RESEARCH ARTICLE — FOOD SCIENCE RESEARCH JOURNAL — Volume 4 | Issue 1 | April, 2013 | 32-36

Need assessment and development of module on exclusive breast feeding

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The present investigation was confined to Mau block of district Chitrakoot (U.P.). Rationale of the study was to facilitate information on exclusive breast feeding to rural women by facilitators through preparing training module. The objective of the study was to develop training module on breast feeding for facilitators of *Anganwadi* centers. Qualitative information was obtained by semi structured interview method to get views from mothers, expecting women, Accredited Social Health Activists (ASHA), *Anganwadi* workers (AWWs) and Village Development Coordinator (VDCOs) and observed that it was common to give cow milk and water to infants less than six months old. Exclusive breast feeding is rarely practiced in the community; also breast milk secretion is not sufficient enough to initiate breast feeding within one hour of birth. Module on exclusive breast 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. Field testing of module was done. The module was found useful by the participants.

Key Words : Chitrakoot, Rural women, Training module, Exclusive breast feeding

How to cite this article : Singhal, Priyanka and Raghuvanshi, Rita Singh (2013). Need assessment and development of module on exclusive breast feeding. *Food Sci. Res. J.*, **4**(1): 32-36.

INTRODUCTION

Breast feeding practices can have a substantial effect on infant health and mortality in developing countries. Breast milk contains the optimal combination of nutrients. Breast feeding allows the mother to pass on immunities and children receive less of other foods and liquids that could be contaminated with disease-causing agents. (Briend *et al.*, 1988; Cabigon, 1997; Habicht *et al.*, 1986; Huffman and Lamphere, 1984; Palloni and Tienda, 1986; Yoon *et al.*, 1996).

Raghuvanshi and Agarwal (1986) studied breast milk immunoglobulins among 121 lactating women of district Varanasi and found that significant negative correlations have been exhibited for immunoglobulins *viz., IgA, IgG* and *IgM* with increase in period of lactation *viz.*, 3-15 days, 1, 3, 6, 9 and 12 months. Raghuvanshi *et al.* (1988) reported that higher mean observations for variables such as total nitrogen, non protein nitrogen, true protein and lactoferrin were represented for first fifteen days of lactation than that of means at any other time of lactation. A decreasing trend was noted for these parameters with advancing lactational age.

In India, infant mortality rate (IMR) in the year 2010 is reported to be 51 and 31 for rural and urban areas, respectively. In Uttar Pradesh, infant mortality rate (IMR) in the year 2010 is observed to be 64 and 44 for rural and urban areas, respectively (Registrar General, India, 2011). Undernutrition is an underlying cause of an estimated 53 per cent of all under-five deaths (WHO, 2005). Those who survive may get locked in a vicious cycle of recurring sickness and faltering growth, often with irreversible damage to their cognitive and social development (UNICEF, 2006). A large proportion of under-five

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children are undernourished in India, contributing to high child mortality (NFHS-3 (2006); Lahariya and Paul, 2010).

India is facing very high rates of child undernutrition and a high infant and child mortality which demands an urgent need for a comprehensive multi-pronged evidence based strategy to combat deficiency diseases. Initiation of breast feeding within one hour of birth, exclusive breast feeding for the first six months of life and introduction of appropriate and adequate complementary food at 6-9 month of age should be practiced to prevent undernutrition in children and to improve child survival. (Black *et al.*, 2003; WHO, 2002).

In India, effective implementation of these interventions is yet to be achieved. NFHS-3 data show that the initiation of breast feeding within one hour is only 24.5 per cent while the exclusive breast feeding rate in children under six months is only 46.4 per cent (NFHS 3, 2005-06). Universalizing early and exclusive breast feeding in the country will require a national policy and program, along with effective strategies and necessary budgetary provisions. All women should adopt practices such as initiation of breast feeding and exclusive breast feeding can save hundreds or thousands of babies. The act of breast feeding provides health benefits to women, in terms of less bleeding at the time of birth, less cancers and less fractures in later ages (American Academy of Pediatrics, 2005).

