-style-type: none"> <li>- Divide into small groups (4-5 participants).</li> <li>- Provide case studies or hypothetical scenarios (e.g., 3-month-old, 6-month-old, 2-year-old).</li> <li>- Groups identify milestones and use tools.</li> </ul>
	Debrief	<ul style="list-style-type: none"> <li>- Groups present findings.</li> <li>- Facilitate a discussion on developmental delays and the importance of timely intervention.</li> </ul>
<b>Conclusion &amp; Q&amp;A</b>	Recap & Open Floor for Questions	<ul style="list-style-type: none"> <li>- Recap key takeaways: Monitoring milestones, supporting parents, early intervention.</li> <li>- Open the floor for any remaining questions or concerns.</li> </ul>
<b>Closing Remarks</b>	Closing & Handout Distribution	<ul style="list-style-type: none"> <li>- Thank participants for engagement.</li> <li>- Provide handouts summarizing key milestones and monitoring techniques.</li> <li>- Encourage application of session knowledge and referrals for delays.</li> </ul>

## Early Childhood Development Parenting Package



1

## Parenting Package-the Approach

This training contains counseling approach and appropriately timed messages on 22 key family practices that frontline workers from various sectors will deliver with the help of counseling cards.

Following are the key steps that trainers need to ensure:

- ✓ Know the concepts
- ✓ Follow the steps
- ✓ Use slides and materials
- ✓ Use energizers
- ✓ Emphasize role plays
- ✓ Handouts (where necessary)

2

## Objective of the Training of Trainers

The overall objective of the Training of Trainers is to train front-line workers. These frontline workers will then educate families and care givers using the counseling cards.

### Specific Objectives:

- Increase knowledge among participants on the importance of the early years and Early Childhood Development
- Increase knowledge among the participants on the roles and responsibilities of the duty bearers towards children
- Increase knowledge and improve skills of the participants on positive parenting and its benefits for the holistic development of the child and the specific family care practices
- Educate participants with hands on practical exercises on using the counseling skills

3

## Methodology

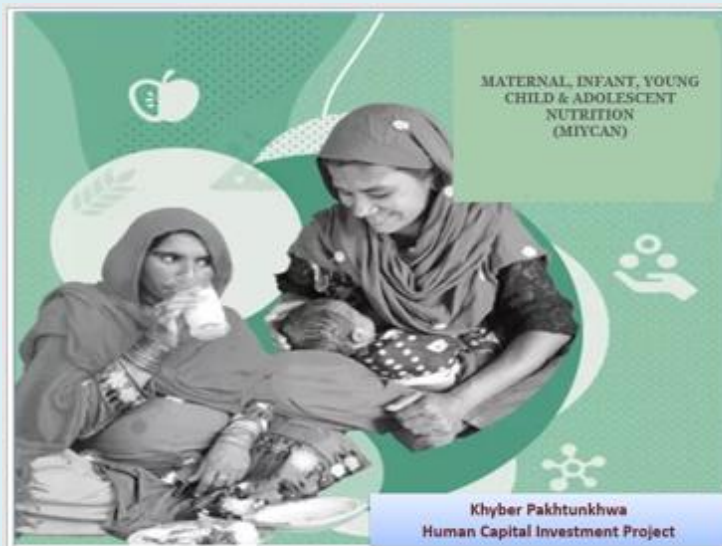
There are four main steps for each session of the training. These include:

- A. Introduce the topic, the session objectives, and present the content with the help of power point slide or flip chart.
- B. Conduct an interactive discussion after finishing the lecture. Ensure participation of all trainees, listen to their experiences and encourage discussion.
- C. Provide an interesting scenario and have the participants do a role-play where relevant. The scenario is provided in some sessions and give instructions for role-play.
- D. Feedback the role-play and conclude the session. Once role-play finishes, ask the group to provide their feedback. Add your own comments in the end and then conclude the session.

Training will focus on developing hands on experience of communicating with care-givers with practice sessions

4

## Early Childhood Development: Key Family Care Practices



1



2

### Basic Concepts

- Introduction to nurturing care, positive parenting and key family care practices
- Family and harmonious relationship

3

3

### Learning Objectives

#### To Understand Key Developmental Milestones

Participants will be able to identify and describe major cognitive, physical, social, and emotional milestones in children from birth to age 5.

#### To Recognize Influential Factors in Development

Participants will analyze how factors such as family environment, nutrition, early learning experiences, and caregiver interactions influence early childhood development.

