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Strengthening Partnerships, Results,
and Innovations in Nutrition Globally

Five-Day Training of Facilitators/Trainers Adolescent and Women's Nutrition and Anemia

Facilitator Guide



Kyrgyz Republic
August 2016

About SPRING

The Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project is a five-year USAID-funded Cooperative Agreement to strengthen global and country efforts to scale up high-impact nutrition practices and policies and improve maternal and child nutrition outcomes. The project is managed by JSI Research & Training Institute, Inc., with partners Helen Keller International, The Manoff Group, Save the Children, and the International Food Policy Research Institute.

Disclaimer

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2. Guyon A. MD. MPH, Quinn V. PhD, Nielsen J. PhD, Stone-Jimenez M. MSc, IBCLC. *Essential Nutrition Actions and Essential Hygiene Actions Training Guide: Health Workers and Nutrition Managers*. 2015.
3. Ministry of Health of the Kyrgyz Republic. *The National Guidelines on Anemia, and the National Anemia Protocol 2015*.

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Acronyms

BMI	body mass index
GMP	growth monitoring and promotion
IFA	iron-folic acid
IYCF	infant and young child feeding
LAM	Lactation Amenorrhea Method
NPP	Nutrition Policy Practice
UNICEF	United Nations Children's Fund
WASH	water, sanitation, and hygiene
WRA	women of reproductive age

Introduction

Training of Facilitators/Trainers: Adolescent and Women's Nutrition and Anemia

This module is intended to prepare facilitators/trainers with technical knowledge and skills to train doctors and nurses about adolescent and women's nutrition and anemia throughout the life cycle. They will strengthen their knowledge and skills for counseling pregnant women during six antenatal care visits and three postnatal visits to help women learn to care for their own nutritional needs during pregnancy and lactation. They will be better able to counsel patients at the health clinics on the appropriate course of action when faced with issues related to anemia in infants and young children, pregnant and non-pregnant women of reproductive age, and the elderly.

Purpose

The purpose of this module is to explore issues regarding adolescent and women's nutrition: nutritional status, causes of malnutrition, the effects of malnutrition on the intergenerational life cycle, the consequences of inadequate weight gain and micronutrient deficiencies, and the interventions to improve women's nutrition. The module will also introduce participants to the clinical guidelines for screening, diagnosis, prevention, and treatment of anemia in children, adults, and pregnant women in primary health care settings.

Course Objectives: Knowledge and Skills

By the end of the training, the participants will have acquired the following knowledge and skills:

Knowledge

Participants will be able to—

1. recognize key factors that contribute to a well-nourished adolescent or woman
2. describe the causes that contribute to a malnourished adolescent/woman
3. share in-country data on adolescent and women's nutrition
4. list the consequences of poor nutrition for adolescents/women, and their babies
5. describe the life cycle, and actions that are needed to have a well-nourished infant, young child, and pre-teen
6. explain the general dietary recommendations and identify available foods which provide key nutrients for families
7. list recommended nutrition practices for adolescent girls
8. list the additional nutrient requirements during pregnancy
9. list recommended nutrition practices for pregnant women
10. name the additional nutrient requirements during lactation
11. list the recommended nutrition practices for mothers during lactation
12. discuss why birth spacing is important to woman's nutrition
13. name the recommended time for spacing children and the criteria for the Lactation Amenorrhea Method (LAM)
14. list the main causes of anemia and the interventions that have been shown to reduce anemia

15. prevent, screen, and treat anemia in children, non-pregnant women of reproductive age, pregnant women, and the elderly
16. name key practices provided to those taking oral Iron-Folic Acid (IFA) supplementation
17. name key practices when counseling for anemia.

Skills

1. Listening and learning skills
2. Building confidence and giving support skills
3. 3-step counseling (assess, analyze, act)

5-Day Training Schedule – Adolescent and Women’s Nutrition and Anemia

Time	Day 1	Day 2	Day 3	Day 4	Day 5
09:00 - 09:15	Daily Review				
09:15 - 10:15	Session 1: 1 hour 15 min Introductions, pre-assessment, expectations and objectives	Session 6: (cont'd) 30 min Special requirements for pregnancy Session 7: 30 min Special requirements for lactation	Session 11: 1 hour Causes of anemia and interventions to reduce anemia	Session 14: (cont'd) 30 min Prevention and treatment of anemia in women of reproductive age Session 15: 30 min Prevention and treatment of anemia in pregnant women	Session 17: 3 hours Clinical practice: Adolescent and women’s nutritional assessment
10:15 - 10:30	Tea Break				
10:30 - 11:30	Session 2: 1 hour Situation of adolescent and women’s nutrition in Kyrgyz Republic	Session 7: (cont'd) 1 hour Special requirements for lactation	Session 12: 1 hour Messages for prevention and treatment of anemia		
11:30 - 13:00	Session 3: 1 hour 30 min Adolescent and women’s nutrition	Session 7: (cont'd) 15 min Special requirements for lactation Session 8: 30 min Role of timely birth spacing in women’s nutrition Session 9: 45 min How to Counsel: Part I <i>Listening and learning skills</i> <i>Building confidence and giving support skills</i>	Session 13: 1 hour 30 min Prevention and treatment of anemia in children	Session 15: (cont'd) 2 hours 30 min Prevention and treatment of anemia in pregnant women	Session 17: 1 hour Feedback from clinical practice

Time	Day 1	Day 2	Day 3	Day 4	Day 5
13:00 - 14:00	Lunch				
14:00 - 15:00	Session 4: 1 hour Basic nutrition requirements for everyone	Session 10: 1 hour 30 min How to Counsel: Part II – 3-step counseling, use of adolescent and women’s nutrition assessment form and observation checklist	Session 13: (cont’d) 1 hour Prevention and treatment of anemia in children	Session 16: 1 hour 30 min Prevention and treatment of anemia in the elderly	Session 18: 1 hour Training action plans
15:00 - 15:30	Session 5: 30 min Nutrition for adolescent girls		Session 14: 30 min Prevention and treatment of anemia in women of reproductive age		Session 19: 30 min Post-assessment and evaluation
15:30 - 15:45	Tea Break				
15:45 - 17:00	Session 6: 1 hr. 15 min Special requirements for pregnancy	Session 10 (cont’d): 30 min How to Counsel: Part II – 3-step counseling, use of adolescent and women’s nutrition assessment form and observation checklist	Session 14: (cont’d) 1 hour 15 min Prevention and treatment of anemia in women of reproductive age	Session 16: (cont’d) 30 min Prevention and treatment of anemia in the elderly Preparation for clinical practice	

Session 1. Introductions, Pre-Assessment, Expectations, and Objectives

Time: 1 hour 15 minutes

Objectives

After completing this session participants will be able to—

1. identify strengths and weaknesses in their knowledge of adolescent and women's nutrition and anemia
2. introduce fellow participants, facilitators and resource persons; discuss their expectations and compare them with the objectives of the training; clarify the priorities/focus of the training
3. present and review the Trainers Guide.

Preparation

- Pre-assessment: **Handout 1.1**
- Prepare flip chart outlining the objectives of the training.
- Have the Trainer's Guide ready.

Learning Objective 1: Identify strengths and weaknesses in participant's knowledge of adolescent and women's nutrition.

Methodology: Written pre-assessment

Suggested Time: 15 minutes

Instructions for Activity:

1. Welcome the participants as they arrive and ask them to be seated in a U or circle.
2. As soon as participants are seated, distribute **Handout 1.1**, the pre-assessment, and ask them to complete it individually.
3. Ask participants to write their birth date on the pre-assessment.
4. Correct all the assessments as soon as possible and on the same day administered, identifying topics that caused disagreement or confusion and need to be addressed. Participants should be advised that these topics will be discussed in greater detail during the training.

Learning Objective 2: Introduce participants, facilitators, and resource persons; discuss participants' expectations, compare with the objectives of the training, and clarify the priorities/focus of the training.

Methodology: Matching game

Suggested Time: 45 minutes

Instructions for Activity:

1. Cut drawings or photos of good foods for adolescent and women's nutrition in half, mix them up, and lay on the floor. Ask each participant to take one half of a drawing or photo. Instruct participants to find their matching halves. Once this is accomplished, ask the pairs to introduce each other: exchange names, where they work, their favorite food, and mention one of their expectations for the training.

2. Write participants' expectations on a flip chart, not repeating ones that are the same. When everyone is finished, they may return to their chairs.
3. Show the prepared flip chart with the learning objectives.
4. Guide the participants in matching their expectations against the training objectives and discussing the similarities and differences.
5. Post the flip charts with the objectives and the expectations on one side of the room to remain until the end of the training.
6. Briefly review the training agenda
7. Announce any logistics, such as where meals will be served, washrooms, etc.

Learning Objective 3: Present and review the Facilitator Guide

Methodology: Interactive presentation

Suggested Time: 15 minutes

Instructions for Activity:

1. Distribute Facilitator Guide
2. Together, go through the structure and layout of the Facilitator Guide

Note:

1. Explain to participants that on the fifth day of the training they will present their action plans to their fellow participants.
2. To begin early reflection and planning, and in preparation for their presentations, distribute **Handout 18.1** from Session 18: Training Action Plans.
3. Ask participants to find time to meet together in their specific groups/*oblasts* during the week.
4. Task participants with submitting a written copy of their action plans on the fifth day of the training.

Handout 1.1 Pre-assessment (What do we know?)

Date of birth: _____

No.	Statement	True	False
1.	A pregnant woman needs to eat more than a lactating woman.		
2.	Adolescent and pregnant women need more calcium in their diets.		
3.	Vitamin A is found in meat from cows or sheep.		
4.	A malnourished mother will usually give birth to an infant with low birthweight.		
5.	It is recommended to wait 2 years before having another child.		
6.	Men can help improve women's nutrition by assuring there is enough food of good variety for women who eat last.		
7.	It is difficult for a pregnant woman to get enough iron from food.		
8.	Iodized salt is important for the whole family.		
9.	A lactating woman needs more iron than a pregnant woman.		
10.	Women need iron supplementation once during pregnancy.		
11.	A pregnant woman can get the extra energy she needs by eating more vegetables like cucumbers and tomatoes.		
12.	Promoting a nutritious diet is a key part of antenatal care.		
13.	Breastfeeding mothers must eat more than usual.		
14.	Pregnancy and lactation are the most important points in the life cycle to improve the nutrition of women.		
15.	It is recommended that pregnant women not drink tea.		
16.	Anemia can be caused by worm infection.		
17.	Taking tea with iron and folic acid pills helps improve anemia.		
18.	Iron deficiency is the most common cause of anemia in the world.		
19.	Liver, meat, and fish contain the best absorbable iron for the human body.		
20.	Side effects of iron-folic acid pills are stomach discomfort, nausea, diarrhea or constipation, and black stools.		
21.	Iron and folic acid supplementation will make a baby too big.		
22.	A lactating woman does not need to take iron and folic acid pills for three months after delivery.		
23.	Women need to eat more green leafy vegetables, peas, and dry soya beans to get folate in their diet.		
24.	A child between 6 months and 5 years needs a high dose vitamin A twice a year.		
25.	Handwashing after using the latrine and before eating and cooking will not affect anemia.		
26.	Micronutrient powders are recommended for pregnant women for the prevention of anemia.		
27.	Adolescents should receive a weekly dose of iron and folic acid pills for 3 months to prevent anemia.		
28.	The elderly have anemia because of poor absorption of vitamin B12.		
29.	Vitamin C can increase absorption of iron.		
30.	Deworming medication is only given to children.		

Session 2. Situation of Adolescent and Women's Nutrition in Kyrgyz Republic

Time: 1 hour

Objectives

After completing this session, participants will be able to—

1. recognize key factors that contribute to a well-nourished adolescent or woman, and problems that contribute to a malnourished adolescent or woman
2. share in-country data on adolescent and women's nutrition
3. describe the causes of poor nutrition: 1) anemia, 2) women who are thin and don't gain much weight during pregnancy, 3) lack of a diverse diet during pregnancy, and 4) women who are overweight or obese.

Preparation

- Prepare cards with words or illustrations: food; micronutrients; care practices; health services; and water, sanitation, and hygiene (WASH).
- Prepare flip chart, "Women's Nutritional Status in Kyrgyz Republic 2012."
- Four flip charts with titles: 1) anemia, 2) underweight during pregnancy, 3) lack of a diverse diet during pregnancy, 4) women who are overweight.

Learning Objective 1: Recognize the key factors that contribute to a well-nourished adolescent or woman, and causes that contribute to a malnourished adolescent or woman

Methodology: Brainstorming

Suggested Time: 10 minutes

Instructions for Activity

1. Write on one flip chart, "Key factors," and ask participants to mention the key factors that contribute to a well-nourished adolescent or woman.
2. Write on another flip chart, "Causes," and ask participants to mention causes that contribute to a malnourished adolescent or woman.
3. Probe until the following are mentioned:
 - a. Key factors that contribute to a well-nourished adolescent/woman: food; micronutrients; care practices; health services; water, sanitation, and hygiene (WASH); and socio-cultural norms.
 - b. Causes that contribute to a malnourished adolescent/woman: anemia, lack of a diverse diet, and either under- or overweight.

Learning Objective 2: Share in-country data on adolescent and women's nutrition

Methodology: Small groups by *oblast*

Suggested Time: 20 minutes

Instructions for Activity

1. Ask participants to form groups, by *oblast*/district.
2. Show the flip chart "Women's Nutritional Status in Kyrgyz Republic 2012."

Women's Nutritional Status in Kyrgyz Republic 2012

Women's Age	BMI <18.5 (thin) (%)	BMI normal (%)	BMI > 25 (%)	Anemia (%)
15 – 19 years	17.8	76.4	5.8	34.5
20-29 years	7.9	73.6	18.4	38.3
30-39 years	2.7	49.4	47.9	37.9
40-49 years	1.8	26.5	71.6	28.3
Urban	8.1	59.9	32.1	34.2
Rural	6.8	55.3	37.9	35.8
Lowest wealth level	6.9	53.1	40.1	38.8
Highest wealth level	8.5	61.3	30.2	32.7

3. Based on this information ask groups to answer the following:
 - a. Which women are most likely to be too thin? *15-19 years, well-off.*
 - b. Which are most likely to be overweight? *Older, rural, poorer women.*
 - c. Which women are most likely to have anemia? *20-39 years, poorer women.*
 - d. Do any of these findings surprise you? Why or why not?
4. Ask each group to respond to one question.
5. Discuss and summarize.

Learning Objective 3: Describe the possible causes of: 1) anemia, 2) underweight during pregnancy, 3) lack of a diverse diet during pregnancy, 4) women who are overweight

Methodology: Group work/rotating flip charts

Suggested Time: 30 minutes

Instructions for Activity:

1. Divide participants into 4 groups.
2. Four flip charts are set up throughout the room with the following titles: 1) anemia, 2) women who are underweight during pregnancy, 3) lack of a diverse diet during pregnancy, 4) women who are overweight.
3. Ask groups to list the possible causes of these nutrition issues. They should refer to the flip chart on the nutritional situation of women first and then think about causes in their *oblast*.

4. Assign a flip chart to each group.
5. Each group has 5 minutes at their flip chart to write as many points as they can think of (without repeating those already listed).
6. After 5 minutes, the facilitator asks the groups to rotate to the next flip chart and repeat the exercise.
7. Repeat this process for each of the four flip charts.
8. Each group reads out the points listed on their flip chart.
9. Probe until the groups list all possible causes on a summary table.
10. Summarize by asking which of the causes can be addressed through contacts between health facilities and families. Which ones require support or intervention by other sectors?

Factors that contribute to malnutrition			
Anemia	Underweight during pregnancy	Lack of diverse diet during pregnancy	Overweight
<ul style="list-style-type: none"> • Lack of iron-rich foods • Lack of iron supplements • Lack of health services • Tea & coffee with meals prevents iron absorption • Lack of vitamin C (to increase iron absorption) • Worms • High pregnancy rate 	<ul style="list-style-type: none"> • Inadequate dietary intake (quality, quantity, frequency) • Lack of diversity of foods • Lack of care practices • Sociocultural norms • Substance abuse (alcohol, drugs, smoking) • Processed and fast foods (especially among adolescents) • Poor body image (especially among adolescents) • Worms 	<ul style="list-style-type: none"> • Inadequate dietary intake (quality, quantity, frequency) • Lack of diversity of foods • Lack of care practices • Sociocultural norms • Substance abuse (alcohol, drugs, smoking) • Heavy work load • Lack of supportive environment 	<ul style="list-style-type: none"> • Inadequate dietary intake (quality, quantity, frequency) • Lack of diversity of foods • Lack of care practices • Sociocultural norms • Lack of exercise

Session 3. Adolescent and Women's Nutrition

Time: 1 hour

Objectives

After completing this section participants will be able to—

1. list the consequences of poor nutrition for adolescents and women, and infants
2. prevent undernutrition throughout the life cycle.