METHODOLOGY

Study locate:

The locale of present research investigation was Mau block of district Chitrakoot (U.P.). Caste composition comprised of approximately 69 per cent as schedule caste and schedule tribe, around 26 per cent as other backward caste and rest 5 per cent as general caste. Local population was mainly tribal (*koal*). People could not sustain on agriculture due to barren land. Stone mining was the main source of livelihood for local community.

Need assessment:

Informal discussions were held with rural women, staff at *Sarvodaya Sewa Ashram* (SSA), Village Development Co-ordinators (VDCOs), *Anganwadi Workers* (AWWs) for need assessment prior to development of training module on breast feeding. Information was gained using interview method exhibited that it was common to give cow milk and water to infants less than six months old. Exclusive breast feeding was rarely practiced in the community; Therefore, information obtained based on need assessment taken into consideration for development of module on exclusive breast feeding. It was also noted that the community women (ASHA, VDCOS etc.) though were convinced that exclusive breast feeding is important and essential, however, they had little information in systematic manner to convince the population. Therefore, it was desirable to prepare a module for trainers with ideas on how to make the women to discuss the issue and conclude in favour of exclusive breast feeding.

OBSERVATIONS AND ASSESSMENT

The findings of the present study as well as relevant discussions have been presented under following sub heads:

Development of module:

Module on exclusive breast feeding was developed for

Module name : Exclusive breast feeding **For (Community group or Facilitator) : Community group**	
Who	Mothers, expecting mothers, adolescent girls and other family members
Why	It is common to give cow milk and water to infants less than six months old. Exclusive breast feeding is rarely practiced in the community. Furthermore, many share the belief that breast milk secretion is not sufficient enough to initiate breast feeding within one hour of birth. A number of women report getting rid of the first milk before feeding the infant. Others report that breast feeding starts after marking *Chhathi*.
When	2 hours
Where	Monthly health meeting at the *Balwadi* Center or at the *Anganwadi Center*
What	Timely initiation of breast feeding. Benefits of exclusive breast feeding. Components of breast milk.
What for	By the end of this 2-hour session, all participants will be able to: – Share their experience of feeding breast milk to infants after birth – Name benefits of exclusive breast feeding – Connect timely initiation of with breast milk secretion Suggest ways of promoting exclusive breast feeding in the community

Table 1 Contd....

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How	Anchor
15 min.	Meaning of exclusive breast feeding task 1:
small group/ plenary explore what the learners already know about the topic and connect them to the core concepts to be introduced	Local practices and traditions Share the following story: Rani had her first daughter when she was 22. She was fed *ghee*, jaggary and *laddu* by her family. Her family members had told her that the breast feeding should start after *chhathi*. She was not happy to wait until *chhathi* to start breast feeding so she consulted an ASHA/VDCO worker. The ASHA/VDCO worker told her to start breast feeding immediately. She started breast feeding on the sixth day after birth of her daughter. Ask learners whether Rani's story sounds familiar. Also ask what is done differently in the community. If there are fewer responses to the open ended questions above, focus on topics other than breast feeding to learn more about the traditions that mark the beginning or end of breast feeding. Limiting the questions to direct questions related to breast feeding such as "Do you start breast feeding immediately after birth?" Example questions: – How do you mark *Chhathi*? When? Who are present during the ceremony? What happens later? – If there are no ceremonies, what do you do immediately before breast feeding your child for the first time? – What factors in the household affect when a mother breastfeeds a child? Encourage learners to share their stories. Listen attentively and acknowledge the experience of each learner. Take a note of important points so that relevant topics can be emphasized in the following section.
Input	
40 min. closer look/key points Add new knowledge or skill	Share the key concepts that would be covered during the session: – Timely initiation of breast feeding – Exclusive breast feeding If the above topics have been covered in the earlier sessions, let the learners know that you would be going over some of the key concepts again for those who were not present and also adding some new information. Exclusive breast feeding means giving a baby no other food or drink, including no water, in addition to breast feeding (except medicines and vitamin or mineral drops; expressed breastmilk is also permitted). It is the baby's suckling which makes the breasts produce milk. The advantages of breast feeding are more than just the advantages of feeding a baby on breastmilk. Breast feeding protects a mother's health in several ways, and can benefit the whole family, emotionally and economically. The advantages of a baby having breastmilk are that: – It contains exactly the nutrients that a baby needs; – It is easily digested and efficiently used by the baby's body; – It protects a baby against infection. The other advantages of breast feeding are that: – It costs less than artificial feeding; – It helps a mother and baby to bond - that is, to develop a close, loving relationship; – It helps a baby's development; – It can help to delay a new pregnancy. – It protects a mother's health: – It helps the uterus to return to its previous size. This helps to reduce bleeding, and may help to prevent anaemia; – Breast feeding also reduces the risk of ovarian cancer, and possibly breast cancer. – It is difficult for a baby's immature kidneys to excrete the extra waste from the protein in animal milks. Animal milks do not contain the kinds of anti-infective protein which protect babies. – Babies fed cow's milk may not get enough iron, and they often become anaemic. Exclusively breastfed babies do get enough iron, and they are protected against iron deficient anaemia until at least 6 months of age, and often longer.

