

Development of module for complementary feeding at rural set up

PRIYANKA SINGHAL AND RITA SINGH RAGHUVANSHI

ABSTRACT

The present study was conducted in Bargarh situated in Mau block of district Chitrakoot (U.P.). Rationale of the study was to facilitate information on complementary feeding to rural women through training module as flip chart. The objective of the study was to develop training module on complementary feeding for facilitators at *anganwadi* centres and *balwadi* centres. Qualitative information was obtained by semi structured interview method to get views on major challenges regarding complementary feeding as reported by respondents. It was uncommon to prepare semi solid food as complimentary food for infants of six months and older. Women were often not aware of the exact age of their child. Family foods often lack the nutrients in the appropriate concentration that children need for proper growth. Distribution of weaning foods from *anganwadi* centers was irregular. On the basis of need assessment, module on complementary feeding was developed containing four sections viz anchor, input, apply and integration. Anchor sections (15 min.) consisted of exploring what the learners already know about the topic and connect them to the core concept to be introduced. Input section (40 min.) comprised of adding new knowledge through flip chart. Apply activity (30 min.) involved undertaking a task that enables learners to apply the new knowledge immediately provided through flip charts. Integrate activity (20 min.) included using new knowledge in their real lives. Participants showed enthusiasm to have knowledge regarding complementary feeding provided by facilitators. The module was found useful by the participants.

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Key Words : Rural women, Complementary feeding, Training module

INTRODUCTION

Infant and young child nutrition has been engaging the attention of scientists and planners since long for the very simple reason that growth rate in the life of human beings is maximum during the first year of life and infant feeding practices comprising of both the breastfeeding as well as complementary feeding have major role in determining the nutritional status of the child. (FNB, 2006). The proportions of underweight, stunting and wasting among under-three year old children have been reported to be 47 per cent, 45 per cent and 16 per cent, respectively at the national level (NFHS-2 1998-99). Infant-feeding practices constitute a major component of child caring practices apart from socio-cultural, economic and demographic factors. Somehow, these practices constitute one of the most neglected determinants of young child malnutrition in spite of their important role in growth pattern of children. Recent studies have recognized the link between malnutrition and child feeding practices (Brennan *et al.*, 2004, Sethi *et al.*, 2003, Kapur, *et al.*, 2005). Need for educating mothers for promotion of proper infant-feeding practices and other aspects of childcare has also

been felt. (Caulfield *et al.*, 1999; Sachdev *et al.*, 1991). The objective of the study was to develop training module on complementary feeding for facilitators at *anganwadi* centres and *balwadi* centres.

METHODOLOGY

The present study was conducted in Bargarh village situated in Mau block of district Chitrakoot (U.P.). The village is considered backward as 81 per cent of population is living below poverty line. There are 18 revenue village with 3073 household covering 19,013 population. Caste composition includes 69 per cent schedule caste and schedule tribe, other backward caste 26 per cent and rest 5 per cent general caste. Population is mainly tribal (*koal*). Daily wages work in nearby stone mines is the main source of income generation for local community and youth.

OBSERVATIONS AND ASSESSMENT

Need assessment was done by conducting informal discussions with rural women, staff at *Sarvodaya Sewa Ashram* (SSA), Village Development Co-ordinators

(VDCOs), *Anganwadi Workers* (AWWs) for preparing module regarding feeding practices of complementary feeding and found that women had knowledge pertaining to complimentary foods such as spinach juice, rice water, dal etc. given to small children. But women could not follow complementary feeding practices due to lack of sufficient food. Specially prepared complementary feeding was not in practice due to lack of money. A number of children were seen with a piece of chapatti in their hands or eating just rice, rarely with dal. There were so many children with extended belly. At present, pearl millet, sorghum, barley were no longer consumed. There was easy access

to vegetables during rainy season for some households because few kitchen gardens were maintained; also vegetables were purchased for consumption depending upon affordability by people.