Preparation

- Illustrations or cards of baby, young child, pre-teen, adolescent, adult/pregnant woman
- Prepare 2 flip charts: 1) consequences of undernutrition for an adolescent or woman, and 2) consequences of undernutrition for a baby
- Cards with one consequence of undernutrition for an adolescent/woman and baby written on each one

Learning Objective 1: Prevent undernutrition throughout the life cycle: undernourished baby, young child, pre-teen, adolescent, and adult/pregnant woman

Methodology: Brainstorming; interactive presentation

Suggested Time: 15 minutes

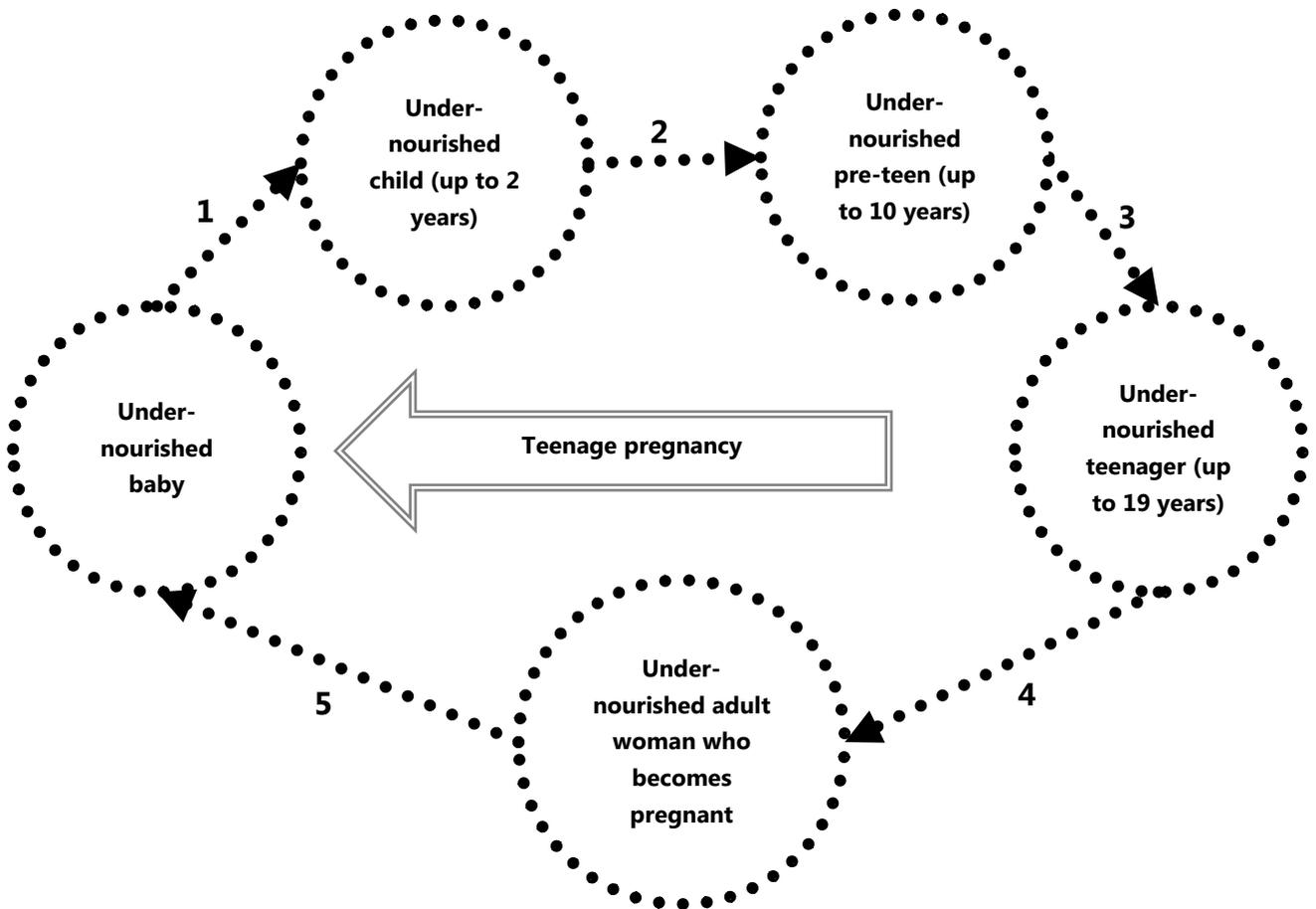
Instructions for Activity

1. Draw five circles on a flip chart .
2. Write undernourished baby in the first circle and ask: In the life cycle, what does an undernourished baby lead to?
3. When participants respond, "undernourished child up to 2 years," write "undernourished child up to 2 years in the second circle," and draw an arrow from undernourished baby to undernourished child.
4. Ask: In the life cycle what does undernourished child lead to?
5. When participants respond, "undernourished pre-teen up to 10 years," write "undernourished pre-teen up to 10 years" in the third circle, and draw an arrow from undernourished child to undernourished pre-teen.
6. Repeat the same process for adolescents (up to 19 years) and adult/pregnant women (one for each circle), and connect all circles with arrows.
7. Ask: What does an undernourished teen who becomes pregnant lead to?
8. Explain that this diagram represents the undernutrition life cycle.
9. Post two flip charts: 1) consequences of undernutrition for an adolescent or woman, and 2) consequences of undernutrition for a baby.
10. Ask participants: What are the consequences of undernutrition for an adolescent or woman?
11. As participants mention a consequence, post a card with the consequence (previously written) on the flip chart.

12. Ask participants: What are the consequences of undernutrition for a baby?
13. As participants mention a consequence, post a card with the consequence (previously written) on the flip chart.
14. Discuss and summarize.

Key Content

Possible outcomes of undernutrition



Consequences of undernutrition

Adolescent/Woman

- Anemia
- Calcium deficiency
- Iodine deficiency
- Folic acid deficiency
- Increased risk of maternal complications and death
- Increased risk of infection due to weakened immune system
- Higher risk of having still birth
- Decreased ability to care for children
- Difficult labor due to small bone structure
- Lethargy and weakness
- Lower work productivity
- Adolescent: decreased academic performance

Baby

- Increased risk of fetal and infant death
- Low birth weight
- Premature birth
- Birth defects
- Cretinism
- Inadequate brain development
- Increased risk of infection and illness

Note: Some women have their first pregnancy during their teen years. A teenage mother and her growing baby may compete for nutrients. When a teenage mother has not completed her growth cycle, she is at risk of a more difficult labor if her pelvis is small.

Teenage mother: needs extra care, more food and more rest than an older mother. She needs to nourish her own body, which is still growing, as well as her growing baby.

Good nutrition for a woman is key for child survival and growth.

Learning Objective 2: Describe actions needed to have a well-nourished baby, child, and pre-teen

Methodology: Group work

Suggested Time: 45 minutes

Instructions for Activity:

1. Divide participants into 3 groups
2. Ask one group to focus on the actions needed to have a well-nourished baby (up to 6 months); ask second group to focus on the actions needed to have a well-nourished young child (up to 2 years); and ask the third group to focus on the actions needed to have a well-nourished pre-teen (up to 10 years). **Note:** The actions for adolescents and woman will be discussed in a later session.
3. Ask each group to present its work to the whole group.
4. As each group presents, place an illustration (or card) on the corresponding circle of the undernutrition cycle: 1) a well-nourished baby (0 to 6 months), 2) a well-nourished child up to 2 years old, 3) a well-nourished pre-teen (up to 10 years).
5. Distribute **Handout 3.1:** Actions needed to have a well-nourished baby, well-nourished child up to 2 years, and well-nourished pre-teen up to 10 years.
6. Discuss and summarize.

Key Content

- Actions to improve child survival must start long before a woman becomes pregnant.
- Actions should start by improving the woman's health status, and solving her economic and social problems.

Handout 3.1: Actions that can break the undernutrition cycle

1. Actions needed to have a well-nourished baby

- A. Improve women's nutrition and health during pregnancy by—
 - increasing the food intake during pregnancy. Eat one extra meal or "healthy snack" (food between meals such as apples, dried or fresh apricots, wheat drink, corn drink, or kefir) each day; during breastfeeding, eat two additional meals or "healthy snacks" each day
 - encouraging consumption of different types of locally available foods as described above. Note: All foods are safe to eat during pregnancy and while breastfeeding
 - beginning antenatal care early in pregnancy so that the woman can receive iron/folate (and other recommended supplements) as soon as she knows she is pregnant and continue for at least 3 months *after* delivery of the child
 - preventing and seeking early treatment of infections. For example—
 - completing anti-tetanus immunizations for pregnant women (five injections in total)
 - de-worming pregnant women during the second or third trimester of pregnancy
 - preventing and educating on STI and HIV and AIDS transmission
 - encouraging good hygiene practices
 - avoiding consumption of coffee and tea with meals
 - avoiding alcohol, smoking, and drugs.
- B. Space pregnancies to allow for rebuilding mother's nutrient stores between lactation and the next pregnancy.
- C. Decrease energy expenditure by—
 - a. delaying the first pregnancy to 20 years of age or more
 - b. encouraging families to help with women's workload, especially during late pregnancy.
 - c. resting more, especially during late pregnancy
 - d. decreasing heavy labor.
- D. Encourage optimal breastfeeding and health services practices through—
 - a. early initiation of breastfeeding (within the first hour of birth)
 - b. exclusive breastfeeding from birth up to 6 months.
- E. Other 'non-feeding' actions:
 - a. Encouraging good hygiene practices
 - b. Attending growth monitoring and promotion (GMP) and immunization sessions.
- F. Encourage men's participation so that they—
 - accompany their wives/partners to antenatal care visits and remind them to take their iron/folate tablets
 - provide extra food for their wives/partners during pregnancy and lactation
 - help with household chores to reduce wives/partners' workload

- encourage their wives/partners to deliver at a health facility
- make arrangements for safe transportation to facility (if needed) for birth
- encourage their wives/partners to put the babies to the breast immediately after birth
- encourage their wives/partners to give the first thick yellowish milk to their babies immediately after birth.

Note: HIV and Nutrition

If a woman is infected with HIV, she needs extra food to give her more energy. HIV puts an additional strain on her body and may reduce her appetite. Eating a variety of foods is important. An HIV-infected pregnant woman needs to attend prevention of mother-to-child transmission (PMTCT) services.

2. Actions needed to have a well-nourished child (up to 2 years)

- Encourage timely introduction of complementary foods at 6 months with continued breastfeeding up to 2 years or beyond
- Feed different food groups at each serving. For example:
 - Animal-source foods: flesh foods, such as *chicken, fish, liver, and eggs, and milk products* (Note: animal foods should be started at 6 months.)
 - Staples: grains, such as *wheat, rice, and corn (in season)*; roots and tubers, such as *potatoes and legumes (e.g., beans, lentils, chickpeas, almonds, pistachios)*; and seeds (e.g., *sesame*)
 - Vitamin A-rich fruits and vegetables, such as *mango, papaya, passion fruit, dark-green leaves, carrots, and pumpkin (butternut squash)*, and other fruits and vegetables, such as *banana, pineapple, watermelon, tomatoes, avocado, eggplant, and cabbage*.
- Check age appropriate frequency, amount, thickness (texture or consistency), and variety (as described above) of complementary foods, responsive feeding, and hygiene
- Provide micronutrient supplements (micronutrient powders - MNPs) according to local protocols
- Improve the absorption of some vitamins and provide extra energy by adding oil and fat, such as seeds, margarine, ghee, and butter to vegetables and other foods. Infants only need a very small amount (no more than half a teaspoon per day).
- Use iodised salt
- Feed a sick child frequently for two weeks after recovery
- Practice responsive feeding and care practices.

Other 'non-feeding' actions:

- Encourage good hygiene practices
- Attend GMP and immunization sessions
- Deworming
- Prevent and treat infections
- Provide vitamin A supplementation every 6 months
- Provide early stimulation and care.

3. Actions needed to have a well-nourished pre-teen (up to 10 years)

Promote appropriate growth by—

- increasing food intake and variety
- encouraging consumption of different types of locally available foods:
 - Animal-source foods: flesh foods, such as *chicken, fish, liver, and eggs, and milk products* (Note: Animal foods should be introduced at 6 months.)
 - Staples: grains, such as *wheat, rice, and corn (in season)*; roots and tubers, such as *potatoes* and legumes (e.g., *beans, lentils, chickpeas, almonds, pistachios*); and seeds (e.g., *sesame*)
 - Vitamin A-rich fruits and vegetables, such as *mango, papaya, passion fruit, dark-green leaves, carrots, and pumpkin (butternut squash)*, and other fruits and vegetables, such as *banana, pineapple, watermelon, tomatoes, avocado, eggplant, and cabbage*.
- using iodised salt
- preventing and seeking early treatment of infections
- encouraging parents to give girls and boys equal access to education; undernutrition decreases when girls/women receive more education
- encouraging good hygiene practices
- encouraging physical activity.

Session 4. Basic Nutrition Requirements for Everyone

Time: 1 hour

Objectives

After completing this section participants will be able to—

1. name the foods required by the entire family and the nutrients contained in each
2. describe which food groups (and nutrients) are most lacking in Kyrgyz family meals.

Preparation

- Copies of Food Guide Pyramid for all participants
- Food cards with names and illustrations of local foods (provide illustrations of two meats and three beans)
- Prepare 8 flip charts with the following titles: Energy, Protein, Iron, Folic Acid, Calcium, Vitamin A, Vitamin C, and Iodine.

Learning Objective 1: Name the foods required by the entire family and the nutrients contained in each

Methodology: Interactive presentation, individual work, group work

Suggested Time: 45 minutes

Instructions for Activity

1. Distribute a copy of the Food Guide Pyramid to each participant, and ask:
 - a. Which foods are represented in the Food Guide Pyramid? *Energy foods, vegetables and fruits, protein (meats, dairy, eggs, beans, nuts), oils and sugar.*
 - b. Why is it in the shape of a pyramid? *We can eat more from the bottom and less from the top.*
 - c. For whom is the Food Pyramid designed? *Families - to show diversified diet.*
 - d. Which foods are found at the top of the pyramid? Why? *Foods we should eat little of.*
2. Explain that the number of portions listed on the right of the Food Guide Pyramid varies by size and age of the person and their activity level.
3. Ask different people to describe the portion sizes listed on the bottom of the chart.
4. Divide participants into groups of five.
5. Place eight flip charts (on wall or floor) with the following titles: Energy, Protein, Iron, Folic Acid, Calcium, Vitamin A, Vitamin C, and Iodine.
6. Pass out food cards to each group with names or illustrations of the following local foods that contain the nutrients mentioned above and ask each group to place their food on the appropriate flip chart:
 - Energy: *bread, grains (rice and porridge), potatoes*
 - Protein: *meats, dairy group, eggs, beans (lentils, chickpeas, white beans)*
 - Iron: *liver, meats, dark green leaves, raisins, dried plums, beans, egg yolk*
 - Folic acid: *green leaves, beetroot, beans, chickpeas, lentils, almonds, walnuts*

- Calcium: *dairy group, dark green leaves, broccoli*
 - Vitamin A: *dark yellow or orange vegetables and fruits, dark green leaves, carrots, pumpkin, and leaves of root vegetables (pumpkin leaves as well as from leaves from radishes, beets, and turnips)*
 - Vitamin C: *citrus fruits, berries, all fruits, tomatoes, bulgarski (green and red peppers), cabbage*
 - Iodine: *iodized salt, fish, sea kale, kelp, and persimmon.*
9. When participants have placed all their cards with the foods mentioned above, distribute the remaining food cards and ask each group to add them to the flip chart which best represents their main nutrient content.
 10. Discuss and summarize.

Learning Objective 2: Describe which food groups (and nutrients) are most lacking in Kyrgyz family meals

Methodology: Brainstorming

Suggested Time: 15 minutes

Instructions for Activity

1. Which food groups are most lacking in Kyrgyz family meals? *Vegetables and fruits. Poor families may eat less meat and dairy.*
2. Which nutrients are they missing? *(iron, folic acid, calcium, vitamin A, vitamin C, iodine).*
3. Explain the importance of food diversity to get all the needed micronutrients.
4. Discuss and summarize.

Session 5. Nutrition for Adolescent Girls

Time: 30 minutes

Objectives

After completing this section participants will be able to—

1. list recommended nutrition practices for adolescent girls.

Preparation

- Four flip charts with title: Nutritional Practices for Adolescent Girls
- **Handout 5.1:** Recommended Nutrition Practices for Adolescent Girls

Learning Objectives 1: List the recommended nutritional practices for adolescent girls

Methodology: Group work

Suggested Time: 30 minutes

Instructions for Activity

1. Divide participants into four groups.
2. Four flip charts are set up throughout the room with the following title: Recommended Nutrition Practices for Adolescent Girls.
3. Ask each group to discuss the recommended nutrition practices for adolescent girls and write them on a flip chart.
4. After 10 minutes, ask one group to share their work.
5. Ask other groups to add only additional points (not to repeat what has already been mentioned).
6. Distribute **Handout 5.1**.
7. Review **Handout 5.1** and summarize in a large group.

Handout 5.1: Recommended Nutrition Practices for Adolescent Girls

Recommended Practice	Supporting Information
1. Eat a variety of foods every day	Adolescent girls need to eat a variety of foods, particularly animal products. Recommended foods: Liver, meats, dark green leaves, raisins, dried plums, beans, egg yolk (for iron); dairy group, dark green leaves, and broccoli (for calcium; breads, grains (rice and porridge), potatoes (for energy); citrus fruits, oranges, tomatoes, and vegetables, particularly carrots and pumpkin.
	Adolescent girls need to eat healthy snacks between meals.
	Drink at least 8 glasses of water during the day.
	Consume citrus fruits (vitamin C) to improve absorption of iron
	Use iodized salt in family foods
2. Adolescent girls should avoid the following: drinking tea or coffee with meals (to improve the absorption of iron); processed or fast foods; food fads, meal skipping, irregular eating patterns, eating away from home, junk food, soda drinks	
3. Promote and advocate school gardening practices	Teach nutrition in schools
4. Encourage adolescent girls to seek health services	Early treatment of infections
	Treatment of anemia
	Adolescent reproductive health services
	Micronutrient supplementation
	Avoid alcohol, smoking, secondary smoking, and illicit drugs
5. Encourage good hygiene practices	Wash hands with soap and running water after visiting the toilet and before handling and eating food
6. Support adolescent girls	Fathers should take an active role in helping their daughters receive health and nutrition care
	Guard against seclusion from family
	Reduce workload of adolescent girls
	Link adolescent girls with school programs or youth clubs
	If daughter is disabled, seek and enroll her in special programs
	Encourage equal access to education
	Delay marriage and early pregnancy (until 20 years old)
	Foster positive body image
	Provide emotional support
Explain menses	

Session 6. Special Requirements for Pregnancy

Time: 1 hour 45 minutes

Objectives

After completing this section participants will be able to—

1. name the additional nutrient needs of the pregnant woman
2. name nutrient sources from the Food Guide Pyramid
3. list recommended nutrition practices for pregnant women.

Preparation

- Flip chart with table: Examples of Energy and Protein Content in Foods
- Local foods for demonstration: white bun (bread), 1 cup of rice, 1 cup of pureed potatoes, 100 g of cooked dry beans, 100 g boiled beef, 1 uncooked egg
- Flip chart with table: Increased Nutritional Needs during Pregnancy
- **Handout 6.1:** Recommended Nutrition Practices for Pregnant Women
- Flip chart with table: supplement (iron, folate, calcium); when? And how much?
- Food cards with name and picture of local foods
- Distribute antenatal protocol.