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	For the first year or so of life, a baby's immune system is not fully developed, and cannot fight infections as well as an older child's or adult's. So a baby needs to be protected by his mother. Breast milk contains white blood cells, and a number of anti-infective factors, which help to protect a baby against infection. Breast milk also contains antibodies against infections which the mother has had in the past. Signs that a baby may not be getting enough breastmilk. These are: – Poor weight gain (less than 500g a month, less than birth weight after 2 weeks) – Passing small amounts of concentrated urine (less than six times a day, yellow and strong smelling) An exclusively breastfed baby who is getting enough milk usually passes dilute urine at least 6-8 times in 24 hours. A baby who is not getting enough breastmilk passes urine less than 6 times a day (often less than 4 times a day). His urine is also concentrated and may be strong smelling and dark yellow to orange, especially in a baby more than 4 weeks old.
Apply	
30 min. small group/ plenary undertake a task that enables learners to apply the new knowledge or skill immediately	Role play: Ask for two volunteers to do a role play. Let the two volunteers choose to be one of the characters in the picture above (one of a mother who has just delivered a baby and the other, an old woman who lives in her neighborhood). Explain that the two characters in the picture are talking about timely initiation of breast feeding and exclusive breast feeding. Let the learners decide on names and the conversation between the two characters in the picture. – Listen attentively and give positive feedback to the volunteers on their performance. – Re emphasize some of the messages from role play and add key messages that need to be reemphasized.
Integrate	
20 min. small group perform a task to enable learners to plan how to use the new information in their real lives (or do it!)	Divide the participants into two groups to carry out the following discussion: – What can be done in the community to promote timely initiation of breast feeding? – What steps can be taken to promote exclusive breast feeding?

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*). Module format was based on as reported by Singhal and Raghuvanshi, (2011). 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.

Field testing of module:

Module was subjected to field test done by facilitators *viz.,* Village Development Co-ordinators (VDCOs) and *Anganwadi workers* (AWWs). Rural women were explained about breast feeding showing various pictures. Most of the participants had interest to discuss pictures. For making the meetings more interactive, more pictures should be used. Participants should be encouraged to ask questions at the end of health meeting sessions could promote responses and raise more questions. More efforts should be done to include all participants in the dialogue and discussion which could make the meeting more participatory.

Conclusion:

The module was found to be accepted by all the participants. Showing pictures to participants resulted to more responses to the questions and raise the queries. The module has served as baseline information. Respondents have shown interest towards storytelling and discussions using pictures.

Acknowledgement:

Authors express sincere thanks to Deepti Pant, State Representative, Catholic Relief Services organization. This research investigation is a part of project by Catholic Relief Services organization. Research facilities provided by the organization are duly acknowledged.

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Received : *29.10.2012;* **Revised:** *24.01.2013;* **Accepted :** *27.02.2013*