#### To Apply Developmentally Appropriate Practices

Participants will demonstrate the ability to plan and implement developmentally appropriate activities and strategies that support holistic growth in young children.

7/7/2025

4

4



## Early Childhood Development Key Family Care Practices

### Practices 1:

Husband and wife should talk to each other frequently about family matters including child's health, growth and development; and positive discipline.



### Practices 2:

Avoid unplanned pregnancy and ensure three years of interval/spacing between births of children by using appropriate contraceptive methods.



5

## Early Childhood Development Key Family Care Practices

### Practices 3:

Ensure that every pregnant woman receives at least four antenatal visits from appropriate health care provider including recommended doses of tetanus ~~toxin~~ vaccination.



### Practices 4:

Have your babies' delivery be attended by a skilled birth attendant to avoid complications.



6

## Early Childhood Development Key Family Care Practices

### Practices 5:

Ensure that the baby is breastfed immediately after birth (at least within one hour) and is exclusively breastfed for six months.



### Practices 6:

Keep the newborn baby warm, have body contact with the baby, keep the umbilical cord clean and avoid bathing the baby for the first 24 hours of birth.



7

## Early Childhood Development Key Family Care Practices

### Practices 7:

Recognize danger signs in newborns and take them to the health care provider for immediate treatment.



### Practices 8:

Register birth of boys and girls as soon as possible and obtain a birth certificate



8

## Early Childhood Development Key Family Care Practices

### Practices 9:

Starting at six months of age, feed children freshly prepared variety of complementary food, while continuing to breastfeed babies up to two years or longer.



### Practices 10:

Take all girls and boys for vaccination at birth, 6 weeks, 10 weeks, 14 weeks and 9 months for full course of immunization to protect them from communicable diseases.



9

## Early Childhood Development Key Family Care Practices

### Practices 11:

Ensure that children, adolescents and women receive adequate amounts of micronutrients (vitamin A, iron, zinc and folic acid) either in their diet or through supplements.



### Practices 12:

Protect children and pregnant women in malaria endemic areas by ensuring that they sleep under insecticide-treated bed nets.



10

## Early Childhood Development Key Family Care Practices

### Practices 13:

Continue to feed and offer more fluids including breast milk when children are sick.



### Practices 14:

Promote children's mental and social development by responding to the child's need for care and by stimulating the child through talking, playing and other appropriate physical and affective interactions.



11

## Early Childhood Development Key Family Care Practices

### Practices 15:

Ensure that men actively participate in providing nurturing and care to children and are involved in reproductive health initiatives.



### Practices 16:

Seek appropriate care and social support during perinatal period to manage maternal mental health.



12

## Early Childhood Development Key Family Care Practices

### Practices 17:

Ensure that all family members use a toilet and always wash hands with clean water and soap/ash after disposing of children's faeces, after using the latrine, before preparing and serving food and before feeding children.



### Practices 18:

Monitor and promote child's growth and follow health worker's advice about treatment, follow-up and referral in case of disabilities, for timely intervention and management.



13

## Early Childhood Development Key Family Care Practices

### Practices 19:

Prevent and respond to abuse of girls, boys and women.



### Practices 20:

Take appropriate actions to prevent and manage child injuries and accidents.



14

## Early Childhood Development Key Family Care Practices

### Practices 21:

Make sure that children are brought up with warmth, care, kind words and gentle guidance and positive discipline from parents and family members.



### Practices 22:

Support children's learning, enroll and keep girls and boys in school until the age of 16.



15

## Activity

## Case Study/Group Work

16

## **Early Childhood Development (ECD)**

### **Session 6.3: Assess, Classify and Manage Child's Development**

**Session Duration: 2 hours**

#### **Tips for the Facilitator:**

1. **Engagement:** Keep the tone interactive and approachable. Use real-life examples and stories to connect with participants. Incorporate humor when appropriate to foster a positive atmosphere.
2. **Adaptability:** Adjust the pace based on the participants' level of experience and prior knowledge. If the group is well-versed, consider focusing on advanced strategies for challenging scenarios.
3. **Sensitivity:** Be mindful that some discussions may be personal or sensitive, especially when addressing child behavior and developmental delays. Provide a non-judgmental and supportive environment for participants to feel comfortable sharing.
4. **Language:** Use clear, simple language to ensure all participants can follow the session. Avoid jargon unless it's explained in simple terms.

