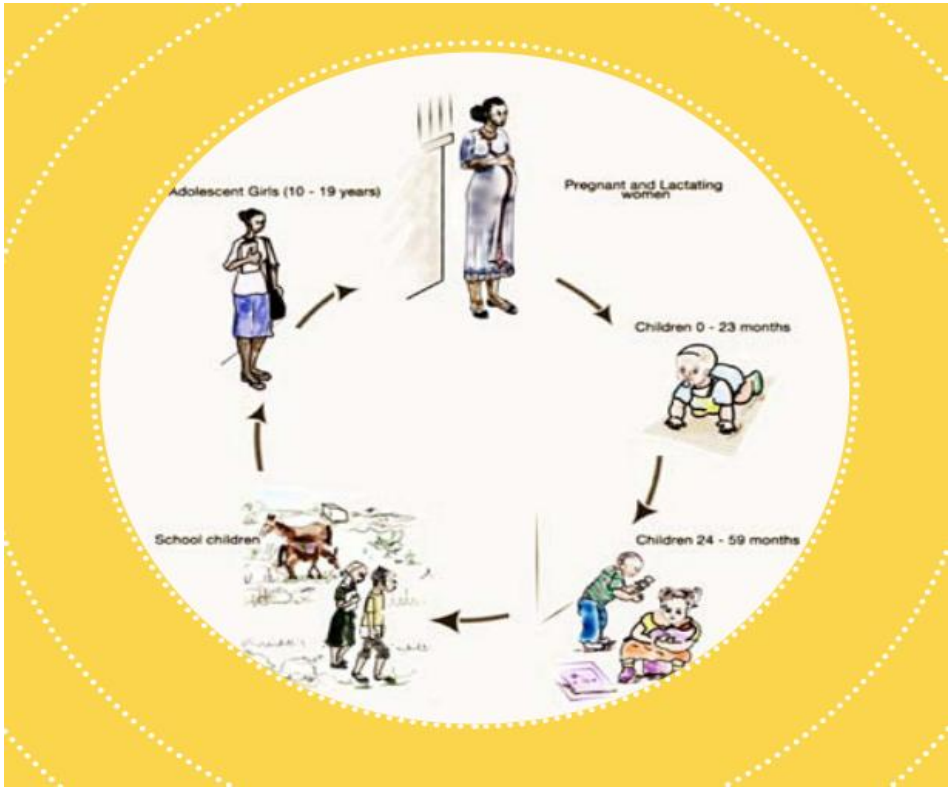
Comprehensive Adolescent, Maternal, Infant and Young Child

Nutrition Facilitator's Guide



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Executive Summary

Worldwide, malnutrition is an underlying cause in the deaths of more than 3.1 million children under the age of 5 each year. Some 20 million infants are born each year with low birth weight (LBW). Fifty-two million children are wasted, and of these 19 million are severely wasted. About 165 million children around the world are stunted. Of the estimated 165 million, 90 percent live in 36 countries, one of which is Ethiopia. Ethiopia has witnessed encouraging progress in reducing malnutrition over the past decade. However, baseline levels of malnutrition remain so high that the country must continue to make significant investments in nutrition.

Major investments in child health in Ethiopia have yielded a substantial decline in infant and under-5 mortality rates; the country has already achieved MDG 4 in 2013. Under-nutrition is one of the main culprits causing high child mortality, accounting for 51 percent of all childhood deaths in Ethiopia (FMOH, 2003). Addressing the problem of under-nutrition is critical to achieving all MDGs, especially MDG1, MDG 4 and MDG 5Adolescent and Women's nutrition affects a wide range of health and social issues, including family care and household food security (FANTA, 2000). Food insecurity and malnutrition in adolescents and pregnant women, compounded by gender discrimination, leads to an intergenerational cycle of nutrition problems which manifest as stillbirths, miscarriages, low birth weight, growth failure, increased risk of maternal and neonatal mortality, impaired cognitive development, sub-optimal productivity in adults and reduced economic growth for the nation. For girls in particular, the chances of escaping this nutrition-poverty trap diminish as the child grows older. Over time her options for better education attainment and delayed marriage decrease. She is likely, in turn, to give birth to a baby of low birth weight. Hence the cycle begins again (Benson, 2006). This cycle must be broken, and it all begins with the mother or, rather, with adolescent girls.