Learning Objective 1: Name the additional nutrient needs of the pregnant woman

Methodology: Brainstorming; demonstration

Suggested Time: 30 minutes

Instructions for Activity

1. Ask participants: What do you think are the additional nutrient needs of the pregnant woman? (*more energy, protein, and micronutrients*)
2. On average, how much extra energy (kcal) does a pregnant woman need? (*350 kcal*)
3. On average, how much extra protein (grams) does a pregnant woman need? (*25 grams*)
4. Demonstrate the additional energy and protein needs of the pregnant woman with the following real foods:

Examples of Energy and Protein Content in Foods

Energy (kcal)	Protein
<ul style="list-style-type: none">• 1 white bun (35 g) = 90 kcal• 1 cup of rice = 265 kcal• 1 cup of puree or chopped potatoes = 135 kcal	<ul style="list-style-type: none">• 100 g cooked dry beans = 125 kcal + 9 g protein• 100 g boiled beef = 126 kcal + 24 g protein• 1 egg = 77 kcal + 6 g protein

5. Ask participants: Which of these protein foods might be difficult for poor women to obtain? Which ones are cheapest? *Beans, eggs, some pieces of meat are cheaper. Why not eat processed meat? Processed meat is associated with high blood pressure (hypertension), heart disease, bowel and stomach cancer; processed meat has large amounts of nitrates.*

Learning Objective 2: Name nutrient sources from Food Guide Pyramid

Methodology: Buzz groups

Suggested Time: 30 minutes

Instructions for Activity:

Note: Buzz groups are made up of three participants sitting next to each other. Buzz groups allow participants to discuss their immediate reactions to information presented, give definitions, and share examples and experiences. Usually there is no need to take notes; responses to the larger group are given orally.

1. Form buzz groups of three participants.
2. Show the flipchart, *Increased Nutrients during Pregnancy*. For each nutrient, ask participants to refer to the Food Guide Pyramid and the flip charts with food cards (flipcharts that were created in Session 4 and which show the food sources of energy, protein, iron, folic acid, vitamin A, and iodine).
3. Ask six buzz groups to name foods that contain one of the nutrients listed in the table below.
4. As each buzz group lists the foods, record them in the "Good food sources" column.
5. Ask participants which nutrient is added to the list. (*Zinc*.) Then ask which foods contain zinc. (*Grain products, such as wheat germ and bran; milk and alternatives; meat and alternatives.*)
6. Discuss and summarize.

Increased nutrient needs during pregnancy		
Micronutrient	Increased by	Good food sources
Energy	350 Kcal	<i>Breads, grains (rice and porridge), potatoes</i>
Protein	25 g	<i>Meats, dairy group, eggs, beans (lentils, chickpeas, white beans)</i>
Iron	9 mg	<i>Liver, meats, dark green leaves, raisins, dried plums, beans, egg yolk</i>
Folic acid	200 µg	<i>Green leaves, beetroot, beans, chickpeas, lentils, almonds, walnuts</i>
Vitamin A	70 RAE	<i>Dark yellow or orange vegetables and fruits, dark green leaves, carrots, pumpkin, (pumpkin leaves as well as from leaves from radishes, beets, and turnips)</i>
Iodine	70 µg	<i>Iodized salt, fish, sea kale, kelp, and persimmon</i>
Zinc	3 mg	<i>Grain products (wheat germ, bran); milk and alternatives; meat and alternatives</i>

Learning Objective 3: List nutrition practices for pregnant women

Methodology: Working groups

Suggested Time: 45 minutes

Instructions for Activity:

1. Form four groups of participants. Ask the working groups to develop three or four nutrition recommendations for pregnant women according to the following: 1) diversified diet, 2) health services, 3) care practices, and 4) hygiene.
2. Ask each group to present their work.
3. Distribute **Handout 6.1:** Recommended Nutrition Practices for Pregnant Women. Review and compare the working groups' recommendations.

Handout 6.1: Recommended Nutrition Practices for Pregnant Women

Recommended Practice	Supporting Information
<p>1. Eat one additional meal every day when you are pregnant to maintain your strength.</p>	<p>Pregnant women need to eat a variety of foods, particularly animal products: <i>liver, meats, dark green leaves, raisins, dried plums, beans, egg yolk (for iron); dairy group, dark green leaves, and broccoli (for calcium); breads, grains (rice and porridge), potatoes (for energy); fruits (citrus fruits, oranges, tomatoes) and vegetables, particularly carrots and pumpkin.</i></p>
	<p>Pregnant women need to eat more food than usual.</p>
	<p>Pregnant women need to eat more food during the last three months of pregnancy.</p>
	<p>Show approximate amounts in grams or in a teacup. A woman who is already overweight needs to eat more variety of food, not necessarily more food.</p>
<p>2. As soon as you know you are pregnant, speak to a health worker to get iron and folic acid supplements to prevent anemia and maintain your strength.</p>	<p>Pregnant women have increased needs for iron. Inadequate iron intake will lead to anemia, which will make them unwell and tired.</p>
	<p>Iron and folic acid tablets are important to prevent anemia in a pregnant women and will help to keep them and the new baby healthy.</p>
	<p>Pills should be taken with food to reduce common side effects such as nausea, abdominal pains, and constipation.</p>
	<p>Dark stools are normal when taking iron tablets.</p>
<p>3. Iron/folate supplementation should be given to the mother for a total of six months. After delivery the mother has to continue the supplementation to complete the six months.</p>	<p>Because women lose blood during delivery, they need to increase their iron stores for the sake of their health and the baby's. (Iron passes into breast milk).</p>
<p>4. Eat foods rich in iron every day when you are pregnant in order to prevent anemia.</p>	<p>Foods rich in iron include <i>liver, organ meats, meats, dried apricots. Poultry</i> is moderately rich in iron.</p>
	<p>Other sources of iron: <i>green leafy vegetables, dried beans (cowpeas), soya beans, groundnuts.</i></p>
	<p>Eating fruits with meals will enhance iron absorption.</p>
	<p>Avoid taking tea and coffee with meals.</p>
<p>5. Gain recommended weight (see table below)</p>	<p>The fetus, placenta, and amniotic fluid together many weigh about 5 kg by the end of pregnancy.</p>
	<p>The pregnant woman needs to increase her energy (fat) stores to support lactation after the baby is born (exclusive breastfeeding for 6 months and continuation until the baby is 2 years old).</p>
	<p>Lactation requires additional energy and a mother who is too thin may become weak with the effort of breastfeeding, even though she will be able to produce sufficient breastmilk.</p>

Recommended Practice	Supporting Information
6. Do not restrict water, but rather drink according to thirst.	
7. Do not restrict exercise	Exercise helps maintain healthy heart and blood circulation.
	Exercise increases a woman's fitness for delivery. Walking is good exercise for pregnant women.
	Women should avoid lifting heavy objects by themselves or doing heavy labor in fields during the last months of pregnancy.
	A pregnant woman should be allowed to rest at least once during the day.
8. Speak to a health worker to get deworming treatment to prevent becoming anemic during the second or third trimester.	Intestinal worms can cause anemia, which leads to fatigue and poor health.
	Wearing shoes is important for preventing contamination with intestinal worms.
9. Wash your hands with soap and running water after visiting the toilet and before handling and eating food.	<p>Good hygiene and sanitation is important to prevent infection with worms and should include—</p> <ul style="list-style-type: none"> washing hands with soap before eating and handling foods washing hands with soap after visiting the toilet and after cleaning a child's bottom keeping your environment clean.
10. Cook food using iodized salt so that family members remain healthy.	Pregnant women need to consume iodized salt for the health of their babies.

Recommended Weight Gain during Pregnancy

Average weight gain: between 10kg and 12.5kg

Body Mass Index (BMI) beginning pregnancy	Expected weigh gain (kg)	Rates of weight gain 2nd and 3rd trimester (average range/week) (kg)
Underweight: Less than 18.5	13–18	0.5–0.6
Normal: 18.5–24.9	11.5–16	0.4–0.5
Overweight: 25–29.9	7–11.5	0.2–0.3
Obese: Greater than 30	About 7	0.2–0.3

Body Mass Index (BMI) is a measure of body fat based on height and weight. The formula is $BMI = \text{kg}/\text{m}^2$ where kg is a person's weight in kilograms and m^2 is their height in meters squared.

Session 7. Special Requirements for Lactation

Time: 1 hour 45 minutes

Objectives

After completing this section participants will be able to—

1. name the additional nutrient needs of the mother during lactation
2. list the recommended nutrition practices for mothers during lactation.

Preparation

- Flip chart with table: Increased Nutrient Needs during Lactation
- **Handout 7.1:** Recommended Nutrition Practices for Mothers during Lactation

Learning Objective 1: Name the additional nutrient needs of the mother during lactation

Methodology: Brainstorming; Buzz groups

Suggested Time: 30 minutes

Instructions for Activity

1. Ask participants: What do you think are the additional nutrient needs of a lactating mother? (*more energy, protein, and micronutrients*)
2. Form buzz groups of three participants. (Buzz groups do not need to take notes; they just discuss among themselves and share orally with the larger group.)
3. Show the flip chart: *Increased Nutrient Needs during Lactation*.
4. Ask buzz groups why women have increased nutrient needs during lactation.
 - a. Mothers need extra nutrition for their own health and strength.
 - b. Nutrients and energy can be taken from their own body stores, leaving them weak and without reserves.
5. Ask buzz groups why there is an increased need for 400-500 Kcal in a lactating woman?
 - a. Exclusive breastfeeding mothers need extra calories to support breast milk formation
6. Ask three buzz groups to share their comments.
7. Ask buzz groups if the undernourished mother produces enough breastmilk.
 - a. A mother who is thin and malnourished will produce a sufficient quantity of breastmilk (better quality than most other foods a child will get) if the child suckles frequently.
 - b. If the mother is severely malnourished, refer her to an appropriate health facility.
8. Ask three other buzz groups to share their comments.
9. Discuss and summarize.

Increased Nutrient Needs during Lactation		
Micronutrient	Increased by	Good food sources
Energy	400-500 kcal	Larger portions of <i>bread, grains (rice, porridge), or potatoes</i>
Protein	25 g	<i>Meats, dairy, eggs, beans (lentils, chickpeas, white beans)</i>
Vitamin A	600 RAE	<i>Dark yellow or orange vegetables and fruits, dark green leaves, carrots, pumpkin, pumpkin leaves as well as leaves from radishes, beets, and turnips.</i> One half of a large carrot or 100 g of cooked, mashed pumpkin will meet this additional requirement.
Folate	100 µg	Green leaves, beetroot, beans, chickpeas, lentils, almonds, walnuts
Iodine	140 µg	Iodized salt, fish, sea kale and kelp, and persimmon
Zinc	4 mg	Grain products (wheat germ, bran); milk and alternatives; meat and alternatives

Learning Objective 2: List recommendations for mothers during lactation

Methodology: Working groups

Suggested Time: 30 minutes

1. Form five groups of participants. Ask working groups to develop three or four nutritional recommendations for mothers during lactation (10 minutes).
2. Distribute **Handout 7.1:** Recommended Nutrition Practices for Mothers during Lactation. Review and compare recommendations suggested by working groups (20 minutes).

Handout 7.1: Recommended Nutrition Practices for Mothers during Lactation

Recommended Practice	Supporting Information
1. Eat two extra meals a day when you are breastfeeding to maintain your health and the health of your baby.	<p>To maintain their health, (and the health of the baby) breastfeeding women need to eat a wide variety of foods, particularly animal products (meat, milk, eggs, etc.) fruits and vegetables.</p> <p>Additional meals will replenish nutrients lost during pregnancy and child birth.</p>
2. Continue taking IFA supplements for 2 months after delivery to replenish iron stores	
3. Vitamin A	During lactation mothers need vitamin A, which can be obtained from carrots, pumpkin, and apricots.
4. Ensure that all family food is cooked using iodized salt so that family members remain healthy.	
<p>5. Use LAM as a family planning method. It is effective when:</p> <ul style="list-style-type: none"> • mother does not have her menses • baby is exclusively breastfed • baby is under 6 months. <p>If the 3 conditions are not met use other family planning methods to prevent getting pregnant too early.</p>	LAM is a modern family planning method; more than 98% effective if the three conditions are met.
6. Visit the health facility to obtain family planning methods to prevent early pregnancy	Don't wait until the baby is 6 months old to decide on which family planning method you want to use.

Session 8. Role of Timely Birth Spacing in Women's Nutrition

Time: 30 minutes

Objectives

After completing this section participants will be able to—

1. discuss why birth spacing is important for women's nutrition
2. name the recommended time for spacing children and the criteria for the LAM.

Preparation

- Flip chart with timeline for child spacing

Learning Objective 1: Discuss why birth spacing is important for women's nutrition

Methodology: Brainstorming

Suggested Time: 10 minutes

Instructions for Activity:

1. Ask participants why birth spacing is important for women's nutrition.
 - a. It allows the mother to rebuild her nutrient reserves before becoming pregnant again.
 - b. It gives time for the youngest to grow and develop without competing with a new sibling.
2. Discuss and summarize.

Learning Objective 2: Name the recommended time for spacing children and the criteria for LAM

Methodology: Interactive presentation

Suggested Time: 20 minutes

Instructions for Activity:

1. Ask participants: What is the recommended interval for spacing children? After hearing comments, use a timeline (see below) showing the breakdown of recommended practices leading to optimal child spacing. Let participants fill in the number of months.
2. Explain that the recommended time between babies is at least three years.
3. Ask participants to brainstorm the definition of LAM and LAM criteria.
4. Describe LAM and the LAM criteria and what to do when the criteria are not met (to continue to prevent pregnancy).
5. Discuss and fill in gaps.

Key Content

There should be an inter-birth spacing of *at least* 39 months (more than 3 years).



Note: For the best maternal and child outcomes, the recommended interval between births is 39 months: 6 months exclusive breastfeeding, followed by at least 18 months additional breastfeeding with complementary foods, and at least 6 months of neither breastfeeding nor pregnancy.

LAM

Breastfeeding is essential to child survival. It has many benefits for the child and the mother, including birth spacing.

L = Lactation

A = Amenorrhea

M = Method

LAM is more than 98 percent effective if the three following criteria are met:

1. Amenorrhea (no menses) – no bleeding during the first 8 weeks after birth
2. Exclusive breastfeeding is practiced – no more than 4 hours between breastfeedings; in the instance that the gap is more than 4 hours, it should not exceed 6-hours between breastfeedings (there should only be one instance of a gap more than 4-hours in every 24 hours).
3. The infant is less than 6 months old.

Note: When a woman no longer meets one of the three criteria at any point during the first six months, she immediately needs to begin another family planning method to prevent pregnancy.

Family Planning Methods Compatible with Breastfeeding

1. Non-hormonal methods: anytime post-partum
2. Progesterone only: injectable or implants – after six weeks post-partum (progesterone administered to a mother in the first eight weeks post-partum may affect the quantity of her breast milk)
3. Combined oral contraceptives: after six months post-partum

Note: Pregnancy before the age of 18 increases the health risks for the mother and her baby.

Session 9. How to Counsel: Part I

Time: 45 minutes

Objectives

After completing this section participants will be able to—

1. identify listening and learning skills
2. identify building confidence and giving support skills.

Preparation

- **Handout 9.1:** Listening and Learning Skills
- **Handout 9.2:** Building Confidence and Giving Support Skills

Learning Objective 1: Identify listening and learning skills

Methodology: Work in pairs

Suggested Time: 25 minutes

Instructions for Activity:

1. Pair participants. Ask the pairs to talk for two minutes to their partners on any topic at the same time. Then, ask the entire group:
 - How did you feel talking at the same time with another person?
 - Did you catch anything s/he said?
2. In the same pairs, ask the participants to repeat the exercise for 1-2 minutes, but this time to listen to each other with lots of concentration (do not take notes, but listen carefully).
3. In the large group, ask:
 - How much of your story did your partner get right?
 - How did it make you feel to tell a story and see someone listening to you?
4. What things did you do to make sure that your partner was listening to you?
 - a. Use responses and gestures that show interest.
 - b. Use non-verbal communication.
5. Explain that listening and learning skills are the first set of skills to be learned and practiced for a good counselor.
6. Review together **Handout 9.1:** Listening and Learning Skills and summarize.

Learning Objective 2: Describe building confidence and giving support skills

Methodology: Brainstorming

Suggested Time: 20 minutes

Instructions for Activity:

1. Ask participants: Before you begin to practice counseling a mother/caregiver, ask yourself, "What helps to give a mother/caregiver confidence and support?"
2. Probe until each of the skills in **Handout 9.2** is mentioned.
3. Refer participants to **Handout 9.2: Building Confidence and Giving Support Skills**
4. Discuss and summarize.

Handout 9.1: Listening and Learning Skills

1. Use helpful non-verbal communication.
 - Keep your head level with the patient
 - Pay attention (eye contact)
 - Remove barriers (computer, phone, tables, and notes)
 - Take time
 - Appropriate touch
2. Ask questions that allow adolescent or woman to give detailed information
3. Use responses and gestures that show interest
4. Listen to patient's concerns
5. Reflect back what the patient says
6. Avoid using judging words

Handout 9.2: Building Confidence and Giving Support Skills

1. Accept what an adolescent or woman thinks and feels (to establish confidence, let the adolescent or woman talk through her concerns before correcting information).
2. Recognize and praise what the adolescent or woman is doing correctly.
3. Give practical help.
4. Give a little but relevant information.
5. Use simple language.
6. Use the appropriate counseling card or other materials.
7. Make one or two suggestions, not commands.

Session 10. How to Counsel: Part II – 3-Step Counseling, Use of Adolescent or Women’s Nutrition Assessment Form and Observation Checklist

Time: 2 hours

Objectives

After completing this session, participants will be able to—

1. demonstrate 3-Step counseling (assess, analyze, and act) and use the Health Worker **Job Aid 10.2:** Adolescent and Women’s Nutrition Assessment Form and Health Worker **Job Aid 10.3:** Observation Checklist of Adolescent and Women’s Nutrition Assessment and Anemia.
2. practice counseling pregnant and lactating women.

Preparation

- **Handout 10.1:** Supplements and Counseling at Six Prenatal Visits
- Have ready 3 photocopies of Health Worker **Job Aid 10.2:** Adolescent and Women’s Nutrition Assessment Form, and Health Worker **Job Aid 10.3:** Observation Checklist of Adolescent and Women’s Nutrition Assessment and Anemia for each participant
- Use prepared flip charts of summarized listening, learning, confidence building, and support skills

Learning Objective 1: Demonstrate the 3-step counseling (assess, analyze, and act) and the use of Health Worker Job Aid 10.2: Adolescent and Women’s Nutrition Assessment Form

Methodology: Demonstration

Suggested Time: 30 minutes

Instructions

Note: The facilitators need to practice before the demonstration.