#### **Method of Delivery:**

Presentation, Interactive Discussion, Role Plays, Q&A, Group Activities

#### **Materials Required:**

- PowerPoint slides
- Flip charts and markers
- Handouts on child development milestones
- Child development videos (optional)
- Worksheets for activities
- Assessment tools and checklists

#### **Session Plan:**

Activity	Objective	Methodology/Notes
<b>Introduction &amp; Icebreaker</b>	Set the tone of the session, introduce the facilitator and encourage engagement.	<ul style="list-style-type: none"> <li>- <b>Self-introduction:</b> Ask participants to share their name, role and experience with child development.</li> <li>- <b>Icebreaker Question:</b> "What's one surprising thing you've observed in a child's development?"</li> </ul>
<b>Care for Child Development: 0-6 Months</b>	Understand key developmental milestones for infants (0-6 months) and learn appropriate care strategies.	<ul style="list-style-type: none"> <li>- <b>Key Content:</b> Physical, cognitive and emotional milestones in infants.</li> <li>- <b>Care Tips:</b> Responsive caregiving, safe sleep, sensory development.</li> <li>- <b>Interactive Activity:</b> Role-play comforting a crying infant and discussing how to ensure a stimulating, safe environment.</li> </ul>
<b>Care for Child Development: 6-12 Months</b>	Recognize developmental milestones for infants (6-12 months) and learn how to care for their motor and social skills.	<ul style="list-style-type: none"> <li>- <b>Key Content:</b> Development of motor skills, sensory engagement and emotional attachment.</li> <li>- <b>Care Tips:</b> Baby-proofing, safe exploration.</li> <li>- <b>Interactive Activity:</b> Group exercise on activities promoting physical and cognitive growth; discussion on baby-proofing.</li> <li>- <b>Video demonstration:</b> Real-life scenarios of development milestones.</li> </ul>
<b>Care for Child Development: 12 Months – 2 Years</b>	Understand rapid changes in toddlers' physical, cognitive and emotional development.	<ul style="list-style-type: none"> <li>- <b>Key Content:</b> Walking, fine motor skills, language explosion, autonomy.</li> <li>- <b>Care Tips:</b> Language development, managing tantrums, fostering social skills.</li> </ul>

		<ul style="list-style-type: none"> <li>- <b>Interactive Activity:</b> Group discussion on handling tantrums. Role-play: Demonstrating strategies for managing defiance.</li> </ul>
<b>Care for Child Development: 2 Years – 5 Years</b>	Learn how to foster growth during preschool years (2-5 years) with a focus on physical, cognitive and emotional development.	<ul style="list-style-type: none"> <li>- <b>Key Content:</b> Fine motor skills, independence, imaginative play, social interaction.</li> <li>- <b>Care Tips:</b> Encourage independence, learning through play, emotional regulation.</li> <li>- <b>Interactive Activity:</b> Group discussion on activities for preschoolers.</li> <li>- <b>Case Study:</b> Discuss a child struggling with emotional regulation and share potential strategies.</li> </ul>
<b>Conclusion and Wrap-Up</b>	Recap the session, provide final takeaways and open the floor for Q&A.	<ul style="list-style-type: none"> <li>- <b>Summary of Key Points:</b> Recap milestones for 0-6 months, 6-12 months, 12-24 months and 2-5 years.</li> <li>- <b>Interactive Discussion:</b> Reflect on the key takeaways.</li> <li>- <b>Closing Activity:</b> Distribute handouts with resources.</li> </ul>
<b>Evaluation and Feedback</b>	Collect feedback from participants to evaluate the session and gather suggestions for improvement.	<ul style="list-style-type: none"> <li>- Distribute feedback forms to assess content, delivery and engagement.</li> <li>- Encourage participants to share ideas for improving future sessions.</li> </ul>

Session Slides: Key Milestones in Early Childhood Development:



## Early Childhood Development Assess & Classify



1

## Learning Objectives

### A. Classify Developmental Progress and Identify Delays

- Learn to classify child development as typical or delayed based on age-appropriate milestones.
- Identify red flags or early signs of developmental delays or concerns in children.
- Differentiate between typical developmental variation and concerning delays that require further evaluation.

### B. Manage Developmental Concerns and Early Interventions

- Develop skills in providing age-appropriate advice and guidance to parents/caregivers on promoting healthy development in children.
- Know how to manage common developmental concerns (e.g., delayed speech, motor skills) at the primary care level.
- Understand the referral pathways for children with significant developmental delays and the importance of early intervention programs.

