Promoting proper feeding for infants and young children

Why Is Breastfeeding So Important?

Breastfeeding provides the perfect nutrition for your baby and provides many health benefits for both mother and baby.
Sugar water and diluted cow milk are not adequate complimentary foods. Cereal based porridge like suji, wheat flour, ground rice, ragi, millet etc. can be started at 6 months.

The best medicine for a baby's gastro intestinal tract infection is breast milk and it should be continued.
Background

Initiating breast feeding within the first hour and exclusive breastfeeding can prevent under two mortality.

- India has the single highest share of neonatal deaths in the world.
- Approx. 16 lac (SRS 2009) children die in India every year before seeing their fifth birthday.
- Almost 13 lac (SRS 2009) parents are not even able to celebrate the first birthday of their child in India.
- The primary causes of infant mortality are newborn infections, diarrhoea, and pneumonia.
- Breastfeeding is the number one intervention which can prevent deaths due to all these three causes.
- Only 24 per cent (NFHS 3) newborns in India start breastfeeding within one hour of birth.

- In India only 46 per cent (NFHS3) of infants less than six months are exclusively breastfed, however exclusive breastfeeding rapidly declines to about 20 per cent by the time children are six months old. The percentage of children aged 6-9 months who are given complementary food is only 56.7 per cent. According to National family Health survey III, although complimentary feeding was initiated timely in 56% children but only 21% received age appropriate complementary food.
- In Rajasthan One lac twenty seven thousand children die before seeing their first birthday (SRS 2009) and nearly One
lac six thousand children do not see their first birthday (SRS 2009).

Breastfeeding rates in Rajasthan are dismally low and falling. Only 13.3% (NFHS3) infants are breast fed within the first one hour. Only 33% (NFHS 3) are exclusively breastfed between 0-6 months of age.

More recent data from Lancet 2008 revealed that suboptimal breastfeeding during first six months is the leading factor for high infant mortality. Breastfeeding exclusively for first six months, timely introduction of appropriate complimentary food at 6 months along with continued breastfeeding till 2 years or beyond is a well documented intervention that can save lives of young children.

Initiating breast feeding within the first hour and exclusive breastfeeding can prevent under two mortality by 13% use for -----------------

What can the media do?

Media can be a key agent in saving lives by putting out the right message to the general masses especially mothers to ensure that they adopt right feeding option for their children and prevent them from falling prey to easy infections and disease.

Media can also ensure that families and mothers are made aware of the effects of the various products promoted in the market as breast milk substitutes and there long term impact on the lives of infants.

It has a key role in advocating with the government to take key actions to promote this low cost intervention and save lives of innocent children in Rajasthan which include the following:

- Including young child feeding parameters in the routine reported data collection under the integrated child development scheme to ensure regular monitoring and oversight.

- Include training on Infant and young child feeding practices in pre service undergraduate medical course (MBBS), GNM nursing, ANM nursing, B Sc Nursing, ayurved nursing (BUMS) curriculum, Home Science curriculum, Health & ICDS Training modules.

- Implementing the Annaprashan scheme (i.e. celebration of the first solid meal of the infant) in a mission mode to ensure that the key messages of exclusive breastfeeding and timely and appropriate complementary feeding to the infant reach to the mother family and the community.
Breastfeeding
Exclusive breastfeeding

- Exclusive breast feeding means that an infant receives only breastfeeding and nothing else - not even water for the first six months of life.
- Mother's milk is considered the ideal nutrition for the first six months of life. It contains everything that the infant requires to meet his nutritional needs for growth and development. It has enough high quality proteins, carbohydrates, fats, vitamins and minerals.
- It has adequate amount of fluid content so that the child does not need additional water. In fact giving water or other additional liquids like top milk or formula feeds can bring in infectious and harmful bacteria with it and it will displace the much needed breast milk. It will also interfere with the mother and child bonding and the physiological process of lactation.
- Breastfeeding can save more human lives and prevent more morbidity than any other intervention.
- Breast milk contains many anti-infective factors and cells like macrophages which kill the bacteria.
- It is responsible for almost one third of the fertility suppression and can provide high quality nutrition at a fraction of the cost of high risk substitutes.
- Exclusive breastfeeding for six months can save nearly Rs 8000/- for every family which are spent on treating disease of the child.
- Breast milk contains brain building factors and breastfed infants have a higher IQ (Intelligence Quotient) than formula fed infants.
- Exclusive breastfeeding saves the baby from long term complications like obesity hypertension, coronary artery disease and asthma.
- It also decreases the chances of having ovarian and breast cancer in the mother.
Colostrum is the first secretion from the breast for the first few days after delivery. It is very important for the child. In fact colostrum is all that the baby needs for the first few days of life. It is high in immunoglobulins and a number of other protective factors of great benefit to newborn infants. **Colostrum, the first milk it immunizes the child against most of the bacteria and viruses. Right positioning and attachment along with comfortable posture of the mother ensure optimal breast feeding of the infant.**

Colostrum is a physiological secretion and non irritant. Unlike other liquids (like glucose water or breast milk substitutes) it does not harm the baby even if it is accidentally aspirated into the lungs. Growth factors in the colostrum stimulate the baby’s intestines for better digestion and absorption of the milk. It prevents the absorption of undigested proteins that can cause allergies.