1. Ask participants: What is the purpose of counseling? (To provide information and support to an adolescent, pregnant woman or lactating mother and help negotiate a change in practice.)
2. On flip chart, write the words Assess, Analyze, and Act, in a vertical line.
3. Ask participants to follow along with health worker **Job Aid 10.2:** Adolescent and Women’s Nutrition Assessment Form
4. Demonstrate assessment step between a pregnant woman, Ajsha, and counselor (assess).

Information for facilitator/Ajsha:

- Ajsha is four months pregnant with her first child. She is 19 years old.
- Ajsha is visiting the health center for the first time.
- She does not know where to have her baby.
- She eats twice a day.
- She doesn’t want to gain too much weight because she thinks she will have an easier delivery.

- She doesn't know her haemoglobin (Hb) count.
5. Facilitator/counselor completes Health Worker **Job Aid 10.2**: Adolescent and Women's Nutrition Assessment Form.
 6. The demonstration is put on hold at this point as the facilitator/counselor analyses out loud the situation with Ajsha.
 7. The facilitator/counselor continues with the action step.
 8. After the demonstration, the participants complete Health Worker **Job Aid 10.3**: Observation Checklist for Adolescent and Women's Nutrition Assessment and Anemia and review together with facilitator. Mention that the anemia section of the checklist will be useful in sessions related to anemia.

Key Content

Step 1: Assess. The counselor should—

- greet Ajsha and introduces him/herself
- allow Ajsha to introduce herself
- ask questions that encourage Ajsha to talk, using *listening and learning skills*, and *building confidence and giving support skills*
- listen to Ajsha's concerns, and observe Ajsha's general condition
- accept what Ajsha is doing without disagreeing or agreeing and praise Ajsha for one good behaviour
- complete the Health Worker **Job Aid 10.2**: Adolescent and Women's Nutrition Assessment Form (mentions to Ajsha that she or he is taking notes just to remember what Ajsha has said)
 - Name and age
 - Has Ajsha been recently sick? If presently sick, address sickness.
 - Weight, height, BMI
 - Is Ajsha taking IFA?
 - Extra meal(s)
 - Daily foods
- ask about hygiene (e.g., Let's try to remember all the good hygiene practices.)
- ask about other challenges.

Step 2: Analyze

- Ajsha hasn't had any prenatal care.
- Ajsha is eating only twice a day.
- Ajsha is worried about delivery.

Step 3: Act. The counselor should—

- praise Ajsha for coming to the health center
- congratulate Ajsha on her pregnancy
- explain the importance of taking IFA

- explain when and how to take IFA
- discuss the importance of frequency, amount, variety of foods
- suggest that Ajsha eat one extra meal/time a day
- talk with Ajsha about the importance of gaining weight for the health of her baby
- present small doable actions (time bound) to eat more frequently, an extra meal, and a varied diet
- ask Ajsha to repeat verbally the agreed upon behaviour
- tell Ajsha that a counselor will follow-up with her at her next monthly visit
- suggest where Ajsha can find support (attend educational talk, or community support group)
- thank Ajsha for her time.

Learning Objective 2: Practice 3-step counseling: adolescent, pregnant woman and lactating mother nutrition

Methodology: Practice

Suggested Time: 2 hours

Instructions for Activity:

1. Distribute and review together the content of **Handout 10.1:** Supplements and Counseling at Six Prenatal Visits.
2. Participants are divided into groups of three: mother, counselor, and observer.
3. Distribute Health Worker **Job Aid 10.2:** Adolescent and Women's Nutrition Assessment Form to counselors.
4. Distribute Health Worker **Job Aid 10.3:** Observation Checklist for Adolescent and Women's Nutrition Assessment and Anemia to observers.
5. Practice Case Study 1: Ask the "mothers" of the working groups to gather together.
6. Read a case study to the mothers ONLY, and ask them to return to their working groups. Note: The mothers need to be sure that they give all the information included in their case study.
7. Emphasize to participants the need to stick to the (minimal) information in the case studies and not to embellish.
8. The counselor of each working group (of three) asks the mother about her situation, and practices the "assess, analyze, and act" steps, using listening and learning skills and building confidence and giving support skills.
9. In each working group, the observer's task is to record the counselor's skills using the *Observation Checklist for Adolescent and Women's Nutrition Assessment and Anemia* and to provide feedback after the case study.
10. The participants switch roles and repeat the above steps using Case Studies 2 and 3.
11. Discuss and summarize.

Note:

When you are playing the mother:

- Give yourself a name and tell it to your “health worker.”
- Answer the health worker’s questions from your story. Do not give all the information at once.
- If your health worker uses good listening and learning skills and makes you feel that she is interested, you can tell her more.

When you are playing the health worker:

- Greet the “adolescent/woman” and introduce yourself. Ask for her name and use it.
- Ask one or two open-ended questions to start the conversation and to find out in general how she is.
- Explain that you would like to learn about how she is feeling and eating. Fill out the Health Worker **Job Aid 10.2:** Adolescent and Women’s Nutrition Assessment Form as you listen (counseling step “assess”).
- Try to praise the things the adolescent/mother is doing right. Complete counseling step “analyze” and together come to an agreement about what the adolescent/woman can try to do (counseling step “act”).

When you are observing:

- Follow the pair practicing with Health Worker **Job Aid 10.3:** Observation Checklist for Adolescent and Women’s Nutrition Assessment and Anemia and observe the three steps of counseling: assess, analyze, and act.
- Notice which listening, learning, confidence building and support skills the health worker uses.
- After the role play, praise what the health worker does right, and review together the Observation Checklist of the Adolescent and Women’s Nutrition Assessment and Anemia.

Case Study #1

You are 17 years old. You are happy to be in school but know that other girls your age are getting engaged. You have started to go out with some friends and have tried smoking and having a drink. You want to continue your studies. You get so busy with your household chores and studies you just take food “on the go.” You would like the school to offer more sex education.

For counselor: BMI is 17.5

Case Study #2

You are 30 years old and have five children. You are breastfeeding the baby who is 6 weeks old. At times it is hard to have enough food to feed your husband and all your children. So you sometimes eat less.

Case Study #3

You are five months pregnant with your third child. You are so busy you don’t have time to go to the health center for prenatal care. You are not too concerned because your other two children were healthy at birth and with this pregnancy you feel confident and experienced.

Handout 10.1: Supplements and Counseling at Six Prenatal Visits

Consult	Activity and Supplements	Nutrition Counseling
First visit	<ul style="list-style-type: none"> • Weigh, measure and calculate BMI • Prescribe: <ul style="list-style-type: none"> ▪ 60 mg iron ▪ 400 µg folic acid ▪ 200 µg potassium iodate • If anemia, give de-worming in second or third trimester 	How to take the iron – not with tea or coffee, with lots of water or milk, between meals
Second visit at 18-20 weeks	<ul style="list-style-type: none"> • Follow-up on prescribed supplements • If high risk for hypertension, prescribe: <ul style="list-style-type: none"> ○ 1 g calcium carbonate and 75 g aspirin 	
Third visit at 24-25 weeks	Follow-up on supplements	
Fourth visit at 32 weeks	Follow-up on supplements	
Fifth visit at 36 weeks	Follow-up on supplements	Counseling on breastfeeding and LAM
Sixth visit at 38 weeks	Stop aspirin 15 days before due date	

Health Worker Job Aid 10.2: Adolescent and Women's Nutrition Assessment Form

	Name of adolescent or woman				Age of adolescent or woman				Date			
Observation of adolescent/woman												
How are you feeling today	Ill				Not ill				Recovering			
Adolescent/woman:	Weight		Height		BMI		IFA		Hb		Anemia	
Pregnant	Weight gain since last visit		1 extra meal				Iron Folate					
			Yes		No		Yes		No			
	Calcium supplement			Yes				No				
Lactating	2 extra meals				Iron Folate							
	Yes		No		Yes		No					
Tell me about your diet yesterday: food and drink (from the time you woke up until you went to bed)	Breads, grains (rice, porridge, corn), potatoes	Beans, lentils, nuts	Vitamin A-rich Fruit-Vegetables (carrots, pumpkin, green leaves)			Other Fruit-Vegetables (cabbage, tomatoes)		Animal flesh foods	Milk, dairy	Eggs	Fluids	
Hygiene	Washes hands before food (eating/feeding/food preparation); after feces (self/infant/animal)				Do you have running water?							
	Yes		No		Yes				No			
Other challenges (note REASONS underlying challenges)												

Health Worker Job Aid 10.3: Observation Checklist for Adolescent and Women's Nutrition Assessment and Anemia

Name of counselor: _____

Name of observer: _____

Date of visit: _____

ASSESSMENT

(√ for yes and × for No)

Did the counselor—

- introduce her/himself
- check on recent illness
- assess weight
- assess height
- assess BMI
- assess haemoglobin

If child:

- assess breastfeeding
- assess complementary feeding
- assess responsive feeding

If adolescent or woman of reproductive age:

- assess food variety
- check if adolescent is taking IFA according to protocol

If pregnant:

- assess weight gain
- check if woman is eating an extra meal per day
- check if woman is taking IFA according to protocol

If lactating:

- check if woman is eating two extra meals per day
- check if woman is taking IFA during first 3 months post-partum

If older person:

- check if older person is taking vitamin B12

Diet yesterday - 24 hour recall:

- Food and drink (from the time child/woman of reproductive age/adolescent/pregnant woman/lactating mother/older person woke up until bedtime)

Hygiene:

- check on hygiene related to washing hands before food (eating/feeding/food preparation); after feces (self/infant/animal)
- check on availability of running water

ANALYSIS

(√ for yes and × for No)

Did the Counselor?

- Identify any difficulty
- Prioritize difficulties (if there is more than one)
- Record prioritized difficulty: _____

ACTION

(√ for yes and × for No)

Did the counselor—

- praise the adolescent/woman/older person for doing recommended practices
- present one or two options (time bound) that are appropriate to the identified difficulty(ies) and child's age
- help the adolescent/woman/older person select one or two options that she can try to address the challenge(s)
- use the counseling card most relevant to the child/adolescent/woman/older person's situation - and discuss that information with the woman
- ask the adolescent/woman/older person to repeat the agreed-upon new behaviour
- record agreed-upon behaviour: _____
- ask the adolescent/woman/older person if she has questions/concerns
- refer as necessary
- suggest where the adolescent/woman/older person can find additional support
- agree upon a date/time for a follow-up session
- thank the adolescent/woman/older person for her time

Use listening and learning skills: Did the counselor—

- keep head level with adolescent/woman/older person?
- pay attention (eye contact)?
- remove barriers (tables and notes)?
- take time?
- use appropriate touch?
- ask open-ended questions?
- use responses and gestures that show interest?
- reflect back what the adolescent/woman/older person said?
- avoid using judging words?
- allow woman time to talk?

Use confidence building and support skills:

- accept what an adolescent/woman/older person thinks and feels
- listen to the adolescent/woman/older person's concerns
- recognize and praise what an adolescent/woman/older person is doing correctly
- give practical help
- give a little relevant information
- use simple language
- make one or two suggestions, not commands

Checklist for assessing anemia

(√ for yes and × for No)

Did the counselor—

- take (or pretend to take) Hb levels
- provide the accurate anemia protocol
- prescribe antihelminthic therapy, where needed (children over 5 years and pregnant women living in areas of high helminth prevalence)
- talk to the mother of child or woman of reproductive age/adolescent/pregnant woman/lactating mother/older person about an iron-rich and enhancing diet
- discuss side effects of the iron therapy
- talk about follow up
- suggest taking Hb levels during a follow-up visit
- refer patient to a therapist or hematologist
- provide information on a maintenance anemia supplementation plan

Session 11. Causes of Anemia and Interventions to Reduce Anemia

Time: 1 hour

Objectives

After completing this section participants will be able to—

1. describe the various causes of anemia
2. describe the interventions throughout the life cycle that are needed to reduce anemia
3. list the various reasons for anemia in their region and identify the appropriate interventions to reduce anemia.

Preparation

- **Handout 11.1:** printout of slide – Causes of Anemia
- **Handout 11.2:** printout of slide – Interventions for Anemia
- **Handout 11.3:** Anemia Prevalence in Kyrgyz Republic
- Flip chart

Learning Objective 1: Describe the various causes of anemia

Methodology: Brainstorming; interactive presentation

Suggested Time: 20 minutes

Instructions for Activity

1. Be familiar with **Handout 11.1**.
2. Draw four circles on a flip chart. (As per **Handout 11.1**, each of the circles represents deficient intake, genetics, malaria and helminths, and inflammation).
3. Ask participants to suggest the main reasons for anemia.
4. Place similar answers into their associated circle, without indicating the category.
5. After all answers have been given, distribute **Handout 11.1**.
6. Ask participants: What are the four categories that have been created?
7. Discuss and summarize.

Learning Objective 2: Describe the interventions throughout the life cycle that are needed to reduce anemia

Methodology: Brainstorming; interactive presentation

Suggested Time: 20 minutes

Instructions for Activity

1. Be familiar with **Handout 11.2**.

2. Draw a horizontal and vertical line meeting at the center to divide the flip chart into four quadrants – each to represent the four causes of anemia: deficient intake, genetics, malaria and helminths, and inflammation.
3. Ask participants to suggest interventions to combat these causes of anemia. On a second flip chart, draw a similar horizontal and vertical line meeting at the center to divide the flip chart into four quadrants – each of the quadrants representing the four important age groups in whom these interventions are applied, namely children, pregnant women, women of reproductive age, and adolescent women.
4. As the participants list the interventions, write down the intervention in the first flip chart in the quadrant representing the cause related to the intervention. At the same time, ask the participants to list the age groups in whom the interventions can be applied and write down the answers in the corresponding quadrant on the second flip chart.
5. After all answers have been given, facilitator distributes **Handout 11.2**.
6. Ask participants: Did you list all possible interventions. What did you miss?
7. Discuss and summarize.

Learning Objective 3: List the various reasons for anemia in their region and identify appropriate interventions to reduce it

Methodology: Small groups by *oblast*

Suggested Time: 20 minutes

Instructions for Activity

1. Ask participants to form groups, by region/district.
2. Prepare a flip chart ahead of time with the table in Handout 11.3, and present it to the participants.
3. Based on this information, ask groups to identify the main *oblasts* where anemia is a problem among both children 6-59 months old and women of reproductive age.
4. List the three main causes for anemia in their *oblast*.
5. Distribute **Handout 11.3**.
6. Ask each group to list three causes and ask why they chose the three.
7. Discuss and summarize.

Causes of Anemia

Deficient diet

Iron, Vit. A, Zinc,
Folate, Vit. B12



Malaria: ↑ destruction & ↓ production of RBC



Helminths: Internal bleeding (loss of iron)

Genetics:

Thalassemias, sickle cell, Hb-E, Hb-C



↑ destruction &
↓ production of normal RBC



Inflammation

- Common chronic infections



Cook, et al. 1994; Scott et al. 2007; Selhub et al. 2009; Ganz et al. 2011; George, et al. 2012; Pasricha et al. 2010; Suchdev et al. 2012

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FOR WHOM - Interventions over the LIFE-COURSE



- **Pregnant woman** - IFA, deworming*, fortification, dietary counseling



- **Woman of Reproductive age** - Birth spacing, delayed cord clamping, EBF, fortification, dietary counseling



- **Child (under 2 and under 5)** - BF, MNPs, fortified complementary food, MNPs, IFA, deworming*, infection control



- **Adolescent woman** - IFA, family planning, birth spacing, fortification, dietary counseling



* After 1 year age - Albendazole, Mebendazole, Praziquantel

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Handout 11.3

Prevalence of Anemia in the Kyrgyz Republic (DHS 2012)

Region	Anemia in children 6-59 months (%)	Anemia in women of reproductive Age (%)
All Kyrgyz Republic	42.6	35.2
Bishkek	45.2	34.7
Issyk-Kul	49.2	50.9
Djalal-Abad	28.2	29.8
Naryn	48.6	39
Batken	44.2	31.6
Osh Oblast	34.9	33.3
Talas	58.4	41.4
Chui	58.5	39.2
Osh City	25.6	17.4

Session 12. Practices for Taking IFA and Counseling for Anemia

Time: 1 hour

Objectives

After completing this section participants will be able to—

1. name key practices when taking oral iron-folic acid (IFA) supplements
2. name key practices when counseling for anemia.

Preparation

- **Handout 12.1:** Key Practices When Taking Oral IFA Supplements
- **Handout 12.2:** Key Practices When Counseling for Anemia

Learning Objective 1: Be familiar with key practices when taking oral IFA supplementation

Methodology: Brainstorming

Suggested Time: 30 minutes

Instructions for Activity

1. Ask participants: What are the benefits of IFA supplementation? Write down the responses on a flip chart.
2. Ask participants: What are the ways to enhance absorption of IFA? Write down the responses on a flip chart.
3. Ask participants: What are the common side effects of IFA and how can they be handled? Write down the responses on a flip chart.
4. Distribute copies of **Handout 12.1** and compare it with participants' responses.
5. Discuss and summarize.

Learning Objective 2: Be familiar with key practices when counseling for anemia

Methodology: Plenary

Suggested Time: 30 minutes

Instructions for Activity

1. Ask participants: What do you think are the key practices when counseling people about anemia?
2. Distribute copies of **Handout 12.2** and review together. Ask different participants to read the key practices.
3. Discuss and summarize.

Handout 12.1: Key Practices When Taking Oral IFA Supplements

Benefits of IFA supplementation:

IFA will—

- provide iron and folic acid for you and your baby
- make your baby strong and healthy
- not make your baby too big
- not cause high blood pressure
- not give you too much blood.

How to enhance the absorption of IFA:

- Take IFA with ascorbic (vitamin C) or citric acid from citrus and other fruits (such as orange, grapefruit, strawberry, and tomatoes) and vegetables (such as cabbage, bell peppers, and spinach) and fermented milk products.
- Take IFA with drinks as compotes (drinks made of dried fruits), juices, boiled water, extracts/infusion of berries and fruits.
- Allow 1-2 hours between taking IFA and drinking tea or coffee. These drinks reduce the beneficial effects of IFA.

Side effects of IFA and how to handle them:

If you:	Remedy
Have black stools	<ul style="list-style-type: none">• Do nothing.• The iron that is not absorbed will make your stool black.• This is normal and not dangerous. It means that your body is getting enough iron.
Have stomach discomfort, nausea, diarrhea or constipation	<ul style="list-style-type: none">• Take the IFA with meals.• Split the IFA tablet in half and take each half tablet at different times of the day.
Miss a daily dose	<ul style="list-style-type: none">• Skip the missed dose and take the one for the next day.• Do not take two doses at one time.
Have children in the household	<ul style="list-style-type: none">• Keep the IFA tablets out of the reach of children.