2

## Care for Child Development 0-6 Months



3

### CARE FOR CHILD DEVELOPMENT 0-6 MONTHS

<p><b>ASSESS:</b> <b>ASK THE CAREGIVER:</b></p> <ul style="list-style-type: none"> <li>How old is your child?</li> <li>Does your child smile and laugh?</li> <li>Does your child move things and arms freely?</li> </ul> <p><b>IDENTIFY RISK FACTORS:</b></p> <ul style="list-style-type: none"> <li>Did you receive prenatal care? If yes, how many times?</li> <li>Did you have any complications during pregnancy?</li> <li>Did you take any other medication from the first trimester to the third trimester?</li> <li>How many times did you have any problems during your pregnancy and the child's birth?</li> <li>Was your baby delivered prematurely?</li> <li>What was your baby's weight at birth? Was the baby hospitalized at birth?</li> <li>Did your child's eyes or skin become yellow after birth?</li> <li>Has your child had any serious illness, such as meningitis, head injury or other conditions?</li> <li>Are there any genetic or hereditary diseases in the family?</li> <li>What do you think of your child's development?</li> </ul> <p><b>IDENTIFY:</b></p> <ul style="list-style-type: none"> <li>Any social or environmental risk factors (examples: mother's level of education, alcoholism, drugs use, domestic violence abuse, neglect, maternal mental health, etc.)</li> <li>What is your level of education?</li> <li>What is your family's source of water?</li> <li>Does your family have a toilet?</li> <li>Did you receive appropriate care and/or drugs during pregnancy or have any other child health problems?</li> <li>Do you have the baby in your arms for more than 12 hours a day?</li> <li>Do you breastfeed your child at least for 10 minutes every day?</li> <li>Do you frequently quarrel with your partner or your mother-in-law?</li> <li>Have you ever been in the hospital?</li> <li>Are there any other family members living in the household? What is your household's composition?</li> <li>Do you frequently suffer from financial stress or poor state of health?</li> </ul> <p><b>Further information for follow-up:</b> If you have, who is the village health worker able to contact you? Please give a name and phone number.</p>	<p><b>CHIEF COMPLAINT:</b> <b>History (under 1 month):</b></p> <ul style="list-style-type: none"> <li>Lying face up with arms and legs flexed and head side ways</li> <li>Stare reflex</li> <li>Look at your face</li> <li>Cries</li> <li>Staring reflex</li> <li>Lying face down, raises his or her head</li> <li>Suckle well</li> </ul> <p><b>0-2 months old:</b></p> <ul style="list-style-type: none"> <li>Social smile</li> <li>Starts to object as not target</li> <li>Uses voice to make sounds (coughing)</li> <li>Attempts kicking</li> </ul> <p><b>3-4 months old:</b></p> <ul style="list-style-type: none"> <li>Responds to the examiner</li> <li>Mobile objects</li> <li>Mobile sounds</li> <li>Mobile head up</li> </ul> <p><b>4-6 months old:</b></p> <ul style="list-style-type: none"> <li>Reaches for a toy</li> <li>Brings objects to his/her mouth</li> <li>Locates the source of a sound by turning towards the sound</li> <li>Activities</li> <li>Smiles</li> <li>Actively changes position (rolls over)</li> </ul> <p><b>MEASURE:</b> head circumference</p> <ul style="list-style-type: none"> <li>102cm or + 102cm (refer to reference chart)</li> </ul> <p><b>LOOK for presence of any abnormal physical features:</b></p> <ul style="list-style-type: none"> <li>An unusual size to the eyes (bilateral proptosis)</li> <li>Unusually wide-set eyes (hypertelorism)</li> <li>Low-set ears</li> <li>Handicap</li> <li>Cleft palate</li> <li>An abnormally short or long neck</li> <li>A single crease across the centre of the palm (single palmar crease)</li> <li>Abnormality of the finger (i.e. very short and the bone is curved or bent)</li> </ul>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