Informal interviews were conducted with staffs at Sarvodaya Sewa Ashram (SSA) to get their views and input on challenges in the communities visited. According to them malnutrition was a problem among children. Many women were aware of nutritious complementary foods. But the main challenge is things are not done in practice. Existing training materials were reviewed provided by SSA included flip charts, booklets were used for making flip

Module name:	Complimentary feeding
For (Community group or facilitator):	Community group
Who	Mothers, expecting mothers and other family members
Why	Complimentary feeding usually starts only when the infants start seeking solid food. It is uncommon to prepare semi solid food as complimentary food for infants six months and older. Food from <i>Anganwadi</i> center is provided irregularly.
When	2 hours
Where	Monthly health meeting at the <i>Balwadi</i> centre or on Saturdays before distributing weaning food at the <i>Anganwadi</i> Centre.
What for	By the end of this 2-hour session, participants will be able to know meaning of complimentary feeding, timely initiation of complimentary feeding, nutrient rich complimentary foods and weaning food from <i>Anganwadi</i> center.
How	
Anchor	
15 min.	Meaning of complimentary feeding task 1: Local practices and traditions
small group/	Ask participants to share traditional ways in which food is introduced to babies: Is there a ritual marking the start of feeding infants? If yes, when does it usually take place? What kinds of food are given to infants initially? Do people usually avoid giving certain kinds of food to infants? Why?
plenary	
explore what the	
learners already know	If there are no such rituals or ceremonies: When does a mother usually start giving food to infants? Are there some traditional foods that are considered good for the babies? If mothers go away for work during the day, who in the family takes care of the infant?
about the topic	
and	
connect them to the	Finally, ask what are the changes noticed in a child around six months. Do they become more active and move about more?
core concepts	
to be introduced	Meaning of complimentary feeding task 2: Session review and expectations
	Share the achievement-based learning objectives with the group and ask what their expectations from the session are. Also ask if the learners have any questions regarding the achievement-based learning objectives. Listen to the expectations and let the learners know that they will be referred to towards the end of the learning session.
	If the learners are not familiar with the concept of complimentary feeding, explain that the concept will be explained throughout the learning session.

Contd.....

Contd.....

Input

40 min.

closer look/

key points

Add new knowledge

or skill

Complementary feeding means giving other foods in addition to breast milk.' These other foods are called complementary foods. During the period of complementary feeding, a baby gradually becomes accustomed to eating family foods. At the end of this period (usually at around the age of 2 years), breast milk is entirely replaced by family foods, although a child may still sometimes suckle for comfort.

There are two kinds of complementary foods:

Specially prepared foods and usual family foods that are modified to make them easy to eat and provide enough nutrients. For example, a mother may specially prepare porridge for the baby while the rest of the family eat potato and groundnut stew. When the child is a little older, the mother will give the potato mashed in the stew. Mashing modifies the consistency of the family food, making it easier for the child to eat. Family meals can also be modified by adding something extra, for example adding a piece of mango to give extra vitamin A, or liver for extra iron, and oil or margarine for extra energy.

When should complementary foods be started?

Complementary foods should be started when the baby can no longer get enough energy and nutrients from breast milk alone. For most babies this is from 6 months of age. This is also the age when nerves and muscles in the mouth develop sufficiently to let the baby munch, bite and chew. Before 4 months, babies push food out of their mouths because they cannot fully control the movement of their tongues. At 6 months of age it becomes easier to feed thick porridges, purees and mashed foods because children can control their tongues better, start to make up-and-down 'munching' movements, start to get teeth, like to put things in their mouths, Interested in new tastes and this is also the age when their digestive system is mature enough to digest a range of foods.

Giving complementary foods too soon is dangerous because a child does not need these foods yet, and they may displace breast milk. If foods are given, the child takes less breast milk, and the mother produces less, so later, it may be more difficult to meet the child's nutritional needs. Child receives less of the protective factors through breast milk, so the risk of illness increases the risk of diarrhoea also increases because complementary foods may not be as clean as breast milk. The foods given instead of breast milk are often thin, watery porridges or soups because these are easy for babies to eat. These foods fill the stomach but provide fewer nutrients than breast milk, and so the child's needs are not met mothers are at greater risk of becoming pregnant if they breastfeed less frequently. Starting complementary feeding too late is also dangerous because a child does not get the extra food needed to fill the energy and nutrient gaps a child stops growing, or grows slowly the risk of malnutrition and micronutrient deficiencies increases.

Why are complementary foods needed?