Handout 12.2: Key Practices When Counseling for Anemia

- Eat a diverse diet according to the Food Guide Pyramid, with the addition of iron-rich foods for children, adolescents, and pregnant and non-pregnant women (See Table 1).
- The best food products to increase or maintain stocks of iron in the body contain heme iron, which is easy for absorption. They include meat (beef, mutton, sheep), shrimp, and internal organs (tongue, liver, kidneys).
- Foods such as citrus, fruits, vegetables with green leaves, peas, and dry soya beans are rich in folate.
- Use enhancers of iron (Table 2), especially foods that are rich in vitamin C (Table 3).
- Allow a gap of 1-2 hours between consuming iron-rich foods or iron supplements and inhibitors of iron absorption, such as tea and coffee, high phytate foods (cereals and maize), polyphenol containing foods (tea, green leafy vegetables), milk, and egg (Table 4).
- Increase bioavailability of iron in food by using the following food practices:
 - Use germinated cereal flours (they contain amylase and increase the energy and nutrient density).
 - Use processes like germination, fermentation, and/or soaking (to reduce the phytate content of foods).
- Practice exclusive breastfeeding for up to 6 months of age, with continued breastfeeding up to 2 years along with appropriate complementary foods
- In case of early termination of breastfeeding (weaning):
 - Use iron-bearing adapted feeding formulas until the child is 12 months old.
 - Avoid feeding a child under 12 months old whole cow's milk.
- Use fortified foods. (Fortification is the addition of micronutrients and minerals to edible products like cereals, staples, oil, sugar, milk, and salt).
- Use micronutrient powders for supplementation of home foods for children under 2 years of age.
- If this is a policy/program, give intermittent IFA supplementation to pubescent girls and menstruating women.
- Ensure that your child gets high dose vitamin A twice a year if s/he is between the ages of 6 months and 5 years.
- Ensure that your child gets deworming medication twice a year.
- Be sure to use a latrine and encourage others, including children, to use a latrine. Wash your hands afterwards to reduce infection. The latrine should be used for disposal of child feces.
- Seek appropriate and timely treatment of diarrhea and pneumonia.

Table 1: Iron Content (mg) of Food Products (in 100g)

*Animal sources have the best absorbable form of iron (meat factor)

**Contain good iron enhancers

Rich in Iron		Moderately rich in Iron		Poor in iron	
Product (100g)	Iron (mg)	Product (100g)	Iron (mg)	Product (100g)	Iron (mg)
Pork liver*	29.7	Lamb*	4.3	Cucumbers	0.9
Beef liver*	9.0	Beef*	4.8	Pumpkin	0.8
Beef kidneys*	7.0	Eggs*	2.5	Carrots**	0.8
Beef brains*	6.0	Frankfurter*	1.9	Pomegranates**	0.8
Yolk*	5.8	Sturgeon caviar*	1.8	Strawberries**	0.7
Beef tongue*	5.0	Sausage*	1.7	Breast milk	0.7
Tachina halvah	50.1	Pork*	1.6	Codfish	0.6
Sunflower halvah	33.2	Chicken*	1.5	Rhubarb	0.6
Dried apples	15.0	Oatmeal	4.3	Lettuce**	0.6
Dried pears	13.0	Cornelian cherry**	4.1	Grapes**	0.6
Prunes	13.0	Peaches**	4.1	Bananas**	0.6
Dried apricots	12.0	Wheat grits	3.9	Cranberry	0.6
Wild apricot	11.7	Buckwheat flour	3.2	Lemon**	0.6
Cocoa powder	11.7	Spinach	3.3	Orange**	0.4
Rose hips/dogrose**	11.0	Raisins	3.0	Tangerine**	0.4
Blueberry**	8.0	Apricots	2.6	Curd cheese	0.4
Oat flour	5.0	Apples**	2.5	Zucchini	0.4
		Pears**	2.3	Cowberry	0.4
		Plums**	2.1	Pineapple**	0.3
		Black currant	2.1	Butter	0.1
		Gooseberry	1.6	Cow milk	0.1
		Raspberry**	1.5	Cream	0.1
		Semolina	1.6		
		Beet root	1.4		
		Cherries**	1.4		
		Rice	1.3		
		Potatoes**	1.2		
		Cabbage**	1.2		
		Honey	1.1		

Table 2: Enhancers of Iron Absorption

Products	Degree of contribution	Active agent
Liver, meat, fish*	+++	«Meat factor»
Oranges, pears, apples	+++	Vitamin C
Plums, bananas	++	Vitamin C
Cauliflower	++	Vitamin C
Lettuce, tomatoes, green bell pepper, cucumbers	+	Vitamin C
Carrots, potatoes, beet root, pumpkin, broccoli, tomatoes, cabbage	++	Lemon and apple acids
Yogurt, pickled cabbage	++	Vitamin C and acids
Fermented mare's milk, "Bozo" and other national beverages	++	Vitamin C and acids

Table 3: Ascorbic Acid (Vitamin C) per 100g of Food

Vitamin C Content	Food Products
Very high (more than 3.0 mg)	Dry and fresh rose hips, red and green bell pepper, black currant, parsley, dill.
High (2.0-3.0 mg)	Cauliflower and cabbage, oranges, strawberries, spinach, sorrel, white currants, lemon.
Moderate (1.0-1.9 mg)	Liver, green onions, turnips, green peas, tomatoes, radishes, young potatoes, lettuce, squash, melon, tangerine, gooseberries, cornelian cherry, raspberries, cow berries, early cherries, cherries, cranberries, currants red, sauerkraut.

Table 4: Inhibitors of Iron Absorption

Products	Degree of impact	Active agent
Cereals and maize	---	Phytates, dietary fiber
Tea, green vegetables with leaves	---	Polyphenol, tannin
Milk, cheese	--	Calcium, phosphates
Spinach	-	Polyphenol, oxalates
Eggs and egg powder	-	Phosphoprotein, albumin

Session 13. Prevention and Treatment of Anemia in Children

Time: 2 hours 30 minutes

Objectives

After completing this section participants will—

1. be familiar with the Kyrgyz national screening, prevention, and treatment protocol for anemia in children
2. practice 3-step counseling with mothers of children who are anemic.

Preparation

- **Handout 13.1:** Copy Of The Section Of The National Protocol That Refers To Screening, Prevention, And Treatment Of Anemia In Children
- **Handout 13.2:** Algorithm Of The Protocol For Screening, Prevention, And Treatment Of Anemia In Children
- **Health Worker Job Aid 13.3:** IYCF and Anemia Assessment Form
- **Health Worker Job Aid 10.3:** Observation Checklist for Adolescent and Women Assessment and Anemia
- Flip charts
- Baby dolls to represent an anemic child
- Slips of paper denoting haemoglobin levels, as per case study descriptions

Learning Objective 1: Be familiar with the Kyrgyz national screening, prevention, and treatment protocol for anemia in children

Methodology: Brainstorming; interactive presentation

Suggested Time: 1 hour

Instructions for Activity:

1. Explain that according to the 2012 Demographic Health Survey, the prevalence of anemia among children is high in the Kyrgyz Republic:
 - 43 percent of children ages 6 to 59 months are anemic.
 - Anemia prevalence is highest in the regions of Talas and Chui, and lowest in Osh City and Jalalabad regions.
2. Write three headings on a flip chart – prevention, screening and treatment – allowing for space between the headings to record responses from participants. Ask about prevention, screening, and treatment and write participant responses in the corresponding section.
3. Ask participants: What are ways to prevent anemia among infants and young children?
4. Point to the flip chart used in **Session 11**, which reviews the key interventions that have been listed for children. Also review key practices to reduce anemia from **Handout 12.2**.
5. Review prevention protocol for healthy, non-anemic infants/young children (Hb is above 110 g/l):

- For newborns, delay cord clamping; not earlier than 1 to 3 minutes after birth.
 - For very low-birth-weight infants (less than 1.5 kg) and pre-term infants aged 2 to 24 months, advise mothers to give iron supplementation at the rate of 2/mg/kg daily; specify brand of iron supplement and dosage (e.g 1/2 tsp, etc.).
 - For children from 6 to 23 months old living in areas with a high-prevalence of child anemia (40 percent and above), advise mothers to supplement the infant/child's diet with 2 mg/kg of elemental iron daily; specify brand of iron supplement and dosage (e.g 1/2 tsp, etc.).
 - For children from 6 to 23 months old living in areas with low-prevalence of anemia, advise mothers to supplement their diet with 12.5 mg of elemental iron daily or give "Gulazyz" - fortified food three to four times a week.
 - For children older than 59 months (5 years) in areas of over 20 percent soil-transmitted helminth infections, advise mothers to give deworming medication once a year (see protocol). Specify brand of deworming medication and dosage.
 - For children older than 59 months in areas with over 50 percent soil-transmitted helminth infections, advise mothers to provide deworming medication twice a year (see protocol). Specify brand of deworming medication and dosage.
6. Ask participants: When should you test childrens' hemoglobin levels? Review the following, if they do not mention them:
- pre-term infants before 3 months of age
 - full-term children aged 6 months
7. Ask: At what cut-offs do Hb levels indicate anemia:
- For full-term children aged 6 to 59 months, an Hb below 110g/l indicates anemia.
 - For full-term children over 59 months, an Hb below 120 g/l indicates anemia.
 - Severe anemia is an Hb below 70 g/l.
8. Ask participants: What is the protocol for treating anemic children ages 6 to 23 months? Review the following, if not mentioned or responses are incorrect:
- Advise mothers to give their children an iron supplement with 2 mg of elemental iron per kg body weight for three months. Specify brand of iron supplement (iron syrup) and dosage.
 - Advise mothers to feed their children micronutrient rich foods and fruits and avoid giving tea with food.
 - If the infant/young child's Hb is below 70 g/l, also refer to a pediatrician or hematologist.
 - For severely anemic children, advise the mother to give an iron supplement with 3 mg iron per kg body weight for three months. Refer participants to Table 1 in the protocol.
9. Explain that for anemic children older than 59 months (5 years), the iron supplementation protocol is 30 mg of elemental iron and 250 µg of folic acid for three months.
10. Ask participants: What is the follow-up protocol for children given iron supplementation treatment? Review the following, if not mentioned:
- 14 days from the beginning of treatment, evaluate the child's condition and compliance to treatment.

- 4 weeks from beginning of treatment, check Hb status.
 - If Hb is improving (Hb equal to or above 110 g/l), advise mother to continue giving iron supplementation for two additional months.
 - The total iron treatment is for a period of three months.
11. Ask participants how they know if the prescribed iron supplementation treatment is not yielding positive results in the child.
 12. If needed, explain that an Hb increase of less than 10 g/l compared to the initial level of Hb before treatment indicates that the iron supplementation is not yielding results.
 13. Ask participants: What might be the possible reasons for the lack of improvement.
 14. Review any of the following, if not mentioned:
 - Insufficient iron supplementation – the mother may not be giving the proper dosage
 - Irregular intake of or refusal to take iron supplementation
 - Other reasons
 15. Discuss the protocol for children whose Hb levels are not improving after 30 days of iron supplementation:
 - If the child is not getting the correct dosage of iron supplement, counsel the mothers on the correct dosage and reasons why she may not be giving the correct dosage (e.g. side effects).
 - If inconsistent treatment is ruled out, the child should be referred to a pediatrician or hematologist to clarify the causes of anemia.
 - If the infant/young child's Hb is below 70 g/l, refer the infant/child to a pediatrician or hematologist.
 16. Ask participants what they would advise after a child successfully completes the iron treatment and is no longer anemic.
 17. If not mentioned, review the following:
 - For children under 24 months living in areas with low prevalence of anemia, advise mothers to supplement the child's diet with 12.5 mg of elemental iron daily or give "Gulazyz" (fortified food) three to four times a week.
 - For children from 6 to 23 months living in areas with high-prevalence of child anemia (40 percent and above: advise mothers to supplement the infant/child's diet with 2 mg/kg of elemental iron daily.
 - Advise mothers to feed their children a diet high in micronutrients and fruits and not to give tea to children under 2.
 18. Discuss indications for when a child should be referred for hospitalization.
 - For children with severe anemia and signs of cardiovascular decompensation, refer to a hospital.
 - If an infant/young child deteriorates after one to two weeks of treatment, or has not improved after four weeks of treatment, refer to a hospital.
 19. As per **Handout 13.1**, ask participants to open the guideline book to the section of the national protocol that refers to screening, prevention, and treatment of anemia in infants and young children, and along with **Handout 13.2**, review the algorithm of the protocol for children with the participants.

20. Ask participants if they have any questions. Answer all questions before proceeding to the next activity.

Learning Objective 2: Practice 3-step counseling with mothers of children who are anemic

Methodology: Practice

Suggested Time: 1 hour 30 minutes

Instructions for Activity:

1. Ask the participants to line up in three columns. Indicate that the participants of each row across the three columns will be asked to play three roles: Mother with child, health worker/counselor, and observer.
2. Ask the group of mothers to join the facilitators outside the room, where the case study will be read to them.
3. Distribute three items to the health worker/counselor: **Handout 13.2, Health Worker Job Aid 13.3**, and as per the case study description, the slip of paper with the denoted haemoglobin level.
4. Distribute **Health Worker Job Aid 10.3** to observers.
5. Practice Case Study 1: Read a case study to the mothers only, and ask the mothers to return to their working groups. Note: The mothers need to be sure that they give all the information included in their case study.
6. Emphasize to participants the need to stick to the (minimal) information in the case studies and not to embellish.
7. The health worker/counselor of each working group asks the mother about why she has come to the clinic, and practices the “assess, analyze and act” steps using the listening and learning and building confidence and giving support skills. The health worker/counselor can use the protocol algorithm in **Handout 13.2** and **Health Worker Job Aid 13.3: IYCF and Anemia Assessment Form** to determine the next course of action. During the counseling, the health worker/counselor uses the information from the flip chart used in **Session 11**, which reviews the key interventions that have been listed for children, as well as the key practices to reduce anemia from **Handout 12.2**.
8. When the discussion turns to haemoglobin levels, the health worker/counselor opens the slip of paper with the haemoglobin level.
9. In each working group, the observer’s task is to record the skills of the health worker/counselor using the Observation Checklist (**Handout 10.3**) to provide feedback after the case study.
10. The participants in groups switch roles and repeat the above steps using Case Studies 2 and 3.
11. Discuss and summarize.

Note:

When you are playing the mother:

- Give yourself and your child a name and tell your health worker/counselor what they are.
- Answer the health worker/counselor’s questions from your story. Do not give all the information at once.
- When the health worker/counselor asks your permission to do a lab test to measure Hb levels, you should say yes.

- If your health worker/counselor uses good listening and learning skills, and makes you feel that she is interested, you can tell her more.

When you are playing the health worker/counselor:

- Greet the mother and introduce yourself. Ask for her name and use it.
- Ask one or two open-ended questions to start the conversation and to find out in general how she and her baby are feeling.
- Use the **Health Worker Job Aid 13.3: IYCF and Anemia Assessment Form** to gather additional background information (counseling step “assess”).
- Explain that you would like to learn about why she is in the health clinic (counseling step “Assess”). Always request mother’s permission to measure her child’s haemoglobin level (counseling step “assess”).
- Follow the protocol as per the level of haemoglobin on the slip of paper (counseling step “analyze”).
- Prioritize and come to an agreement about what the mother can try to do (counseling step “act”).
- Remember to mention practices from the flip chart used in **Session 11**, which reviews the key interventions that have been listed for children, as well as the key practices to reduce anemia from **Handout 12.2**. In particular, the health worker/counselor should emphasize the importance of mass deworming and key water, sanitation, and hygiene practices.

When you are observing:

- Follow the pair practice with **Handout 10.3: Observation Checklist** and observe the three steps of counseling: assess, analyze, and act, as well as the practices on the anemia-specific checklist.
- Notice which listening and learning skills and building confidence and giving support skills the health worker uses.
- After the role play, praise what the health worker does right, and review together the Observation Checklist (**Handout 10.3**).

Case Study #1

Mother: You are a mother living in Chui, and you have brought your 6-month-old infant to the health clinic for his regular visit. He is your second child—there is one and a half years between your first and second child. You’ve been breastfeeding him regularly and his growth is normal. You complain that your infant has been lethargic lately.

 The health worker/counselor will open the piece of paper that says 90 g/l

Case Study #2

Mother: You are a mother from Talas, and you were given elemental iron to give your 6-month-old infant because the doctor said he was anemic. You have returned for your four-week follow-up visit. If the health worker/counselor asks you, you stopped giving your child the iron supplement because it made him constipated. Your baby is still very lethargic.

 The health worker/counselor will open the piece of paper that says 95 g/l

Case Study #3

Mother: You are a mother from Naryn, and your child is now 9 months old. The health worker had counseled you during the last visit about the importance of giving your child iron supplementation and you have complied with the therapy. Your child is much more active and alert. After three months you are returning to see the health worker.