4





<ul style="list-style-type: none"> <li>• Head circumference is <math>&lt; -2SD</math> or <math>&gt; +2SD</math></li> <li>• 3 or more abnormal features are present</li> <li>• The infant does not display one or more of the reflexed postural skills corresponding to the age group</li> </ul>	<b>Risk</b> <b>PROBABLE DEVELOPMENT DELAY</b>	<b>IDENTIFY TREATMENT</b> <ul style="list-style-type: none"> <li>• Counsel the caregiver and emphasize the importance of referral treatment</li> <li>• Refer the infant for neurological and postoperative assessment</li> </ul>
<ul style="list-style-type: none"> <li>• The infant does not display one or more of the reflexed postural skills corresponding to her/his age group, but there are one or more risk factors</li> </ul>	<b>Yellow</b> <b>DEVELOPMENTAL ALERT</b>	<b>IDENTIFY TREATMENT</b> <ul style="list-style-type: none"> <li>• Counsel the caregiver about playing and communicating with the baby (refer to the counseling card)</li> <li>• Schedule a return visit within 2 weeks. Tell the caregiver what warning signs to look for, indicating that they should return as soon as they notice a warning sign but not later than in 2 weeks</li> </ul>
<ul style="list-style-type: none"> <li>• The infant displays all the reflexed postural skills corresponding to her/his age group, but there are one or more risk factors</li> </ul>	<b>Yellow</b> <b>NORMAL DEVELOPMENT WITH RISK FACTORS</b>	<b>IDENTIFY TREATMENT</b> <ul style="list-style-type: none"> <li>• Counsel the caregiver about playing and communicating with the baby (refer to the counseling card)</li> <li>• Schedule a return visit within 2 weeks. Tell the caregiver what warning signs to look for, indicating that they should return with the child as soon as possible but not later than in 2 weeks</li> </ul>
<ul style="list-style-type: none"> <li>• The child displays all the reflexed postural skills corresponding to her/his age group, and there are no risk factors</li> </ul>	<b>Green</b> <b>NORMAL DEVELOPMENT</b>	<b>IDENTIFY TREATMENT</b> <ul style="list-style-type: none"> <li>• Praise the caregiver</li> <li>• Counsel the caregiver to continue playing and communicating with the baby</li> <li>• Schedule a return visit for routine monitoring based on the schedule followed by the health facility</li> <li>• Tell the caregiver what warning signs to look for, indicating that they should bring their child back sooner (e.g. convulsions, change too much, extremely irritable, refuses to eat)</li> </ul>

## Care for Child Development 6-12 Months



Care for CHILD DEVELOPMENT 6-12 MONTHS	
<b>ASSESS THE CAREGIVER</b> <ul style="list-style-type: none"> <li>• How old is your child?</li> <li>• Is your child able to respond when you call/teasing name?</li> <li>• What type of words does the child understand?</li> <li>• Is your child able to say a few words?</li> <li>• Does the child try to bring to you what you asked?</li> </ul>	<b>CLINICAL</b>
<b>IDENTIFY RISK FACTORS</b> <ul style="list-style-type: none"> <li>• Did you attend prenatal visit? If yes, how often?</li> <li>• Did you deliver late and felt a complication during pregnancy?</li> <li>• Did you take any other medication than the regular or other antenatal treatment? If yes, specify.</li> <li>• Were there any problems during your pregnancy in the third trimester?</li> <li>• Was your baby delivered prematurely?</li> <li>• What was your baby's weight at birth?</li> <li>• Was the baby hospitalized after birth?</li> <li>• Did your child have an infection before or after birth?</li> <li>• Has your child had any serious illness, such as meningitis, hepatitis, diarrhoea?</li> <li>• Are there any physical or mental delays in the child?</li> <li>• What do you think of your child's development?</li> <li>• Did you ever see the child during your pregnancy?</li> </ul>	<b>CLINICAL</b>
<b>REMARKS:</b> <ul style="list-style-type: none"> <li>• Any social or environmental risk factors (Biomarker, mother's level of education, occupation, drug use, domestic violence, abuse, neglect, maternal mental health, etc.)</li> <li>• What is your family history of mental?</li> <li>• Does your family have a history?</li> <li>• Has your child ever been in contact with drugs during pregnancy? Is there a possibility of abuse?</li> <li>• Does your child have any other chronic condition that may affect their development?</li> <li>• Do you think the child will ever be able to do anything?</li> <li>• Do you have any other family members who are also affected by the same condition?</li> <li>• Do you have any other family members who are also affected by the same condition?</li> <li>• Do you have any other family members who are also affected by the same condition?</li> </ul>	<b>CLINICAL</b>
<b>Notes/observations for Follow-up:</b> If you have, who is the child would be able to contact you? Please give a name and phone number.	