There is a strong relationship between age and physical nutritional status; it is well recognized that the size and body composition of the mother at the start of pregnancy is one of the strongest influences on fetal growth (Kramer, 1987). Ensuring that adolescent girls are themselves nutritionally fit to become mothers is essential. According to the 2011 Ethiopian Demographic and Health Survey (EDHS), the median age for a first marriage is around 16.5. Twelve percent of adolescent girls (aged 15–19) are either already mothers or pregnant with their first child. The government's efforts to address under-nutrition will be strengthened through the Lifecycle Approach, a comprehensive approach that emphasizes the first 1,000 days of a child's life. For instance, ensuring that a newborn is breastfed within 1 hour of birth could cut all infection related neonatal

mortality by 44-45% (Lancet 2013). Exclusive breastfeeding for the first 6 months of life can cut by about 15 percent the number of child deaths, and adequate complementary feeding could prevent an additional 6 percent of all such deaths (Jones et al., 2003).

The first 1,000 days of life, from the first day of pregnancy until the child is 24 months old, is a critical window of opportunity for health and development. This is the period in which nutrition requirements are greatest and when adolescent girls, pregnant women and young children in Ethiopia in particular are most vulnerable to inadequate care, inadequate access to health services and unsuitable feeding practices.

The interventions in this revised training Guide will therefore target the following "windows of opportunity": adolescent girls, pregnant women, infants 0–6 months old, and infants and young children 6–24 months old.

The 2011 EDHS estimated the national prevalence of stunting among children at 44.4 percent, the prevalence of underweight at 28.7 percent and wasting at 9.7 percent. The survey also revealed that the level of chronic malnutrition among women in Ethiopia is relatively high, with 27 percent of women either thin or undernourished—that is, having a body mass index (BMI) of less than 18.5 kg/m2. Similarly, the prevalence of anemia among women in the reproductive age group (15–49) was found to be 17 percent (CSA, 2011).Between 2000 and 2011 the prevalence of both underweight and stunting declined 32 and 23 percent, respectively. While this trend is clearly progressing in the right direction, Ethiopia needs to accelerate efforts to reach the Health Sector Development Plan's (HSDP IV) target of reducing the prevalence of stunting to 30 percent by 2015. Known high impact nutrition interventions must thus be scaled up and intensified.

Micronutrient deficiencies contribute significantly to morbidity and mortality among children. Micronutrient deficiencies, particularly iron, Zinc, iodine and Vitamin A deficiencies are significant public health problems in Ethiopia. The prevalence of anemia among children under five nationally has dropped by 19 percent between 2005 and 2011—from 54 percent in 2005 to 44 percent in 2011. Iodine is vital for healthy growth and mental development. According to the NNP (National Nutrition Program (NNP 2013-2015), salt iodization needs to reach 95 percent if Ethiopia is to be on track to eliminate iodine deficiency. The Ministry of Health and partners have taken important strides to ensure progress towards universal salt iodization, including calling for mandatory use and sale of iodized salt.

In addition to its effect on the eyes, Vitamin A deficiency increases the severity of childhood infections. Nationwide supplementation of Vitamin A is undertaken twice a year, covering 91.7 percent of children under 5 (MOH, 2011/12).

Overall, levels of nutrition (stunting, wasting and underweight) and micronutrient deficiencies are high but showing improving trends. However, the feeding practices of Ethiopian families remain sub-optimal. According to EDHS 2011, only half of children under 2 living with their mothers are exclusively breastfed. Only 4.3 percent of children consumed the recommended four food groups and just 13 percent of children under 2 consumed iron-rich foods.

Introduction

Promoting preventive nutrition is a recognized & cost effective global strategy to break the intergenerational cycle of malnutrition. Adolescent girls, mothers, infants & young children are the primary targets for breaking the malnutrition cycle. Though infant & young child nutrition has been of interest since the development of the National Strategy in 2004 in Ethiopia, nutrition interventions for adolescents and mothers remained to be a gap. Currently, as a result of global & national interest to integrate nutrition interventions across the lifecycle, this Adolescent, Maternal, Infant & Young Child Nutrition (AMIYCN) is prepared. The training module is prepared based on the first two strategic objectives (1. Improve the nutritional status of women15-49 years and Adolescents10—19 years, 2. Improve the nutritional status of infants and young children) the revised National Nutrition Program Document:

This training module is intended to equip health workers (HW) and health extensions workers (HEW) with the basic hands-on skills in the community based on Adolescent, Maternal, Infant and young child Nutrition (AMIYCN) approach which includes working with Health development Army / Women Development Army. It includes key Adolescent, Maternal, Infant and young child feeding (AMIYCF) practices/messages, negotiation, and interpersonal communication skills. They can apply the knowledge and skills to help mothers/caregivers optimally feed their adolescent girls, infants and young children and to care for their own nutritional needs. The training also provides an opportunity for health workers and Health extension workers to learn together and practice "coaching" to improve performance.