The health worker/counselor will open the piece of paper that says 110 g/l

Key Content

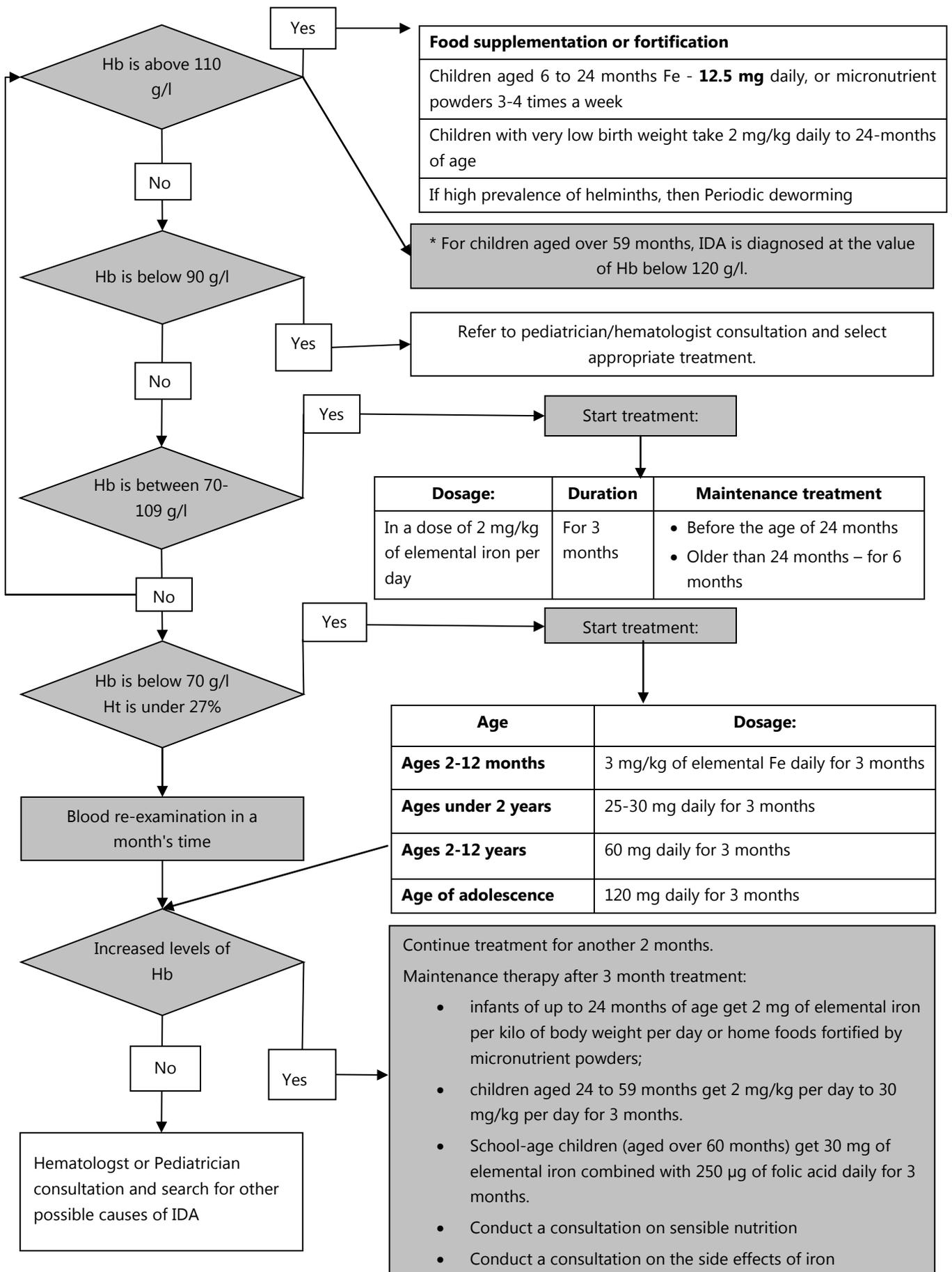
The 3-step counseling process involves:

- **Assess** the clinical condition of the child and prepare for anemia assessment: ask, listen, and observe.
- **Analyze** the course of action as per the protocol, and discuss the prevention and treatment with the mother.
- **Act** – Initiate appropriate treatment, and provide counseling to the mother as regards the dose, duration, side effects, and potential lifestyle changes.

Handout 13.1: Section Of The National Protocol That Refers To Screening, Prevention, And Treatment Protocol For Anemia In Children

Refer to guideline book, section of the national protocol that refers to screening, prevention, and treatment of anemia in infants and young children. Text only available in Russian.

Handout 13.2: Algorithm Of The Protocol For Screening, Prevention, And Treatment Protocol For Anemia In Children



Health Worker Job Aid 13.3: IYCF Assessment

Circle or fill in appropriate response

	Name of Mother/Caregiver		Name of Child			Age of child (months)		Is (name of child) your first child?			
Observation of mother/caregiver											
Child Illness	Child ill			Child not ill			Child recovering				
Hemoglobin Level			Prophylactic				Treatment of Anemia		Deworming		
Tell me about Breastfeeding	Currently breastfeeding		Frequency: times/day & night		If No: when did BF stop?		How is breastfeeding going? (record any difficulties)				
Tell me about any liquids your child received yesterday	Is your child getting anything else to drink?		What		Frequency: times/day		Amount: how much (Ref. 250 ml)				
	Other milks										
	Other liquids including water										
Complementary Foods yesterday	Age of child	Variety						Frequency	Amount	Thickness/texture	
		Staple: Breads, grains (rice, corn), Potatoes	Legumes (beans, nuts, seeds)	Vit A-rich Fruit-Veg	Other Fruit-Veg	Animal flesh foods	Milk, dairy	Eggs	M = meal S = snack	# of large spoonful or part of a 250 ml cup: ¼, ½, ¾, full	
Growth curve increasing	Yes		No			Levelling off/Static					
Other challenges (note REASONS underlying challenges)											
Mother/caregiver assists child	Who assists the child when eating?										
Hygiene	Washes hands BEFORE FOOD (eating/feeding/food prep); AFTER FECES (self/infant/animal)										
	Yes					No					

Session 14. Prevention and Treatment of Anemia in Women of Reproductive Age

Time: 2 hours 15 minutes

Objectives

After completing this section participants will—

1. be familiar with the Kyrgyz national screening, prevention, and treatment protocol for anemia in women of reproductive age
2. be able to practice 3-step counseling with women of reproductive age who are anemic.

Preparation

- **Handout 14.1:** Copy Of The Section Of The National Protocol That Refers To Screening, Prevention, And Treatment For Anemia In Women Of Reproductive Age
- **Handout 14.2:** Algorithm of the Protocol for Screening, Prevention, And Treatment For Anemia In Women Of Reproductive Age
- **Health Worker Job Aid 10.2:** Adolescent and Women’s Nutrition Assessment Form
- **Health Worker Job Aid 10.3:** Observation Checklist for Adolescent and Women’s Nutrition Assessment and Anemia
- Flip chart
- Slips of paper denoting haemoglobin levels, as per case study descriptions

Learning Objective 1: Be familiar with the Kyrgyz national screening, prevention, and treatment protocol for anemia in women of reproductive age

Methodology: Brainstorming; interactive presentation

Suggested Time: 45 minutes

Instructions for Activity:

1. Explain that according to the 2012 Demographic Health Survey, 35 percent of women of reproductive age (WRA) in the Kyrgyz Republic have anemia.
2. Point out that in the regions of Issyk, Talas, Chui, and Naryn, anemia prevalence among women ranges from 39 to 51 percent.
3. Write three headings on a flip chart: prevention, screening and treatment. Leave space between the headings to note down responses from participants. Ask about prevention, screening, and treatment and record participant responses in the corresponding section.
4. Ask participants how anemia can be prevented among women of reproductive age.
5. Point to the flip chart used in **Session 11**, which reviews the key interventions that have been listed for women of reproductive age. Also review key practices to reduce anemia from **Handout 12.2**.
6. If not mentioned, explain that due to the high prevalence of anemia among WRA, it is advisable to prescribe a weekly dose of 60 mg elemental iron with 2,800 µg (2.8 mg) of folic acid for a period of three months twice a year, with a three month interval between treatments.

7. Ask participants: When should you check the anemia status of women?
8. Review the following, if they do not mention them:
 - a. Check Hb level of adolescent girls between 15 and 17 years of age once a year during a visit to a health facility. If the girl has not visited a health facility, then at the earliest opportunity.
 - b. Check Hb level of all women ages 18 to 25 once a year.
9. Ask: At what cut-offs do Hb levels indicate anemia among WRA?
 - a. Hb levels below 120 g/l indicate anemia
 - b. Hb levels below 70 g/l indicate severe anemia
10. Ask participants: What is the protocol for treating anemic non-pregnant WRA? Review any of the following, if not mentioned or participant responses are incorrect:
 - For women with mild to moderate anemia, advise the woman to take 60 mg of elemental iron two times a day (total of 120 mg/day) and 400 µg (0.4 mg) of folic acid daily (or 2,800 µg/2.8 mg weekly) for three months twice a year, with a three month interval between treatments.
 - For women with severe anemia, advise the woman to take 60 mg of elemental iron three times a day (total of 180 mg/day) and 400 µg (0.4 mg) of folic acid daily (or 2,800 µg/2.8 mg weekly) for three months twice a year, with a three month interval between treatments.
 - Advise the woman on which iron formulation to take and the dosage.
 - Advise the woman to eat a micronutrient-rich diet, include fruits with meals, and avoid drinking tea with meals.
11. Ask participants: What is the follow-up protocol for WRA given iron supplementation treatment? Review the following, if not mentioned:
 - 14 days from the beginning of treatment, evaluate the women's clinical condition and compliance to treatment.
 - 4 weeks from beginning of treatment, check Hb status.
 - If Hb is improving (Hb increases above or equal to 120 g/l), advise the mother to continue taking the iron supplementation for two additional months.
 - The total iron treatment is for a period of three months.
12. Ask participants how they know if the prescribed iron supplementation is not yielding positive results.
13. If needed, explain that if the Hb is not increasing compared to initial level before commencement of treatment, the iron supplementation is not working.
14. Ask participants what they would advise if the iron treatment is not working. Review the following if not mentioned:
 - Determine the possible reasons for the lack of improvement
 - For severely anemic women (70 g/l and below), refer to a therapist or hematologist
15. Review some of the reasons why there may not be improvement with an iron supplementation treatment:
 - Insufficient iron supplementation – the mother may not be taking the proper dosage.

- Irregular intake of or refusal to take iron supplementation.
 - Other reasons.
16. Mention that women should be counseled if they are not taking the correct dosage of iron supplement. If inconsistent treatment is ruled out, the women should be referred to a therapist or hematologist to clarify the causes of anemia.
 17. Ask participants what they would advise once the woman completes her treatment and is no longer anemic.
 18. If not mentioned, point out that women should return to the normal prevention protocol, which is to take a weekly dose of 120 mg elemental iron with 2,800 µg (2.8 mg) of folic acid for a period of three months twice a year, with a three month interval between treatments.
 19. Discuss indications for when a non-pregnant woman should be referred for hospitalization.
 - For women with severe anemia and signs of cardiovascular decompensation, refer to a hospital
 - If a woman's condition worsens in one or two weeks from the beginning of treatment, or has not improved in 4 weeks from the beginning of treatment, refer to a hospital.
 20. As per **Handout 14.1**, ask participants to open the guideline book to the section of the national protocol that refers to screening, prevention, and treatment protocol for anemia in women of reproductive age, and along with **Handout 14.2**, review the algorithm of the protocol for women of reproductive age with participants.
 21. Ask participants if they have any questions. Answer all questions before proceeding to the next activity.

Learning Objective 2: Practice 3-step counseling with women of reproductive age who are anemic

Methodology: Practice

Suggested Time: 1 hour 30 minutes

Instructions for Activity:

1. Ask the participants to line up in three columns. Indicate that the participants of each row across the three columns will be asked to play three roles: woman of reproductive age (WRA), health worker/counselor, and observer.
2. Ask the group of WRAs to join the facilitators outside the room, where the case study will be read to them.
3. Distribute three items to the health worker/counselor: **Handout 14.2, Health Worker Job Aid 10.2**, and as per the case study description, the slip of paper with the denoted haemoglobin level.
4. Distribute **Health Worker Job Aid 10.3** to observers.
5. Practice Case Study 1: Read a case study to the WRAs ONLY, and ask them to return to their working groups. Note: The WRAs need to be sure that they give all the information included in their case study to the counselor.
6. Emphasize to participants the need to stick to the (minimal) information in the case studies and not to embellish.

7. The health worker/counselor of each working group asks the WRA about why she has come to the clinic, and practices the “assess, analyze and act” steps with listening and learning skills and building confidence and giving support skills. The health worker can use the protocol algorithm in **Handout 14.2** and **Health Worker Job Aid 10.2: Adolescent and Women’s Nutrition Assessment Form** to determine the next course of action. During counseling, the health worker/counselor uses the information from the flip chart used in **Session 11**, which reviews the key interventions that have been listed for WRA, as well as the key practices to reduce anemia from **Handout 12.2**.
8. When the discussion turns to haemoglobin levels, the health worker/counselor opens the slip of paper with the haemoglobin level.
9. In each working group, the observer’s task is to record the skills of the health worker/counselor using the Observation Checklist (**Handout 10.3**) to provide feedback after the case study.
10. The participants switch roles within their groups and repeat the above steps using Case Studies 2 and 3.
11. Discuss and summarize.

Note:

When you are playing the WRA:

- Give yourself a name and tell your health worker/counselor what it is.
- Answer the health worker/counselor’s questions from your story. Do not give all the information at once.
- When the health worker/counselor asks your permission to do a lab test to measure Hb levels, you should say yes.
- If your health worker/counselor uses good listening and learning skills, and makes you feel that she is interested, you can tell her more.

When you are the health worker/counselor:

- Greet the WRA and introduce yourself. Ask for her name and use it.
- Ask one or two open-ended questions to start the conversation and to find out in general how she is feeling.
- Use the **Health Worker Job Aid 10.2: Adolescent and Women’s Nutrition Assessment Form** to gather additional background information (counseling step “assess”).
- Explain that you would like to learn about why she is in the health clinic (counseling step “assess”).
- Always request mother’s permission to measure her haemoglobin level (counseling step “assess”).
- Follow the protocol appropriate for the level of haemoglobin on the slip of paper (counseling step “analyze”).
- Prioritize and come to an agreement about what the WRA can try to do (counseling step “act”).
- Remember to mention practices from the flip chart used in **Session 11**, which reviews the key interventions that have been listed for WRA, as well as the key practices to reduce anemia from **Handout 12.2**. In particular, the health worker/counselor should emphasize the importance of mass deworming and key water, sanitation, and hygiene practices, especially among adolescents.

When you are observing:

- Using **Handout 10.3**: Observation Checklist for Adolescent and Women’s Nutrition Assessment and Anemia, observe the three steps of counselling—assess, analyze, and act—as well as the practices on the anemia-specific checklist.
- Notice which listening, learning, confidence building, and support skills the health worker/counselor uses.
- After the role play, praise the health worker/counselor for what s/he has done right, and review together the Observation Checklist for analyzing role plays

Case Study #1

Woman: You are from Naryn (39 percent anemia prevalence among women). You have come to the clinic because you are feeling a little tired.

The health worker/counselor will open the piece of paper that says 100 g/l.

Case Study #2

Woman: You are a 30-year-old married woman from Naryn. You work in a field, growing tobacco. You have two children at home, aged 7 and 8 years old. They were small for their age when they were born. You eat once a day, mainly pasta and potatoes, with no vegetables. You are going to the clinic because you do not have much of an appetite and you are very, very tired.

The health worker/counselor will open the piece of paper that says 70 g/l.

Case Study #3

Woman: You are 15 years old and you have recently started menstruating. You also notice worms in your stools. You don’t know what to do, and this is your first visit to the health center.

The health worker/counselor will open the piece of paper that says 110 g/l.

Key Content

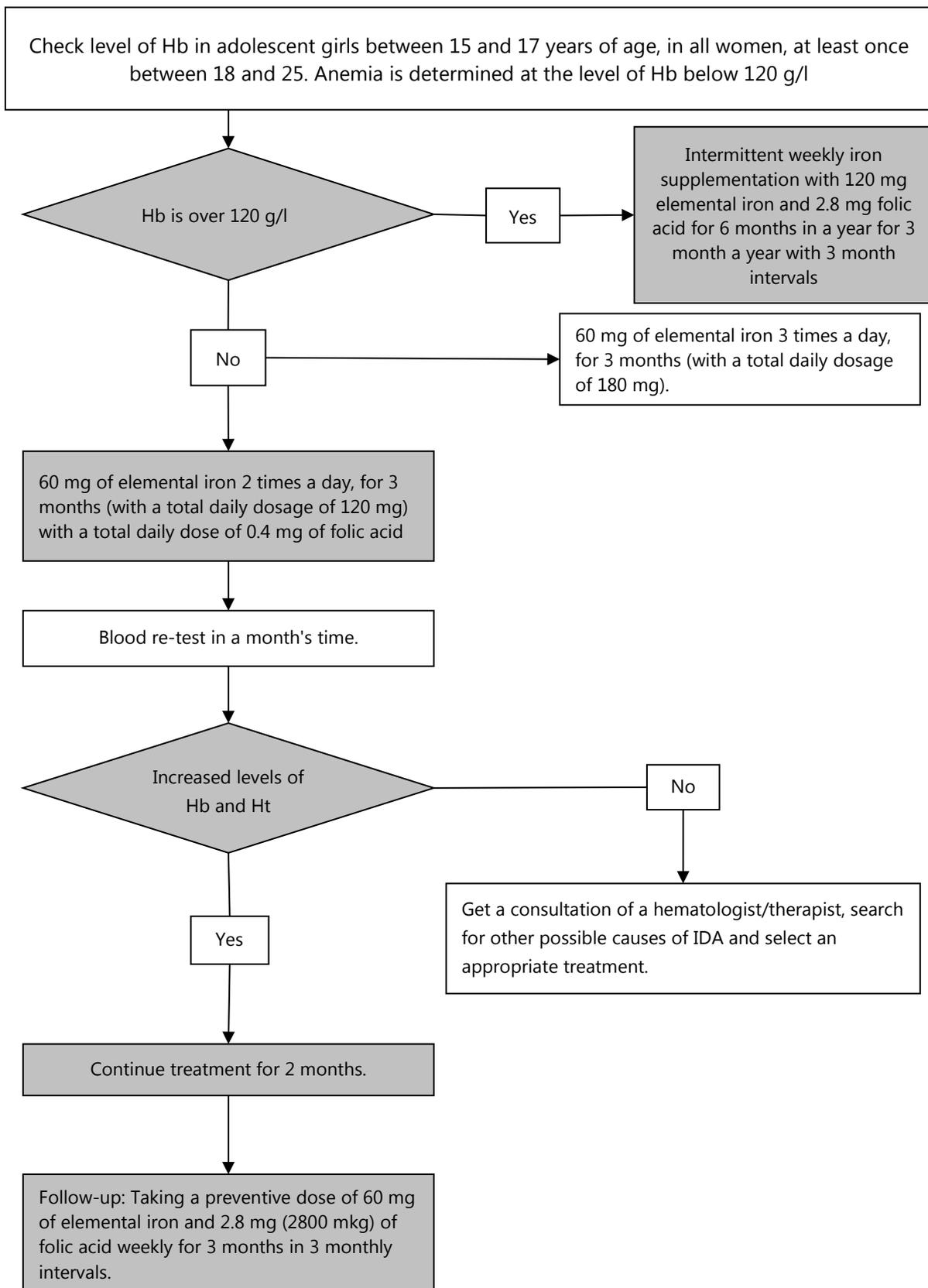
The *3-step counseling* process involves:

- **Assess** the clinical condition of the child, and prepare for anemia assessment: ask, listen, and observe.
- **Analyze** the course of action as per the protocol, and discuss the prevention and treatment with the mother.
- **Act** – Initiate appropriate treatment and provide counseling to the mother on dosage, duration of treatment, side effects, and potential lifestyle changes.