<ul style="list-style-type: none"> <li>• Head circumference is <math>&lt; -2SD</math> or <math>&gt; +2SD</math></li> <li>• 3 or more abnormal features are present</li> <li>• The infant does not display one or more of the reflexed postural skills corresponding to the age group</li> </ul>	<b>Risk</b> <b>PROBABLE DEVELOPMENT DELAY</b>	<b>IDENTIFY TREATMENT</b> <ul style="list-style-type: none"> <li>• Counsel the caregiver and emphasize the importance of referral treatment</li> <li>• Refer the infant for neurological and postoperative assessment</li> </ul>
<ul style="list-style-type: none"> <li>• The infant does not display one or more of the reflexed postural skills corresponding to her/his age group, but there are one or more risk factors</li> </ul>	<b>Yellow</b> <b>DEVELOPMENTAL ALERT</b>	<b>IDENTIFY TREATMENT</b> <ul style="list-style-type: none"> <li>• Counsel the caregiver about playing and communicating with the baby</li> <li>• Schedule a return visit within 2 weeks</li> <li>• Tell the caregiver what warning signs to look for, indicating that they should return with the child as soon as possible but not later than in 2 weeks</li> </ul>
<ul style="list-style-type: none"> <li>• The infant displays all the reflexed postural skills corresponding to her/his age group, but there are one or more risk factors</li> </ul>	<b>Yellow</b> <b>NORMAL DEVELOPMENT WITH RISK FACTORS</b>	<b>IDENTIFY TREATMENT</b> <ul style="list-style-type: none"> <li>• Counsel the caregiver about playing and communicating with the baby</li> <li>• Schedule a return visit within 2 weeks</li> <li>• Tell the caregiver what warning signs to look for, indicating that they should return with the child as soon as possible but not later than in 2 weeks</li> </ul>
<ul style="list-style-type: none"> <li>• The child displays all the reflexed postural skills corresponding to her/his age group, and there are no risk factors</li> </ul>	<b>Green</b> <b>NORMAL DEVELOPMENT</b>	<b>IDENTIFY TREATMENT</b> <ul style="list-style-type: none"> <li>• Praise the caregiver</li> <li>• Counsel the caregiver to continue playing and communicating with the baby</li> <li>• Schedule a return visit for routine monitoring based on the schedule followed by the health facility</li> <li>• Tell the caregiver what warning signs to look for, indicating that they should bring their child back sooner (e.g. convulsions, change too much, extremely irritable, refuses to eat)</li> </ul>



## **PARTICIPANT'S HANDOUTS**

### **Annexure 1: Case Scenarios (Module 1: Listening and Learning Skills)**

#### **Scenario 1: Breastfeeding Challenges in Rural Areas**

**Background:** A mother from a rural village has just delivered her first baby. She is facing difficulties with breastfeeding because she is unsure of how to latch her baby correctly. Additionally, she mentions that there are no breastfeeding support groups in her community and she is hesitant to ask for help because of traditional beliefs that breastfeeding only works if the mother eats specific foods.

#### **Scenario 2: Early Introduction of Solid Foods**

**Background:** A mother comes to your clinic with her 6-month-old infant and mentions that she has started giving her baby mashed rice and other soft foods. She says that her mother-in-law and neighbors advised her to start early because the baby is "too hungry" and not satisfied with breastfeeding alone.

#### **Scenario 3: Dealing with Malnutrition Concerns**

**Background:** A mother brings her 2-year-old child to the clinic, concerned that her child is not gaining weight and looks undernourished. The mother is following the local practice of feeding the child a basic diet of rice and lentils but is unsure if this is enough. She mentions that she has heard conflicting advice about how to feed her child from family members and neighbors.

#### **Scenario 4: Maternal Health and Nutrition during Pregnancy**

**Background:** A pregnant woman visits the clinic for a routine check-up. She mentions feeling weak and tired all the time and is concerned that she's not getting the nutrients she needs. She expresses that she cannot afford expensive foods and is unsure about what to eat for better health during her pregnancy. Her family believes that eating "heavy foods" will help her feel stronger, but she is not sure what that means.

## **Annexure 2: Case Scenarios (Module 2: Maternal Nutrition)**

### **Sub-Theme: Socio-cultural Factors Effecting Maternal and Child Nutrition in Pakistan**

#### **Scenario 1: Poverty and Limited Access to Nutrient-Rich Foods**

##### **Background:**

A pregnant woman from a low-income household in a rural area of Khyber Pakhtunkhwa comes to the clinic for her antenatal check-up. She reports feeling weak and tired and is concerned about her baby's health. She mentions that her family struggles to afford nutritious food and they primarily eat a simple diet of bread and vegetables. She is not taking iron or folic acid supplements due to the cost.