The laxative property of colostrum helps the baby to pass meconium which also helps to reduce the incidence of neonatal jaundice. The stimulation of nipples, while colostrum feeding by the newborn baby increases the oxytocin levels in the mother’s blood. This helps in the contraction of her uterus and decreases the incidence of post partum haemorrhage.
We believe all mother’s know how to feed their child but do they

Mother’s have to be taught how to hold their baby while breast feeding them. This is essential that the baby is attached to the breast properly as it is only then will it get optimal amount of milk in every feed. It is essential that every new mother is explained the correct position by the nurse or a skill birth attendant when she feeds her baby for the first time.

We all believe that the mother knows how to feed her baby. This may or may not be true. Mother’s have to be taught how to hold their baby while breast feeding them. This is essential that the baby is attached to the breast properly as it is only then will it get optimal amount of milk in every feed. It is essential that every new mother is explained the correct position by the nurse or a skill birth attendant when she feeds her baby for the first time.

Mother can feed her child in whatever position that she feels comfortable with. She can even breastfeed her child in a lying down position. The way that she holds the baby can also be variable.

- One such position is the cradle hold in which the mother holds the baby on the same side as the breast with which she is feeding at that time. The baby’s body and head is in one straight plane and the baby’s abdomen is turned towards the mother. The whole upper part of the baby’s body is supported by the mother’s hand. The neck is kept slightly extended so that the baby’s chin can touch the mother’s breast. She can support the breast with her opposite hand with four fingers below and thumb above.

It is important to attach the baby well on to the breast. When the mother’s nipple touches the upper lip of the baby, the baby opens the mouth and protrudes tongue. This is the time when the large part of the
mother’s breast including nipple and the areola (the dark pigmented portion behind the nipple) should be put inside the baby’s mouth. Baby is well attached when its mouth is wide open, lower lip is everted, almost all of the nipple and areola is inside the baby’s mouth, little areola is visible above the baby’s mouth and the baby’s chin is touching the mother’s breast.

Initially the child makes rapid sucking movements and after the first few minutes the sucking movements are deep, slow and intermittent allowing for the swallowing of the milk. Ideally a child should be allowed to take complete breast feeding from one side at a time. This is because it allows for complete emptying of the breast. The initial milk that comes is foremilk which is rich in anti-infective factors and the milk which comes later is the hind milk which is rich in proteins and calories. Receiving hind milk makes the baby satisfied and content. Complete emptying allows for more milk to be produced next time.

Baby should be allowed to be kept with the mother in the same bed so that the baby can take feed on demand and night time feeding is very important for the baby. It allows for better secretion of prolactin hormone which helps in making more milk. Breast feeding mother should not have any worry, stress, pain or doubt. A calm, quite and confident mother has better secretion of prolactin and oxytocin hormones which help in production of more milk. Prolactin helps in keeping in check a mother’s fertility in the initial few months but it cannot be relied upon as the sole contraceptive method.
Myths and facts about breast milk

There are many myths regarding breastfeeding.

- Janam Ghutti should be given at birth as it will bring in the child the traits of the person who is giving it. The fact is that this is unscientific. It actually suppresses hunger, inhibits the sucking reflex, decreases production of breast milk, causes gastritis and vomiting in the child and, worst of all, it can cause infection.

- Breast milk is not enough during the first few days after birth and prelacteal feeds are required during this time. This is untrue as the fluid requirement of healthy newborn is quite less in first day or two. In fact it is natural to loose about 5 to 7% weight during that period by losing fluid from the body. Giving prelacteal feeds increases the risk of illnesses such as diarrhoea and other infections and allergies, particularly if they are given before the baby has got colostrum. Prelacteal feeds satisfy a baby’s hunger and thirst. Making the infant less interested in feeding at the breast, so there is less stimulation of breast milk production.

- Breastfeeding is not possible after a caesarean section birth or the mother should not breastfeed in lying down position. Actually it is usually possible for a mother to breastfeed within about 4 hours, or even within first hour in most cases, after a caesarean section. For the first 24 hours she can breastfeed lying on her back, during the next 24 hours she can breastfeed by turning from side to side and from day three onwards, she can sit up with the pillows support for breastfeeding. A baby should be on the breast for sufficient time (5, 10, 20 min or longer) on each side. To ensure adequate breast milk production and flow a baby needs to be fed as often and for as long as she/he wants, both during day and night. This is called demand feeding, unrestricted feeding, or baby-led feeding.