Handout 14.1: Copy Of The Section Of The National Protocol That Refers To Screening, Prevention, And Treatment For Anemia In Women Of Reproductive Age

Refer to guideline book, section of the national protocol that refers to screening, prevention, and treatment protocol for anemia in women of reproductive age. Text only available in Russian.

Handout 14.2: Algorithm of the Protocol for Screening, Prevention, And Treatment For Anemia In Women Of Reproductive Age



Session 15. Prevention and Treatment of Anemia in Pregnant Women

Time: 3 hours

Objectives

After completing this section participants will—

1. be familiar with the Kyrgyz national screening, prevention, and treatment protocol for anemia in pregnant women
2. be able to practice 3-step counseling with pregnant women who are anemic.

Preparation

- **Handout 15.1:** Copy Of The Section Of The National Protocol That Refers To Screening, Prevention, And Treatment Of Anemia In Pregnant Women
- **Handout 15.2:** Algorithm of the Protocol for Screening, Prevention, And Treatment Of Anemia In Pregnant Women
- **Health Worker Job Aid 10.2:** Adolescent and Women’s Nutrition Assessment Form
- **Health Worker Job Aid 10.3:** Observation Checklist for Adolescent and Women’s Nutrition Assessment and Anemia
- Flip charts
- Slips of paper denoting haemoglobin levels, as per case study descriptions

Learning Objective 1: Be familiar with the Kyrgyz national screening, prevention, and treatment protocol for anemia in pregnant women

Methodology: Brainstorming; interactive presentation

Suggested Time: 1 hour

Instructions for Activity:

1. Write three headings on a flip chart: prevention, screening, and treatment. Leave space between the headings to record responses from participants. Ask about prevention, screening, and treatment and write the participant responses in the corresponding sections.
2. Ask participants how anemia can be prevented among pregnant women.
3. Point to the flip chart used in **Session 11**, which reviews the key interventions that have been listed for pregnant women. Also review key practices to reduce anemia from **Handout 12.2**.
4. Review any of the following not mentioned by participants:
 - A pregnant women should take 30 mg of elemental iron (60 mg in areas where the anemia prevalence is greater than 40 percent) with 400 µg (0.4 mg) of folic acid daily.
 - Iron and folic acid supplementation should begin at the earliest stage of pregnancy possible.
 - Ideally, iron medications should be taken between meals with juice or boiled water. Tea should not be taken with the iron supplements. If taking supplements between meals causes nausea, then advise patient to take the iron with meals.

- Women should be given a one-time, single dose of antihelminthic therapy *in either the second or third trimester* (see protocol for medication and dosage).
5. Ask participants when they should check the anemia status of pregnant women.
 6. Review the following, if not mentioned:
 - Measure Hb level in all pregnant women no later than the first trimester of pregnancy.
 - Repeat measurement of Hb in all pregnant women in the 28th week of pregnancy.
 7. Ask: At what cut-offs do Hb levels indicate anemia among pregnant women? Review the following, if not mentioned:
 - During the first trimester Hb levels below 110 g/l indicate anemia.
 - In the second and third trimester, Hb levels below 105 g/l indicate anemia.
 - Hb level of 70 g/l below indicates severe anemia.
 8. Ask participants: What is the protocol for treating anemic pregnant women? Review any of the following, if not mentioned:
 - Advise the woman to take a combination of 60 mg of elemental iron twice a day (total of 120 mg/day) and 400 µg (0.4 mg) folic acid daily (2,800 µg/ 2.8 mg weekly) for three months.
 - If severely anemic, advise the woman to take 60 mg three times a day (total of 180 mg/day) and 400 µg (0.4 mg) folic acid daily (2,800 µg/ 2.8 mg weekly) for three months.
 - Advise which iron/folic acid supplement to take and dosage.
 - Discourage drinking tea with the iron supplement; allow for half an hour or more between taking the supplement and drinking tea.
 9. Ask participants: What is the follow-up protocol for pregnant women given iron supplementation treatment? Review the following, if not mentioned:
 - 14 days from the beginning of treatment, evaluate the woman's clinical condition and compliance to treatment
 - 4 weeks from beginning of treatment, check Hb status.
 - If Hb is improving (Hb level increases to above or equal to 110 g/l), advise the woman to continue taking the iron supplementation for two additional months.
 - Check Hb monthly.
 10. Ask participants: How do you know if the prescribed iron supplementation is not yielding positive results?
 11. If needed, explain that if the Hb is not increasing from the level before treatment, the iron supplementation is not working.
 12. Review some of the reasons why there may not be improvement with an iron supplementation treatment:
 - Insufficient iron supplementation – the mother may not be taking the proper dosage.
 - Irregular intake of or refusal to take iron supplementation.
 - Other reasons

13. Ask participants: What is the protocol for women who are not improving with iron/folic acid supplementation?
14. Review the following, if not mentioned:
 - If the woman is not taking the correct dosage of the iron supplement, counsel and refer her to a therapist or hematologist.
 - If inconsistent treatment is ruled out, refer the woman to a therapist or hematologist to clarify the form and cause of anemia.
 - Refer severely anemic women (70 g/l and below) to a therapist or hematologist to clarify the form and cause of the anemia.
15. Ask participants what they would advise once the woman completes her iron supplementation treatment and is no longer anemic.
16. If not mentioned, review the following:
 - Advise the pregnant woman to resume the normal prevention protocol of 30 mg of elemental iron (60 mg where the anemia prevalence is greater than 40 percent) and 400 µg (0.4 mg) of folic acid daily.
 - Take Hb levels monthly until delivery.
17. Discuss indications for when a pregnant woman should be referred for hospitalization.
 - Refer pregnant women with severe anemia and signs of cardiovascular decompensation to a hospital.
 - If a woman's condition worsens within one to two weeks of beginning treatment, or has not improved in four weeks from the beginning of treatment, refer her to a hospital.
18. As per **Handout 15.1**, ask participants to open the guideline book to the section of the national protocol that refers to screening, prevention, and treatment of anemia in pregnant women, and along with **Handout 15.2**, review the algorithm of the protocol for pregnant women with participants.
19. Ask participants if they have any questions. Answer all questions before proceeding to the next activity.

Learning Objective 2: Practice 3-step counseling with pregnant women who are anemic

Methodology: Practice

Suggested Time: 2 hours

Instructions for Activity:

1. Ask the participants to line up in three columns. Indicate that the participants of each row across the three columns will be asked to play one of three roles: pregnant woman, health worker/counselor, and observer.
2. Ask the group of pregnant women to join the facilitators outside the room, where the case study will be read to them.
3. Distribute three items to the health worker/counselor: **Handout 15.2**, **Health Worker Job Aid 10.2**, and as per the case study description, the slip of paper with the denoted haemoglobin level.
4. Distribute **Health Worker Job Aid 10.3** to observers.

5. Practice Case Study 1: Read a case study to the pregnant women ONLY, and ask them to return to their working groups. Note: The pregnant women need to be sure that they give all the information included in their case study to the counselor.
6. Emphasize to participants the need to stick to the (minimal) information in the case studies and not to embellish.
7. The health worker/counselor of each working group asks the pregnant woman about why she has come to the clinic, and practices the “assess, analyze and act” steps using the listening, learning, confidence building and support skills. The health worker can use the protocol algorithm in **Handout 15.2** and **Health Worker Job Aid 10.2: Adolescent and Women’s Nutrition Assessment Form** to determine the next course of action. During counseling, the health worker/counselor uses the information from the flip chart used in **Session 11**, which reviews the key interventions for the pregnant woman, as well as the key practices to reduce anemia from **Handout 12.2**.
8. When the discussion turns to haemoglobin levels, the health worker/counselor opens the slip of paper with the haemoglobin level.
9. In each working group, the observer’s task is to record the skills of the health worker/counselor using the Observation Checklist (**Handout 10.3**) to provide feedback after the role play.
10. The participants switch roles within their groups and repeat the above steps using Case Studies 2 and 3.
11. Discuss and summarize.

Note:

When you are playing the pregnant woman:

- Give yourself a name and tell your health worker/counselor what it is.
- Answer the health worker/counselor’s questions from your story. Do not give all the information at once.
- When the health worker/counselor asks you permission to do a lab test to measure Hb levels, you should say yes.
- If your health worker/counselor uses good listening and learning skills, and makes you feel that she is interested, you can tell her more.

When you are the health worker/counselor:

- Greet the pregnant woman and introduce yourself. Ask for her name and use it.
- Ask one or two open-ended questions to start the conversation and to find out in general how she is feeling.
- Use the **Health Worker Job Aid 10.2: Adolescent and Women’s Nutrition Assessment Form** to gather additional background information (counseling step “assess”).
- Explain that you would like to learn about why she is in the health clinic (counseling step “assess”).
- Always request the mother’s permission to measure her haemoglobin level (counseling step “assess”).
- Follow the appropriate protocol for the level of haemoglobin on the slip of paper (counseling step “analyze”).

- Prioritize and come to an agreement about what the pregnant woman can try to do (counseling step “act”).
- Remember to mention practices from the flip chart used in **Session 11**, which reviews the key interventions that have been listed for pregnant women, as well as the key practices to reduce anemia from **Handout 12.2**. In particular, the health worker/counselor should emphasize the importance of deworming in pregnancy and key water, sanitation, and hygiene practices.

When you are observing:

- Using **Handout 10.3**: Observation Checklist for Adolescent and Women’s Nutrition Assessment and Anemia, observe the three steps of counseling—assess, analyze, and act—as well as the practices on the anemia-specific checklist.
- Notice which listening, learning, building confidence, and giving support skills the health worker/counselor uses.
- After the role play, praise the health worker/counselor for what s/he does right, and review together the Observation Checklist for Adolescent and Women’s Nutrition Assessment and Anemia.

Case Study #1

Pregnant mother: You are a 20-year-old pregnant woman returning to the antenatal clinic as a follow-up to your iron/folic acid supplementation therapy. This is your first pregnancy. You have not been taking your iron because it makes you very nauseous and your stools turn black, which concerns you.

The health worker/counselor will open the piece of paper that says 100 g/l.

Case Study #2

Pregnant mother: This is the fourth month of your second pregnancy. Your first pregnancy ended with a miscarriage at 12 weeks. You have been taking your iron and folic acid for 3 months, as recommended by your doctor. You are eating one more meal a day, as suggested by your doctor, but experiencing a little nausea and vomiting. You are now returning for your second trimester check up, and want to know what to do for the remainder of the pregnancy.

-----The health worker/counselor will open the piece of paper that says 120 g/l.

Case Study #3

Pregnant woman: You are from Talas (41 percent anemia prevalence among women) and four months pregnant. You have come to the clinic for your first antenatal visit.

The health worker/counselor will open the piece of paper that says 95 g/l.

Key Content

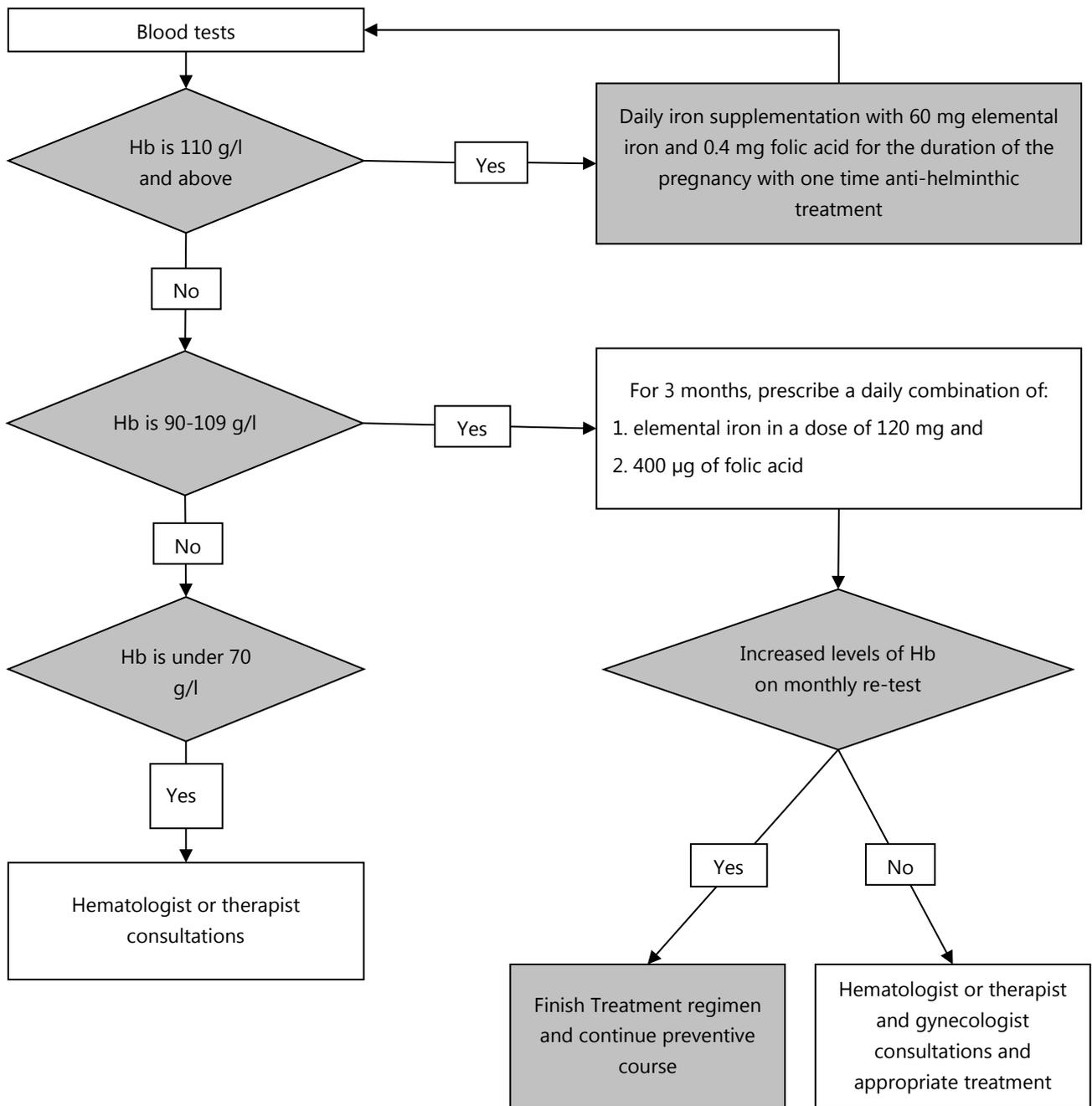
The *3-step counseling* process involves:

- **Assess** the clinical condition of the child, and prepare the anemia assessment: ask, listen, and observe.
- **Analyze** the course of action as per the protocol, and discuss the prevention and treatment with the mother.
- **Act** – Initiate appropriate treatment, and provide counseling to the mother on dosage, duration of treatment, side effects, and potential lifestyle changes.

Handout 15.1: Section of the National Protocol That Refers to Screening, Prevention, and Treatment of Anemia in Pregnant Women

Refer to guideline book, section of the national protocol that refers to screening, prevention, and treatment of anemia in pregnant women. Text only available in Russian.

Handout 15.2: Algorithm of the Protocol for Screening, Prevention, and Treatment of Anemia in Pregnant Women



Session 16. Prevention and Treatment of Anemia in the Elderly

Time: 2 hours

Objectives

After completing this section participants will—

1. be familiar with the Kyrgyz national screening, prevention, and treatment protocol for anemia in the elderly
2. be able to practice 3-step counseling with the elderly who are anemic.

Preparation

- **Handout 16.1:** Copy of the Section Of The National Protocol That Refers To Screening, Prevention, And Treatment Of Anemia In The Elderly
- **Handout 16.2:** Instructions for Anemia Management in the Elderly
- **Health Worker Job Aid 10.2:** Adolescent and Women’s Nutrition Assessment Form
- **Health Worker Job Aid 10.3:** Observation Checklist for Adolescent and Women’s Nutrition Assessment and Anemia
- Flip charts
- Slips of paper denoting haemoglobin levels, as per case study descriptions

Learning Objective 1: Be familiar with the Kyrgyz national screening, prevention, and treatment protocol for anemia in the elderly

Methodology: Brainstorming; interactive presentation

Suggested Time: 1 hour

Instructions for Activity:

1. Write three headings on a flip chart – prevention, screening and treatment. Leave space between the headings to record responses from participants. Ask about prevention, screening, and treatment and write down the participant responses in the corresponding section.
2. Explain that elderly people are susceptible to anemia because of poor diet and/or poor iron absorption.
3. Review the medications being taken by the elderly patient. In the information booklet accompanying the IFA tablet, review the drug interactions that iron and folic acid can have with other medicines. If the drug information booklet is not available, consult the pharmacist. Iron supplements can affect the absorption of many drugs (e.g., drugs for blood disorders, Parkinson’s disease, thyroid disorders, various antibiotics, etc.). Iron absorption is also reduced by zinc and calcium supplements and antacids. Folic acid supplements reduce blood levels of drugs for seizure disorders (whose dosage will need to be increased to retain their effectiveness).
4. Mention that elderly people *may* take 30 mg of elemental iron, 400 µg (0.4 mg) of folic acid and 2.4 µg of B12 daily as a prevention measure. However, this is not recommended as mandatory in the protocol. Mention that folic acid should not be taken without vitamin B12.