#### **Scenario 2: Cultural Practices and Breastfeeding Challenges**

##### **Background:**

A mother in a small village of Khyber Pakhtunkhwa shares that her mother-in-law advises her to stop breastfeeding her 3-month-old baby because “the baby is old enough to drink milk from a glass.” The mother is confused and unsure about how to respond. She also mentions that she feels pressured by her family to start feeding the baby solid foods early, despite being told breastfeeding is important.

#### **Scenario 3: Healthcare System Challenges in Rural Areas**

##### **Background:**

A woman in a remote village of Khyber Pakhtunkhwa is pregnant and seeking advice on nutrition during pregnancy. However, the local healthcare facility is under-resourced and lacks a trained nutritionist. The healthcare worker providing the consultation is overwhelmed with a heavy patient load and has limited time to provide detailed nutrition counseling.

## **Scenario 4: Poor Sanitation and Child Nutrition**

### **Background:**

A mother from an urban slum in Khyber Pakhtunkhwa brings her 1-year-old child to the clinic with concerns about the child's frequent episodes of diarrhea. She mentions that the family has limited access to clean drinking water and that the child's meals are often prepared in unsanitary conditions due to lack of proper kitchen facilities. The mother is also concerned about her child's poor weight gain and reports that the child is not eating enough.

### **Annexure 3: Case Scenario of Zahra (Module 3: Maternal Nutrition)**

**Background Information:** Zahra is a 22-year-old married woman who is in her second trimester of pregnancy with her first child. She resides in a rural village in Khyber Pakhtunkhwa, Pakistan. Zahra lives with her husband, in-laws and two younger siblings. Zahra's family relies on farming for their livelihood, but they have limited financial resources, as farming yields are low due to water scarcity and poor soil quality. Zahra has not received regular antenatal care because her family struggles to afford the costs of transportation to the nearest healthcare facility, which is several kilometers away. Zahra's husband works in a nearby city but only sends money home irregularly and Zahra's family has few savings.

Zahra is uncertain of her exact due date, but she estimates that she is around 16 weeks pregnant. She has not yet had a blood test or ultrasound and her pregnancy was confirmed by a local midwife, who has given her some general advice on diet but has not conducted a comprehensive nutritional assessment.

Zahra's diet mainly consists of bread, rice, lentils and some seasonal vegetables. Meat is rarely consumed due to its cost. She occasionally has milk, but it is often a luxury when the family can afford it. Zahra has also noticed that she feels fatigued frequently, especially in the late afternoon and has been experiencing light-headedness and dizziness at times. She does not take any prenatal vitamins and is unaware of the importance of supplements during pregnancy.

Zahra also reports having some difficulty with food access, as her family's farm has faced significant crop failure due to water scarcity and there is limited access to markets due to the village's remote location. There is also a cultural preference for traditional foods that may not be nutritionally balanced and Zahra feels pressure from her family to continue preparing these meals despite her growing concerns about her health.

Zahra's family is supportive, but she feels increasingly anxious about her pregnancy, particularly because she has not had any professional medical care and is unsure about how to properly care for herself and her baby. She is eager to ensure her child is healthy and wishes to learn how to improve her diet but is unsure where to turn for help.

## Facilitator Notes:

### Nutrition Risk Factors for Zahra:

- **a. Inadequate dietary intake:** Zahra's diet is mainly composed of rice, bread and lentils, with limited access to fruits, vegetables and animal protein. This puts her at risk for deficiencies in essential nutrients, such as iron, folate, calcium and protein.
- **b. Anemia or iron deficiency:** Zahra reports feeling fatigued and light-headed, which are common symptoms of anemia. The lack of iron-rich foods in her diet (such as meat and dark leafy greens) and her limited access to supplements could contribute to iron deficiency.
- **c. Inadequate food supply/food insecurity:** Zahra's family is facing financial strain due to limited farming yields and irregular income from her husband's work. This food insecurity is exacerbated by her remote location and limited access to markets, making it difficult to obtain diverse, nutrient-rich foods.
- **d. Lack of prenatal care:** Zahra has not received formal prenatal care, including blood tests, ultrasounds, or professional counseling on nutrition and health during pregnancy. This lack of care increases the risk of undiagnosed complications, such as anemia or gestational hypertension.
- **e. Cultural dietary preferences:** Zahra's cultural norms may affect her ability to consume a balanced diet, particularly when it comes to the limited availability of animal proteins and dairy products, which are essential for fetal development and maternal health.
- **f. Stress and anxiety about pregnancy:** Zahra's uncertainty about her pregnancy and lack of access to healthcare may be causing emotional stress, which can negatively affect both maternal and fetal health.
- **g. Lack of awareness about prenatal nutrition:** Zahra has not been informed about the importance of prenatal vitamins and supplements like folic acid, iron, or calcium, all of which are critical during pregnancy.