As a baby grows and becomes more active, an age is reached when breast milk alone is not sufficient to meet the child's nutritional needs. So complementary foods are then needed to fill the gap between the total nutritional needs of the child and the amounts provided by breast milk. From 6 months onwards there is a gap between the total energy needs and the energy provided by breast milk. This gap gets bigger as the child gets older. This means complementary foods are needed to fill the energy gap the quantity of food needed increases as the child becomes older if the gap is not filled, the child will stop growing, or grow slowly. Signs that a child is ready to start complementary foods are that the child is 6 months old *and* receives frequent breastfeeds but appears hungry soon after *or* is not gaining weight adequately.

Contd.....

<i>Contd.....</i>	
Apply	
30 min.	Read the following story:
small group/ plenary	Radha's son is six months old. Her friend Sunita visited her one day. Sunita's daughter is healthy and is one year and six months old. Sunita told Radha the secret behind her daughter's health. She told Radha that she had started feeding complimentary food when her daughter was six months old. Radha realized that her son is already six months old and she has been feeding only breast milk to her son. She decided to talk to her mother-in-law regarding starting complimentary food. The mother-in-law strictly asked her not to feed anything extra to her grandson saying he is too small to swallow anything. Radha talked to her husband. He thought Radha was kidding. "How could a child without teeth eat anything? I myself wasn't fed with anything like that!" Radha couldn't say anything further and continued to feed her son with breast milk only. Radha's son is now eight months old. His growth is very slow and falls sick frequently. He cannot move about actively and he is also irritated easily.
undertake a task that enables learners to apply the new knowledge or skill immediately	What should Radha do? What are the symptoms in Radha's son that can tell us that he requires complimentary food? How can the problem of child not having the teeth be addressed?
Integrate	Divide the learners into two groups.
20 min.	In small groups of five, discuss what might be done in the community to overcome barriers to complimentary feeding (e.g., not having enough time to feed, not knowing what to feed, etc.)
small group	
perform a task to enable learners to plan how to use the new information in their real lives (or do it!)	Also discuss locally available food can be modified into complimentary foods. What might the learners tell their neighbors or relatives who hold the same view as the mother-in-law. (soak <i>chapatti</i> in <i>daal</i> , mash pieces of potato, rice, make a paste of the beans in dal etc.).

charts like using text as well as pictures.

Nutrition related establishments were also visited. There were balwadi centres in Pateri and Bhauti hamlets run by SSA approximately for last ten years. Balwadi centres was equipped with playing material for children. Lunch for children was prepared by an attendant locally known as daai. balwadi workers were called as VDCOs and taught to children. At *balwadi* centres, health meetings were held once in a month. The facilitators had the meetings with a recap of the topics covered during the previous monthly meetings. Monthly sessions of meetings included the topics *viz.*, diarrhoea, summer illnesses, immunization, malaria prevention, anaemia, complementary feeding etc.. In Kotuwa and Bhauti, anganwadi centres distributed weaning food to 7 months to 6 years old children once in a week. Irregularities were reported in distributing weaning food.

Development of module:

Module was prepared for capacity building of front line workers. Module has four sections *viz.*, anchor, input,

apply and integration. Module format was based on Jane Vella's Adult Learning Principles. (http://media.wiley.com/product_data/excerpt/77/07879596/0787959677.pdf). Anchor section (25 min.) consisted of exploring what the learners already know about the topic and connect them to the core concepts to be introduced. Input section (40 min) involved adding new knowledge or skill. Apply (30 min) comprised of undertaking a task that enables learners to apply the new knowledge or skill immediately. Integrate activity (20 min) involved performing a task to enable learners to plan how to use the new information in their real lives. Technical information regarding complementary feeding mentioned in input section of module was referred from World Health Organisation (WHO). (http://whqlibdoc.who.int/hq/2000/WHO_NHD_00.1.pdf). The following module was developed, based on the need assessment and local information.

Field testing of module:

The facilitator simplified the explanation of topic 'complementary feeding practices' and showed various

pictures using flip charts created for capacity building of facilitators. Some participants were not able to give answers after imparting knowledge through flip charts by facilitator. Most of the participants showed interest to discuss pictures. The module was accepted by all the participants because they could respond to the questions and raise the queries. The module has served as baseline information. Storytelling and discussions had increased interest in population.

Using pictures while the facilitator is adding new information might be the first step for making the meetings more interactive. More efforts should be done to include all participants in the dialogue and discussion which could make the meeting more participatory. Also, encouraging participants to ask questions at the end of health meeting sessions could draw more questions.

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