5. Point out that this recommendation is *encouraged, but not mandatory*.
6. Explain that elderly people may be taking other medications, thus giving them another pill to take may result in lack of compliance. It is recommended that elderly people take the required iron/folic acid and B12 formulation in one combined oral solution or pill. If the medication being taken by the patient is known to cause side effects, then refer the patient to a hematologist.
7. Ask: Why do the elderly need to eat iron-enhancing food?
8. If not mentioned, point out that the elderly produce less stomach acid, which is needed to make B12 and absorb iron.
9. Ask participants: What are some iron-enhancing foods, and why are they iron-enhancing?
10. Review the following, if not mentioned:
 - Citrus fruits (e.g., lemons, oranges, tangerines, pineapple, grapefruits, and tomatoes) provide vitamin C which enhances iron absorption, and they are acidic, which enhances vitamin B12 absorption.
 - Bell peppers, strawberries, potatoes, and cauliflower are also good sources of vitamin C for enhancing iron absorption.
 - Tea and coffee inhibit iron absorption and should be taken between meals only.
11. Ask: At what cut-offs do Hb levels indicate anemia among the elderly? Review the following, if not mentioned:
 - For men, Hb levels below 130 g/l indicate anemia.
 - For women, Hb levels below 120 g/l indicate anemia.
12. Ask participants: What is the protocol for treating elderly people who are anemic? Review any of the following, if not mentioned:
 - Advise the elderly person to take an oral solution of 30 mg of elemental iron with 400 µg (0.4 mg) folic acid and 2.4 µg daily for six months.
 - Advise the elderly person to take the iron/folic acid solution between meals with juice or water. Discourage drinking tea with the iron supplement.
13. Ask participants: What is the follow-up protocol for elderly people given iron supplementation treatment? Review the following, if not mentioned:
 - 14 days after beginning treatment, evaluate the person's clinical condition and compliance to treatment
 - 4 weeks after beginning treatment, check Hb status.
 - If Hb is improving (Hb increase of 20 g/l) the treatment must continue for another five months.
 - Check Hb at the third and sixth months of treatment.
14. Ask participants: How do you know if the iron treatment is working?
15. If not mentioned, explain that if after four weeks of treatment the Hb has not increased by at least 20 g/l from the pre-treatment level, the physician must determine the possible reasons for lack of improvement.

16. Review some of the reasons why there may not be improvement with the iron/folic acid/B12 treatment:
 - Insufficient iron supplementation – the person may not be taking the proper dosage
 - Irregular intake of or refusal to take iron supplementation because of side effects, such as constipation
 - Cause of anemia is not iron deficiency.
17. Ask participants: What is the protocol for elderly who are not improving with iron supplementation?
18. Review the following, if not mentioned:
 - If the patient is not taking the correct dosage, counsel him/her and refer to a therapist or hematologist.
 - If the patient is not taking the correct dosage because of constipation, encourage him/her to continue treatment and prescribe 50 to 100 ml of lactulose. Once the constipation ceases, reduce amount of lactulose by half.
 - If the patient has a low-iron diet, advise him/her to extend his/her diet by including meat products.
 - If inconsistent treatment is ruled out, refer the patient to a therapist or hematologist to clarify the form and cause of anemia.
19. For elderly people who are severely anemic (70 g/l and below), refer to a therapist or hematologist to clarify the form and cause of the anemia.
20. Explain that for elderly who are acutely malnourished, anemia often takes the most severe form. If this is the case, ask how the patient should be treated.
21. If not mentioned, explain that oral iron therapy should not be started until:
 - the patient's appetite has been restored
 - the patient has begun to gain weight within 14 days of beginning correctional nutrition intake.
22. Discuss indications for when an elderly person should be referred for hospitalization.
 - For elderly persons with severe anemia and signs of cardiovascular decompensation, refer to a hospital.
 - If the patient's condition worsens within one or two weeks of beginning treatment, or has not improved in 4 weeks from the beginning of treatment, refer him/her to a hospital.
23. As per **Handout 16.1**, ask participants to open the guideline book to the section of the national protocol that refers to screening, prevention, and treatment of anemia in older persons, and along with **Handout 16.2**, review the instructions for anemia management in the elderly with participants.
24. Ask participants if they have any questions. Answer all questions before proceeding to the next activity.

Learning Objective 2: Practice 3-step counseling with elderly who are anemic

Methodology: Practice

Suggested Time: 1 hour

Instructions for Activity:

1. Ask the participants to line up in three columns. Indicate that the participants of each row across the three columns will be asked to play three roles: elderly patient, health worker/counselor, and observer.
2. Ask the group of elderly patients to join the facilitators outside the room, where the case study will be read to them.
3. Distribute three items to the health worker/counselor: **Handout 16.2, Health Worker Job Aid 10.2,** and as per the case study description, the slip of paper with the denoted haemoglobin level.
4. Distribute **Health Worker Job Aid 10.3** to observers.
5. Practice Case Study 1: Read a case study to the elderly patients ONLY and ask them to return to their working groups. Note: The elderly patients need to be sure that they give all the information included in their case study.
6. Emphasize to participants the need to stick to the (minimal) information in the case studies and not to embellish.
7. The health worker/counselor of each working group asks the elderly patient about why s/he has come to the clinic, and practices the “assess, analyze and act” steps using the listening, learning, building confidence, and giving support skills. The health worker can use the protocol algorithm in **Handout 16.2** and **Health Worker Job Aid 10.2: Adolescent and Women’s Nutrition Assessment Form** to determine next course of action. During the counseling, the health worker/counselor uses the information on the key practices to reduce anemia from **Handout 12.2**, as well as information on the key nutritional needs of the elderly outlined in the protocol.
8. When the discussion turns to haemoglobin levels, the health worker/counselor opens the slip of paper with the haemoglobin level.
9. In each working group, the observer’s task is to record the skills of the health worker/counselor using the Observation Checklist (**Handout 10.3**) to provide feedback after the case study.
10. The participants switch roles within their groups and repeat the above steps using Case Studies 2 and 3.
11. Discuss and summarize.

Note:

When you are playing the elderly person:

- Give yourself a name and tell your health worker/counselor what it is.
- Answer the health worker/counselor’s questions from your story. Do not give all the information at once.
- When the health worker/counselor asks your permission to do a lab test to measure Hb levels, you should say yes.
- If your health worker/counselor uses good listening and learning skills and makes you feel that she is interested, you can tell her more.

When you are playing the health worker/counselor:

- Greet the elderly patient and introduce yourself. Ask for his/her name and use it.
- Ask one or two open-ended questions to start the conversation and to find out in general how s/he is feeling.
- Use the **Health Worker Job Aid 10.2: Adolescent and Women’s Nutrition Assessment Form** to gather additional background information (counseling step “assess”).
- Explain that you would like to learn about why s/he is in the health clinic (counseling step “assess”).
- Always request the elderly patient’s permission to measure his/her haemoglobin level (counseling step “assess”).
- Follow the appropriate protocol for the level of haemoglobin on the slip of paper (counseling step “analyze”).
- Prioritize and come to an agreement about what the elderly patient can try to do (counseling step “act”).

When you are observing:

- Using **Handout 10.3: Observation Checklist**, observe the three steps of counselling—assess, analyze, and act—as well as the practices on the anemia-specific checklist.
- Notice which listening, learning, confidence building, and giving support skills the health worker/counselor uses.
- After the role play, praise the health worker/counselor for what s/he has done right, and review together the Observation Checklist.

Case Study #1

Older person: You are a 65-year-old man who is visiting the clinic to collect your medication for diabetes and blood pressure. You have not been feeling well; you have lost your appetite and are sleeping badly.

The health worker/counselor will open the piece of paper that says 120 g/l.

Case Study #2

Older person: You are a 75-year-old woman who is visiting the clinic for a follow-up visit after the health worker gave you iron, folic acid, and B12 for your mild anemia. You took the iron and folic acid, but you were not able to take the B12 and are now feeling weak with dizziness and fatigue.

The health worker/counselor will open the piece of paper that says 107 g/l.

Case Study #3

Older person: You are a 70-year-old man and you have come to the clinic for a check up.

The health worker/counselor will open the piece of paper that says 140 g/l.

Key Content

The *3-step counseling* process involves:

- **Assess** the clinical condition of the child, and prepare for anemia assessment: ask, listen, and observe.
- **Analyze** the course of action as per the protocol, and discuss prevention and treatment with the mother.
- **Act** – Initiate appropriate treatment, and provide counseling to the elderly patient on dosage, duration of treatment, side effects, and potential lifestyle changes.

Handout 16.1: Section of the national protocol that refers to screening, prevention, and treatment of anemia in the elderly

Refer to guideline book, section of the national protocol that refers to screening, prevention, and treatment of anemia in older persons. Text only available in Russian.

Handout 16.2: Instructions for anemia management in the elderly

- Check Hb levels in elderly people at doctor's visit.
- Repeated measurement of Hb in elderly people one month after initiation of treatment.
- Anemia in the elderly is determined at the level of Hb below 130 g/L for males and 120 g/L for females.
- **Prevention:** 30 mg of elemental iron with 400 µg (0.4 mg) of folic acid, and additional 2.4 µg of vitamin B12.
- Use of iron enhancers like citric acid is important for the elderly.
- **Treatment:**
 - Elderly people with mild or moderate IDA: 30 mg of elemental iron with 400 µg (0.4 mg) of folic acid, and additionally 2.4 µg of vitamin B12.
 - Therapy effectiveness evaluation conducted in 14 days and 4 weeks from the beginning of treatment.
 - In 4 weeks, if hemoglobin increases by 20 g/L, continue maintenance treatment with 30 mg of elemental iron in combination with 400 µg of folic acid daily for 2 months.
 - If the prescribed treatment gives no positive results and there are no issues with adherence, the patient should be referred to a hematologist or therapist in order to clarify the causes of anemia.
- Elderly people with severe anemia (HB below 70 g/L) should be consulted by a hematologist or therapist.

Session 17. Clinical Practice

Time: 4 hours

Objectives

After completing this session, participants will be able to—

1. practice 3-step counseling with adolescent, pregnant women, and mothers who are lactating
2. reflect on the strengths and weaknesses of clinical counseling practice.

Preparation

- Have ready photocopies of Health Worker **Job Aid 10.2:** Adolescent and Women’s Nutrition Assessment Form, and Health Worker **Job Aid 10.3:** Observation Checklist of Adolescent and Women’s Nutrition Assessment and Anemia.
- Use prepared flip charts of summarized listening and learning skills, and building confidence and giving support skills.
- **Handout 17.1:** Summary Chart for Counseling during Clinical Practice for feedback session

Learning Objective 1: Practice counseling with adolescents, pregnant women, and mothers who are lactating

Methodology: Practice

Suggested Time: 3 hours (including travel)

Instructions for Activity:

1. At the training site, review 3-step counseling, listening and learning skills, and building confidence and giving support skills.
2. Divide participants into pairs: one will counsel, problem solve, reach an agreement with a pregnant woman or mother who is lactating, while the other follows the discussion with the observation checklist in order to give feedback later.
3. Ask the counselor to use Health Worker **Job Aid 10.2:** Adolescent and Women’s Nutrition Assessment Form.
4. Ask the observer to fill out Health Worker **Job Aid 10.3:** Observation Checklist of Adolescent and Women’s Nutrition Assessment and Anemia.
5. Pairs switch roles: the other participant will counsel, problem solve, reach an agreement with a pregnant woman or mother who is lactating, while the participant who previously counseled now follows the discussion with the observation checklist in order to give feedback later.
6. Identify key gaps that need more time for practice and observation at the site.

Key Content

The *3-step counseling* process involves:

- **Assess** weight, height, BMI, haemoglobin (if client knows), supplements, dietary practices, and condition of pregnant woman or mother who is lactating: ask, listen, and observe.
- **Analyze** any difficulty: identify the difficulty and, if there is more than one, prioritize. Answer questions from the adolescent, pregnant woman, or mother who is lactating.

- **Act** – discuss, suggest small amount of relevant information, give practical help to the adolescent, pregnant woman, or mother who is lactating, and agree on feasible actions she can try.

Learning Objective 2: Reflect on strengths and weaknesses of counseling field practice

Methodology: Feedback exchange

Suggested Time: 1 hour

Instructions for Activity:

1. At the training site, in a large group, ask each pair of participants to summarize their counseling experience by filling in the Summary Chart (see below) for visits (attached to the wall or on the mat).
2. Use the following summary chart to record each pair of participants' clinical practice experience. Draw this table on the flip chart and display it throughout the rest of the training. Add additional columns for other counseling sessions.
3. Table shows: Participants' names; adolescent or woman's name
 - **Assess:** variety of foods, weight, height, BMI, haemoglobin (if client knows), supplements, any illnesses. **ANALYZE:** difficulty identified, priorities determined.
 - **Act:** suggest options/proposals/alternatives to adolescent or woman; agree upon small, doable actions that are time bound/negotiated agreement
4. Participants receive and give feedback.
5. Facilitators and participants identify key gaps that need more practice time at field practice site.
6. Ask each participant to write one sentence describing his/her experience on a sticky note. As they finish, they can post this note on the wall. The facilitator will organize the notes into categories and read them back to the participants. Open the discussion to the entire group and ask them what they learned from the experience. How will they apply this learning when they return to their work?
7. OR - Ask three counselors: 1) How did you feel? Confident? 2) What difficulties did you encounter?
8. Ask three observers: 1) Did the counselor apply the listening and learning skills? Specify. 2) Will the patient follow agreed upon action(s)? 3) What else needs to be taken into account?
9. Discuss and summarize.

Handout 17.1: Summary Chart for Counseling during Clinical Practice

Participants' names	ASSESS												ANALYZE	ACT	
	Name of adolescent/ pregnant woman/ mother who is lactating	Adolescent			Measurements				Woman						
		Variety of foods	Iron-folate	Illness	Weight	Height	BMI	Hb	Pregnant/ Lactating	Variety & extra meal(s)	Iron-folate	Calcium		Illness	Difficulties identified/ priorities determined

Session 18. Training Action Plans

Time: 1 hour

Objectives

After completing this session, participants will be able to—

1. prepare and present *oblast*/district training action plans

Preparation

- **Handout 18.1:** Training plan template for adolescent and women’s nutrition and anemia training

Learning Objective 1: Prepare and present *oblast*/district action plans

Methodology: Group work

Suggested Time: 1 hour

Instructions for Activity:

1. On the first day of the training, explain to participants that on the fifth day of the training they will present their action plans to their fellow participants.
2. Group the participants according to where they work, and ask each group to discuss how they will begin to use this training.
3. Distribute **Handout 18.1:** Training Plan Template for Adolescent and Women’s Nutrition and Anemia Training for groups to use in their planning.
4. Ask participants to find time to meet together in their specific groups during the week.
5. Ask groups by *oblast*/district to present their action plans.
6. Ask other participants for input and feedback.
7. Collect copies of various action plans (**Handout 18.1**).
8. Share action plans with organizing entities, health facilities, and MOH.

Handout 18.1: Training Plan Template for Adolescent and Women’s Nutrition and Anemia

Activity	Target	Who	Number of Participants	When	Where	Resources/Materials Required (Number of copies)	Responsible	Expected Outcomes

Session 19. Post-assessment and Evaluation

Time: 30 minutes

Objectives

After completing this session, participants will be able to—

1. identify strengths and weaknesses in their knowledge of adolescent and women's nutrition and anemia.
2. conduct an evaluation of the training.

Preparation

- **Handout 19.1:** Post-assessment
- **Handout 19.2:** Evaluation form

Learning Objective 1: Identify strengths and weaknesses in participants' knowledge of adolescent and women's nutrition and anemia after the training

Methodology: Written post-assessment

Suggested Time: 15 minutes

Instructions for Activity:

1. Pass out copies of the post-assessment (**Handout 19.1**) to the participants and ask them to complete it individually.
2. Ask participants to write their birth date on the post-assessment (to match both pre- and post-assessments).
3. Correct all the tests, identifying topics that still cause confusion and need to be addressed.
4. Create a simple graph of the pre- and post-assessment results: questions are indicated on the x-axis and correct answers on the y-axis, using different colours for pre- and post-assessment results.
5. Share results of pre and post-assessment with participants and compare/review the answers.

Learning Objective 2: Conduct evaluation of training

Methodology: Written evaluation

Suggested Time: 15 minutes

Instructions for Activity:

1. Explain that their suggestions will be used to improve future trainings.
2. Distribute end-of-training evaluations to participants and ask them to write their comments.
3. Have participants fill out the form without writing their name on it.
4. Tick the corresponding box: unsatisfactory, good, very good.

Handout 19.1 Post-assessment (What have we learned?)

Birth date: _____

No.	Statement	True	False
1.	A pregnant woman needs to eat more than a lactating woman.		X
2.	Adolescent and pregnant women need more calcium in their diets.	X	
3.	Vitamin A is found in meat from cows or sheep.	X	
4.	A malnourished mother will usually give birth to an infant with low birth weight.	X	
5.	It is recommended to wait two years before having another child.		X
6.	Men can help improve women's nutrition by assuring there is enough food of good variety for women who eat last.	X	
7.	It is difficult for a pregnant woman to get enough iron from food.	X	
8.	Iodized salt is important for the whole family.	X	
9.	A lactating woman needs more iron than a pregnant woman.		X
10.	Women need iron supplementation once during pregnancy.		X
11.	A pregnant woman can get the extra energy she needs by eating more vegetables like cucumbers and tomatoes.		X
12.	Promoting a nutritious diet is a key part of antenatal care.	X	
13.	Breastfeeding mothers must eat more than usual.	X	
14.	Pregnancy and lactation are the most important points in the life cycle to improve the nutrition of women.		X
15.	It is recommended that pregnant women not drink tea.	X	
16.	Anemia can be caused by worm infection.	X	
17.	Taking tea with iron and folic acid pills helps improve anemia.		X
18.	Iron deficiency is the most common cause of anemia in the world.	X	
19.	Liver, meat, and fish contain the best absorbable iron for the human body.	X	
20.	Side effects of iron-folic acid pills are stomach discomfort, nausea, diarrhea or constipation, and black stools.	X	
21.	Iron and folic acid supplementation will make a baby too big.		X
22.	A lactating woman does not need to take iron and folic acid pills for three months after delivery.		X
23.	Women need to eat more green leafy vegetables, peas, and dry soya beans to get folate in their diet.	X	
24.	A child between 6 months and 5 years needs high dose vitamin A twice a year.	X	
25.	Handwashing after using the latrine and before eating and cooking will not affect anemia.		X
26.	Micronutrient powders are recommended for pregnant women for the prevention of anemia.		X
27.	Adolescents receive a weekly dose of iron and folic acid pills for 3 months to prevent anemia.	X	
28.	The elderly have anemia because of poor absorption of vitamin B12.	X	
29.	Vitamin C can increase absorption of iron.	X	
30.	Deworming medication is only given to children.		X

Handout 19.2: End-of-training Evaluation

Place a ✓ in the box that reflects your feelings about the following:

	Unsatisfactory	Good	Very Good
Training objectives			
Methodologies used			
Materials used			
Useful in your work			
Clinical practice			

1. Which topics did you find most useful?

2. What are your suggestions to improve the training?

Other comments

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