Providing people with information and teaching them how they should behave does not lead to desirable change in their response/behaviour. However, when there is a supportive environment with information and communication (teaching) then there is a desirable change in the behaviours of the target group. Thus, Behaviour Change Communication is proved to be an instructional intervention which has a close interface with education and communication. It is a strategic and group oriented form of communication to perceive a desired change in behaviour of target group.

Essential Nutrition Action (ENA) programs are implemented through health facilities and community groups. The approach includes ensuring that key messages and services pertaining to the seven action areas are integrated into all existing health sector programs, In particular those that reach mothers and children at critical contact points (maternal health and prenatal care; delivery and neonatal care; postpartum care for mothers and infants; family planning; immunizations; well child visits (including growth monitoring, promotion, and counseling); sick child visits (including Integrated Management of Newborn & Childhood Illnesses and Integrated Community Case Management); and Outpatient Therapeutic Care during Community---based Management of Acute Malnutrition. The appropriate messages and services are also integrated to the greatest extent possible. Optimal infant and young child Nutrition (IYCN) practices rank among the most effective interventions to improve child health and survival. To improve this situation, health care professionals as well as the general public need to protect, promote, & support optimal IYCN.

Complementary feeding means giving infants other foods in addition to breast milk. The main purpose of feeding complementary foods is to fill in the energy and micronutrient gap created after 6 months of age when it cannot be met by breast milk alone. When and how infants and young children are introduced to complementary feeding is a known critical challenge especially in developing countries. In Ethiopia, traditional infant foods such as thin gruels are made up of cereals or tubers which are relatively low in energy as well as micronutrients needed for optimal physical and cognitive development during infancy and early childhood periods. Furthermore, the bulkiness of traditional infant foods and the concentration of fibers and inhibitors in staple food crops are major factors in reducing nutritional benefits of traditional complementary foods. In addition, various societal misconceptions for example thinking that infants and very young children are not able to eat meat, eggs, kale, believing that they are heavy for the child's intestine, interfere with optimum complementary feeding principles. The WHO/ UNICEF Global strategy for infant and young child feeding summarizes the actions that governments and other concerned parties should take to protect, promote and support appropriate infant and young child feeding. This section has addressed IYCN actions based on WHO/ UNICEF Global strategy for infant and young child feeding.

Good nutrition is important for all pregnant women and contributes to maternal health and optimal birth outcomes. Inadequate food intake, poor dietary quality, and untreated infections before and during pregnancy increase the risk of maternal mortality and morbidity and are risk factors for negative birth outcomes such as infants with low birth weight (LBW) or intrauterine growth restriction (IUGR)

Objectives of AMIYCN training

General Objective

After completing the training module on Adolescent, Maternal, Infant & Young Child Nutrition, health service providers will be able to promote, protect & support nutrition interventions according to the national guideline & support target groups practice appropriate AMIYCN recommendations.

Learning Objectives of the training

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

1. Describe the key messages and practices for optimal breast-feeding,
2. Describe the key messages and practices for optimal complementary feeding.
3. Describe infant feeding options in the context of HIV/AIDs.
4. Mention the importance of feeding of the sick child.
5. Describe the key messages and practices for optimal adolescent and women's nutrition
6. Describe the four essential micronutrients (Vitamin A, Iron, Iodine & Zinc)
7. Negotiate with the mothers (to encourage them) to try one improved practice in one of the learning objectives mentioned above and to reinforce the correct behaviours to encourage the adoption of the new practice.
8. Develop a three month action plan of the activities which they will implement upon return to their health facilities

Training Agenda

The five day training is organized in a sequence to facilitate learning and practice negotiation skills.

The sessions for each day outline specific learning objectives, activity details, materials/hand outs, duration and methodologies for learning activities.

Training methodology

The training approach promotes the principles of Behaviour Change Communication of small do-able actions, and the widely acknowledged theory that adults learn best by reflection on their experiences. Attempts have been made to make the training sessions relevant to the needs of participants and their communities.