### **Additional Information Needed:**

To develop a more complete nutritional assessment, the following additional information would be helpful:

- **Current Meal Pattern:** A detailed breakdown of Zahra's daily food intake, including the types and quantity of food consumed, as well as any snacks, would help identify specific nutritional gaps.
- **Physical and Medical History:** Information about Zahra's past medical conditions (e.g., history of anemia, diabetes, hypertension) and any current health issues would provide valuable context for tailoring her nutrition care plan.
- **Social Support:** Understanding Zahra's support system, including her family and local community, would be important to assess her ability to access resources and get help with her pregnancy.
- **Supplement Use:** Information on whether Zahra is using any supplements and her knowledge of their importance during pregnancy, would help address potential gaps in her nutrition.
- **Cultural Practices and Beliefs:** A deeper understanding of Zahra's cultural practices and beliefs regarding pregnancy and nutrition can help healthcare providers give culturally appropriate advice.
- **Knowledge and Attitudes Towards Pregnancy:** Zahra's feelings about her pregnancy, her level of understanding about healthy eating and her willingness to follow dietary changes would be important for providing effective counseling.

### **Nutrition Care Plan for Zahra:**

Based on Zahra's current nutritional assessment and risk factors, a comprehensive nutrition care plan is recommended:

#### **1. Nutrition Education:**

- **Basic Nutritional Counseling:** Educate Zahra on the importance of a balanced diet that includes a variety of nutrient-rich foods. Emphasize the importance of eating a variety of



fruits, vegetables, protein-rich foods (e.g., lentils, beans, eggs, small amounts of chicken), dairy (if affordable) and whole grains to support both maternal and fetal health.

- **Folate and Iron-Rich Foods:** Highlight the importance of folate (found in leafy greens, lentils, chickpeas) and iron-rich foods (e.g., meat, spinach, beans). Offer practical advice on how to incorporate these into her diet, considering local food availability and cultural preferences.
- **Supplementation:** Educate Zahra on the importance of taking prenatal vitamins, particularly folic acid and iron, to prevent deficiencies and complications such as anemia and neural tube defects. Assist her in accessing free or subsidized prenatal vitamins through local health programs or WIC-like services in the region.

## 2. Addressing Food Insecurity:

- **Community Resources:** Refer Zahra to local community health programs or food assistance services to address her food insecurity. Explore options for food distribution, assistance, or local subsidies that can provide access to nutritious foods.
- **Improving Access to Food:** Provide guidance on locally available, cost-effective foods that can help improve her nutrition, such as seasonal vegetables, local grains and legumes.

## 3. Regular Prenatal Care:

- **Referral to Healthcare Facilities:** Provide Zahra with information on how to access formal prenatal care, including blood tests, ultrasounds and professional nutritional counseling. If possible, help her apply for medical assistance programs to cover the costs of transportation and medical expenses.
- **Monitor Weight Gain:** Regularly monitor Zahra's weight gain to ensure it aligns with recommended standards. If she is not gaining weight appropriately, further interventions may be needed.

#### 4. Addressing Tobacco Use:

- **Smoking Cessation Support:** Provide counseling on the harmful effects of smoking during pregnancy, particularly the risks of preterm birth, low birth weight and respiratory problems for the baby. Offer support resources for smoking cessation, such as local support groups or counseling.

#### 5. Psychological Support:

- **Emotional and Social Support:** Assess Zahra's emotional well-being and provide her with information about local counseling services for stress and anxiety management. Strengthen her social support network by connecting her with community groups or other pregnant women in similar situations.

#### Conclusion:

Zahra's case highlights the challenges that many pregnant women face, particularly in low-resource settings like rural Khyber Pakhtunkhwa. By providing targeted nutrition counseling, access to community resources and support for prenatal care, healthcare providers can help Zahra overcome some of the barriers she faces and improve her maternal and fetal health outcomes. Addressing nutrition risk factors early in pregnancy can help prevent complications, ensuring that Zahra has a healthy pregnancy and the best possible outcome for her baby.