

# RESEARCH BRIEF



Series 4, January 2015

## A Hospital Based Cross Sectional Study to Assess the Knowledge, Attitude and Practices of Mothers Regarding Infant Feeding

**A**dequate nutrition during infancy and early childhood is essential to ensure the growth, health and development of children to their full potential. Globally, undernutrition causes 45% of all deaths of children younger than 5 years, representing more than 3 million deaths each year. Foetal growth restriction and suboptimum breastfeeding together cause more than 1.3 million deaths, or 19.4% of all deaths of children younger than 5 years.

Optimal infant and young child feeding (IYCF) practices- which is initiation of breastfeeding within 1 hour of birth, exclusive breastfeeding for the first 6 months and starting appropriate complementary feeding after 6 months along with continued breastfeeding till 2 years or beyond – are key to reducing malnutrition and mortality of children under 5 years of age.

Infant feeding practices in India are dismally low and are not showing any significant improvement over years. According to National Family Health Survey-3 (NFHS-3) of India, only 24.5% infants receive breastfeeding within one hour of birth while exclusive breastfeeding upto six months is 46.3%. Similarly, introduction of complementary feeding along with continued breastfeeding between 6-8 months is 55.8%.

The present study was undertaken by Breastfeeding Promotion Network of India (BPNI) research team to assess the current Knowledge, Attitude, and Practice (KAP) of mothers about infant feeding and socio-economic factors associated with infant and young child feeding practices. The cross-sectional study was carried out among the mothers of infants less than 12 months of age who were attending pediatric outpatient department and immunization clinic for treatment & vaccination in Maharishi Valmiki Hospital, Puth Khurd, New Delhi.

A total of 150 mothers were selected for the study by the

order of arrival to the OPD during the study period. The data was collected between October 2013 to December 2013. Ethical clearance was obtained from the hospital ethics committee of Maharishi Valmiki Hospital. Informed consent was obtained from the mothers.

In the present study, inspite of 70% mothers possessing knowledge about the initiation of breastfeeding within one hour of birth, only 40% of them practiced it. More than half (52.8%) of the mothers were advised by the doctors and nurses followed by 22.6% mother/ mother in law, 8.9% by friends/ neighbours regarding initiation of breastfeeding within one hour. Very few 1.6% mothers were advised by ASHA and AWW. Those mothers who delayed initiation of breastfeeding to the new born cited insufficient secretion of milk as the main reason followed by illness of mothers, separation of infants, caesarean delivery and lack of awareness.

In the present study, 42% of the infant received pre-lacteal feed & most common reasons cited for giving pre-lacteal feed was inadequate milk secretion (30.1%) followed by infant being hungry (22.2%), protection from cold (20.6%), advice by elders (12.7%), sickness of mothers (3.1%) and family rituals (6.3%).

In the present study statistical analysis (chi-square test (x<sup>2</sup>)) confirms that institutional delivery was found to be significantly associated with both initiation of breastfeeding within one hour of birth ( $p < 0.007$ ) and use of pre-lacteal feeding ( $p < 0.000$ ), which demonstrates the urgent need of regular training of IYCF programme to all hospital staff, as they can play crucial role in influencing the early initiation of breastfeeding among mothers.

Majority of mothers (70.6%) were observed to have adequate knowledge and attitude towards significance of exclusive breastfeeding to infant's upto 6 months of age. High Proportion (82%) of mothers also felt that exclusive

breastfed infants are less susceptible to diarrhea than bottle fed/ formula fed infants.

It has been observed that although knowledge on exclusively breastfeeding upto 6 months of age was relatively higher, only 65.6% actually practiced it. Mix fed infants received breastfeeding along with animal milk (16.6%), non-milk liquid/juice (13.5%), plain water (2.6%) and infant formula (1.7%). Major barriers to exclusive breastfeeding were found to be inadequate milk secretion and joining back the duty. However, as far as, frequency ( $\geq 6/24$ hrs) of breastfeed was concerned, majority (87.5%) of the breastfeeding infants aged less than six months were breastfed for six or more times.

In the present study 84% mothers had good knowledge on practice of continuing breastfeeding to the infants during their sickness and majority (93%) of them practiced it. In contrast, practice of bottle for feeding infants was 19.3%.

In the present study 68.6% mothers were having knowledge of initiation of complementary feeding at the age of 6 months and 64.1% started complementary feeding at the age of 6-8 months. Common complementary food items given to infants were home made solid / semi-solid food (73.7%), followed by milk other than breastmilk (26.2%), commercial infant foods (14.4%) and non-milk liquid like *Dal pani*, *Rice-water* (19.4%) etc. Home-made food, in turn, was dominated by grain made food (73.7%) followed by fruits, dry fruits, vegetables (17.7%) and flesh food and eggs (10.1%). On the other hand dairy food and vitamin-A rich fruits & vegetables constitute to just 4.2% and 2.5% of the home food, respectively.

Although, the knowledge and practice of introduction of complementary feeding at the right age was quite

adequate but, the practice of minimum meal frequency, minimum dietary diversity and minimum acceptable diet was sub-optimal in the present study. Only 44% of infant received food with minimum meal frequency, 7.6% of infant received food with minimum dietary diversity and a combination of minimum meal frequency and minimum dietary diversity, in present study was 4.2% only. Minimum meal frequency, minimum dietary diversity and minimum acceptable diet are the major challenges to improve infant and young child feeding. The most common reason for delayed complementary feeding was the wrong perception of mothers that early initiation of complementary feeding will lead to child belly stomach and belief that child will vomit everything.

The findings of the study indicate that simple knowledge of traditional practice of breastfeeding is not enough for appropriate IYCF. Misconceptions of insufficiency of milk secretion coupled with lack of professional and family support, lack of knowledge and some harmful socio-cultural beliefs are the major obstacles for IYCF practices. These issues need tackling at a large scale by skilled counseling, support and motivation by trained health care professionals and family members.

Thus, the present study reveals a need for IYCF Counseling Centre with skilled counselors at all health facilities and at community level to impart skilled counseling on IYCF practices not only to pregnant women and lactating mothers but also to their family members. It is also necessary to educate mothers regarding the kinds and frequency of foods for adequate development of their infants. There is a need for strong community based public health intervention program to improve the knowledge of mothers on complementary feeding.

**BPNI Research Team:** Dr.Arun Gupta, Dr. J.P. Dadhich, Dr.Shoba Suri, Dr.Neelima Thakur, Fariha Siddiqui , Nupur Bidla



## **Breastfeeding Promotion Network of India (BPNI)**

BP-33, Pitampura, Delhi-110034. India

Tel: +91-11-27343608, 42683059. Tel/Fax: +91-11-27343606.

Email: [bpni@bpni.org](mailto:bpni@bpni.org) . Website: [www.bpni.org](http://www.bpni.org)

BPNI is a registered, independent, non-profit, national organisation that works towards protecting, promoting and supporting breastfeeding and appropriate complementary feeding of infants and young children. BPNI works through advocacy, social mobilization, information sharing, education, research, training and monitoring the company compliance with the IMS Act. BPNI is the Regional Focal Point for South Asia for the World Alliance for Breastfeeding Action (WABA) and Regional Coordinating Office for International Baby Food Action Network (IBFAN) Asia.

As, a policy, BPNI does not accept funds of any kind from the companies producing infant milk substitute, feeding bottles, related equipments, or infant foods (cereal foods) or from those who have been ever found to violate the IMS Act or the International Code of Marketing of Breast-milk-Substitute or from organization/ industry having conflict of interest.