This participatory approach uses the experiential learning cycle method and intends to prepare participants for hands-on performance of skills. The training employs a variety of training methods: demonstrations, practices, discussions, case studies, group discussions, and role plays. Participants will learn to act as resource persons for breastfeeding mothers, pregnant women, and mothers/caregivers who have young children and Adolescent girls

Respect for individual trainees is central to the training and sharing of experiences is encouraged throughout. Participants complete the pre and post training assessment questionnaires and discuss their evaluations at the end of the training.

Training location

Wherever the training is planned, a site should be selected which is close to the training facility and readily available to support the practicum for negotiation with mothers/caregivers on do-able adolescent, maternal, infant and young child feeding practices and also for complementary food demonstration. Prepare the practicum site by coordinating with clinic and/or community for arrival of participants and arranging for space for practicing negotiation skills. It is advised to have one facilitator for 6-8 participants for this session.

Training Schedule

Session	Title	Duration
	Day 1	
Session 1	Registration, opening speech, self-introduction, Expectation, Administration and Logistics, pre-test and course objectives	55 min
Session 2	Behaviour Change Communication (BCC)	2 hour
Session 3	Essential Nutrition Actions for the prevention of malnutrition: Role of the health worker and the Community worker	30 min
	Infant and young child Nutrition(IYCN)	
Session 4	Advantages of breast-feeding	30 min
Session 5	Key breast feeding practices: Positioning and correct attachment	1 hour 45 min
Session 6	Breast feeding beliefs and myths	30min
Session 7	Current difficulties during breast-feeding: prevention and solutions;	1 hour
	Evaluation of the day: Mood Meter	
	Day 2	
	Review of day 1	
Session 8	Counselling and Reaching an Agreement	2 hour 30 min
Session 9	Key complementary feeding practices	3 hour
Session 10	Complementary food Demonstration	2 hour 30 min
	Evaluation of the day: Mood Meter	
	Day 3	
	Review of day 2	
Session 11	Feeding of the sick child	2 hour 30min
Session 12	Counselling & Reaching an Agreement regarding complementary feeding	1 hour 30min
Session 13	Adolescent and women's nutrition • The malnutrition cycle • Strategies to break the malnutrition	3 hour
Session 14	Counselling and Reaching an Agreement regarding Adolescent and women's nutrition	1 hour
	Evaluation of the day: Mood Meter	
	Day 4	
Session 15	Field visit health centre or village and summary of field visit results	8 hour
	Evaluation of the day: Mood Meter	
	Day 5	
	Review of day 3 & 4	
Session 16	Essential Micronutrients	2 hour
Session 17	Introduction to Job Aids for health workers	2 hour
Session 18	Development of an action plan (6 months) Presentation of action plans	2 hour
Session 19	Post-test, Course evaluation	1hour
	Closing	1hour

Training Tools and Techniques

Review Energizers

The following are some example exercises that can be used during the review sessions. They are an interesting and interactive way of reviewing what was learned on previous days. Please select one of the exercises for each of the review sessions on the agenda.

1. Participants and facilitators form a circle. One facilitator has a ball which s/he throws to one participant. Facilitator asks a question to the participant who catches the ball. Participant responds. When the participant has answered correctly to the satisfaction of the group, that participant throws the ball to another and in turn asks a question. The participant, who throws the ball, asks the question. The participant who catches the ball answers the question.

2. Form 2 rows facing each other. Each row represents a team. A participant from one team/row asks a question to the participant opposite her in the facing team/row. That participant can seek the help of her team in responding to the question. When the question is answered correctly, the responding team earns a point and then asks a question of the other team. If the question is not answered correctly, the team which asked the question responds and earns the point. Questions and answers are proposed back and forth from team to team.

3. Form 2 teams. Each person receives a written statement. These statements are answers to questions that will be asked by a facilitator. When a question is asked, the participant who believes she has the correct answer will read her answer. If correct, she scores a point for her team. The team with the most correct answers wins the game.

4. From a basket, a participant selects a question and answers it; feedback is given by other participants. Repeat the process for other participants.

Daily Evaluations:

A. Ask participants to write on a small page of paper their answers to one, two, or all of the following questions which have been displayed on a flip chart:

1. What did you learn today that will be useful in your work?

2. What was something that you liked?

3. Give suggestions for improving today's sessions.

- Collect participants' answers, mix-up the papers, redistribute them and ask participants to read the answers, OR

- Collect participants' answers, summarize and provide summary on the following day.

B. A table measuring participants' mood (filled out by participants at the end of each day).

		MOOD Meter		
DATE				
Day 1				
Day 2				
Day 3				
Day 4				
Day 5				

SESSION 1

INTRODUCTIONS, EXPECTATIONS, PRE TEST & COURSE OBJECTIVES

Learning objectives

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

1. Begin to name fellow participants, facilitators, and resource persons.
2. Create a dynamic relationship among participants and trainers.
3. Discuss participants' expectations.
4. Explain course objectives and purpose of the training.

Overview

Activity 1.1	Presentation game for introductions and expectations (20 minutes)
Activity 1.2	Pre-test (15 minutes)
Activity 1.3	Presentation of course objectives (10 minutes)
Activity 1.4	Discuss administrations and housekeeping (10 minutes)

Total Time 55 minutes

Materials needed

- √ Flipchart papers, markers and masking tape
- √ Objectives written on flip chart
- √ Matching pairs of infant feeding pictures for presentation game
- √ Participants' folders
- √ One copy of Pre-test for each participant

Detailed activities

Activity 1.1 Presentation of a Game for Introductions and Expectations (20 minutes)

Methodology

- Pictures are cut in 2 pieces; each participant is given a picture portion and must find his/her match; pairs introduce each other's names, organization , Responsibility expectations of the training, and something of human interest (favourite food, hobbies, likes, dislikes, etc.)
- Facilitator asks participants about their expectations and writes them on flipchart.

Activity 1.2 Pre-test (15 minutes)

Methodology

- Pass out copies of the pre-test to the participants and ask them to complete it individually.
- Ask participants to select a code number from a bag and then write their code number on the pre-test. Remind them to remember for the post test.
- Correct all the tests as soon as possible the same day, 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.

Activity 1.3 Presentation of training objectives (10 minutes)

Methodology:

- Facilitator introduces course objectives and compares them with expectations of participants.
- Expectations and objectives remain in view during training course.

Activity 1.4 Discuss administrations and housekeeping (10 minutes)

Pre-test and Post-test

Please read through the following statements. Select "**Yes"** if you agree with the statement or select **No** if you disagree with the statement.

"	**Pre-test and Post-test**	**Yes**	**No**
1	It is necessary to put the baby on the breast immediately after birth.		
2	Colostrum serves as the first immunization for the baby		
3	When breastfeeding, the baby's chin needs to touch the mother's breast.		
4	Demonstrating to a mother how to better feed her child is more effective than just telling her.		
5	The most important thing a mother can do to produce sufficient breastmilk is to breastfeed her baby frequently, both day and night		
6	A malnourished infant or young child most likely had more episodes of diarrhoea.		
7	Vitamin A supplementation is necessary only for children under 2 years.		
8	A mother can prevent sore and cracked nipples by correctly positioning and attaching her baby at the breast.		
9	When a mother is HIV-positive, there are ways to decrease HIV transmission to the baby.		
10	At 4 months, a mother should begin to add foods in addition to breastmilk.		
11	Watery gruel is a better food for a 6 month old baby than soft enriched porridge		
12	The mother or caregiver should actively encourage the baby to eat the food given.		
13	It is necessary that young children have their own plates while they are eating.		
14	Carrots, mangoes, papaya, and green leafy vegetables contain vitamin A.		
15	Animal products and legumes are the foods that help a child to grow.		
16	Young children should be breastfed for at least 2 years.		

17	Children 12–24 months old should eat 3-4 times a day and have 1 -2 snacks.		
18	When a young child over 6 months has diarrhoea, mother needs to increase the frequency of breastfeeding, frequency of other liquids and the frequency of foods		
19	A pregnant woman needs to eat more than a woman who is lactating.		
20	Red meat, liver, and green leafy vegetables contain iron.		
21	Iodized salt is important for the whole family.		
22	To prevent low birth weight infant improving feeding of adolescent girl is very important.		
23	During adolescent period requirement of Iron increase.		
24	A malnourished mother is likely to give birth to a low weight child.		
25	De-worming is part of anaemia control.		
26	The lactating woman requires more iron than the pregnant woman.		
27	Men can help improve women's nutrition by sharing their workload.		
28	Focusing on pregnant and lactating women is the only point in the life cycle of females where nutrition can be improved		
29	Zinc is an essential mineral which is found in both animal and plant source foods.		
30	The promotion of a nutritious diet is a key component in the Care and Support of HIV+ mothers.		

Pre-test and Post-test Answers

Please read through the following statements. Select **Yes** if you agree with the statement or select **No** if you disagree with the statement.

"	Pre-test and Post test	Yes	No
1	It is necessary to put the baby on the breast immediately after birth.	**x**	
2	Colostrum serves as the first immunization for the baby	**x**	
3	When breastfeeding, the baby's chin needs to touch the mother's breast.	**x**	
4	Demonstrating to a mother how to better feed her child is more effective than just telling her.	**x**	
5	The most important thing a mother can do to produce sufficient breastmilk is to breastfeed her baby frequently, both day and night	**x**	
6	A malnourished infant or young child most likely had more episodes of diarrhoea.	**x**	
7	Vitamin A supplementation is necessary only for children under 2 years.		**x**
8	A mother can prevent sore and cracked nipples by correctly positioning and attaching her baby at the breast.	**x**	
9	When a mother is HIV-positive, there are ways to decrease HIV transmission to the baby.	**x**	
10	At 4 months, a mother should begin to add foods in addition to breastmilk.		**x**
11	Watery gruel is a better food for a 6 month old baby than soft enriched porridge		**x**
12	The mother or caregiver should actively encourage the baby to eat the food given.	**x**	
13	It is necessary that young children have their own plates while they are eating.	**x**	

14	Carrots, mangoes, papaya, and green leafy vegetables contain vitamin A.	**x**	
15	Animal products and legumes are the foods that help a child to grow.	**x**	
16	Young children should be breastfed for at least 2 years.	**x**	
17	Children 12–24 months old should eat 3-4 times a day and have 1 -2 snacks.	**x**	
18	When a young child over 6 months has diarrhoea, mother needs to increase the frequency of breastfeeding, frequency of other liquids and the frequency of foods	**x**	
19	A pregnant woman needs to eat more than a woman who is lactating.		**x**
20	Red meat, liver, and green leafy vegetables contain iron.	**x**	
21	Iodized salt is important for the whole family.	x	
22	To prevent low birth weight infant improving feeding of adolescent girl is very important.	**x**	
23	During adolescent period requirement of Iron increase.	**x**	
24	A malnourished mother is likely to give birth to a low weight child.	**x**	
25	De-worming is part of anaemia control.	**x**	
26	The lactating woman requires more iron than the pregnant woman.		**x**
27	Men can help improve women's nutrition by sharing their workload.	**x**	
28	Focusing on pregnant and lactating women is the only point in the life cycle of females where nutrition can be improved		**x**
29	Zinc is an essential mineral which is found in both animal and plant source foods.	**x**	
30	The promotion of a nutritious diet is a key component in the Care and Support of HIV+ mothers.	**x**	

SESSION 2

BEHAVIOUR CHANGE COMMUNICATION (BCC)

Learning objectives

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

1. Define behaviour change communication.
2. Explain the concept of behavior and why changing behavior is difficult
3. Explain behavior change steps
4. Explain why knowledge is not enough to change behaviour.
5. Explain the stages of behaviour change.
6. Practice identifying different behaviour change stages.

Overview

Activity 2.1	Define Behaviour Change Communication and explain why knowledge is usually not enough to change behaviour (30 minutes)
Activity 2.2	Explain the stages of behaviour change communication and the interventions required at each step of the change (60 minutes)
Activity 2.3	Practice identifying what behaviour change stage a mother is in with regards to her infant feeding practices (30 minutes)

Total Time 2 hours

Materials needed

- √ Flipchart papers (+ markers + masking)
- √ Behaviour Change case studies on cards

Advance preparation

Handouts

Stages of behaviour change

Detailed activities

Activity 2.1 Define Behaviour Change Communication and explain why knowledge is usually never enough to change behaviour (30 minutes)

Methodology

- Brainstorm the definition of behaviour change communication.
- Divide participants into buzz groups of three. Ask groups to think about a time when someone told them what to do. Ask them to think about how they felt.
- Ask participants to think about a time when someone asked them what they wanted to do. Ask them to think about how they felt in this situation.
- In plenary discuss the difference between how it felt to be told what do to and how it felt to be asked what they wanted to do. Ask a few participants to share their feelings.

Behaviour = action/doing; Change = always involves motivators and barriers/obstacles; Communication = interpersonal, visuals, media, etc.

Behaviour change communication (BCC) **is a process of any intervention with Individuals, Communities and/or societies to develop communication strategies to promote positive behaviors which are appropriate to their settings. This in turn provides a supportive environment which will enable people to initiate and sustain positive and desirable behavior outcomes.**