- Some mothers feel that they do not produce enough milk because the baby is crying or putting his fingers in his mouth. More often than not it is the mother’s misconception and the baby is
in fact getting all the milk that she/he needs. The usual reason that the baby does not get the milk that is available is that she/he is poorly attached onto the breast. This is why it is so important that the mothers who believe that they do not have enough milk should be shown how to attach a baby properly by a skilled person. Adequate weight gain and passing dilute urine about six times in 24 hours are the signs of adequate milk transfer. Babies who do not recover birth weight at the end of the second week and who do not gain about 500g or 1 kg or more each month thereafter, needs to be assessed.

- Mothers feel that breast milk production is related to the size of the breast but actually all women have equal number of milk producing glands and are capable of producing enough milk for their baby.

- People think that baby needs extra water during summer period, but there are enough studies to prove that healthy infants do not need additional water in the first six months. Breast milk itself is 88 percent water and is enough to satisfy a baby’s thirst. Giving water during this period can harm the baby by displacing nutrient rich breast milk, causing infection and decreasing breast milk production.

- Breastfeeding is wrongly stopped if the baby has diarrhoea or when the mother has infection. The best medicine for a baby’s gastrointestinal tract infection is breast milk and it should be continued. Diarrhoea is more common and more severe in children who are artificially fed. Likewise a mother should continue breastfeeding a child even in face of minor illness like cough, cold or diarrhoea as the antibodies that she produces to fight the infection in her body will be passed on to the baby through her breast milk and protect the child.

- It is a myth that breastfeeding ruins the shape of a mother’s breast. Breastfeeding causes secretion of oxytocin hormone which causes uterine contraction and can help in reducing the abdominal bulge which is common immediately after delivery.

- Some mothers put the child on bottle feed when they return to work because they feel that there is no way that breastfeeding will be possible now. Actually there are many ways in which a child can continue to receive breast milk even when a mother returns to work. Putting the child on bottle will decrease breast milk production and make the child more prone to infection and illness, which will ultimately adversely affect the both the baby’s health and her career. A working mother can breastfeed her child just before she leaves for work and then express and keep some in a clean container (like a covered cup) which can be fed to the child in her absence by the caretaker with the help of a cup or spoon. She can come home during lunch hours to feed the child. She can continue to breastfeed more often after returning from work and during the night.

- Some mothers with small, flat or inverted nipples feel that they will not be able to breast feed their baby. This is not correct. The baby feeds on the teat (nipple and part of the black areola behind it) and not on the nipple alone. If the nipple is protrusible i.e. it can be stretched when the mother pulls it out with fingers then the baby can easily breastfeed as the nipples will become similarly stretched when deep inside the baby’s mouth. The nipple and part of the breast behind it areola) should be given inside the baby’s mouth.
Children need four to five complimentary meals a day in addition to regular breastfeeding by 8 months of age.

Complimentary feeding

Timely initiation of complimentary feeding upon completion of six months of age and continued feeding with age appropriate foods in term of quality, quantity frequency and density will make the child to grow healthy. Food items or liquids other than breast milk given to young children between six months to two years age along with breastfeeding are called complimentary foods. It is important to understand the correct time of starting complimentary feeding. The selection of complimentary food items and the way it is given to a child is also of paramount importance. It is one area where a great amount of scientific research has thrown light on selection, preparation and method of giving complimentary feeding.

Complimentary food is required at completion of six months of age because before this time breast milk alone is sufficient to take care of nutritional needs of the child. On completion of six months the increasing nutrition needs of the child outweighs the chance of acquiring infection. The neuromuscular mechanisms which are important for swallowing also develop by 7 months of age. So it is recommended to start liquids at 6 months of age and gradually increase the consistency and offer gruels with the consistency of thick paste at 7 months of age. The consistency can be further increased gradually as the child develops the strength to bite and chew and family foods can be offered by 8 months.

- All food items are not ideal complimentary foods.
- Sugar water and diluted cow milk are not adequate complimentary foods. Cereal based porridge like suji, wheat flour, ground rice, ragi, millet etc. can be started at 6 months. It can be enriched with oil/ghee/fat or animal milk. Mashed fruits like banana or other seasonal fruits like papaya or mango are acceptable. One or two spoons are enough to start with. The quantity and frequency should be gradually increased to half a cup at a time.
Gradually the baby should be used to feeding from the family pot (mashed rice with dal, khichri, curd, a little chapatti softened in dal or milk, mashed vegetables fruits etc. enriched with some oil/fat and green vegetables. If culturally acceptable egg, meat and fish can be given. Non vegetarian foods are special foods for children of growing age and the protein that they contain are easily digested and assimilated. Vegetarian families can use a mixture of daals to enrich the quality of proteins that the child gets.

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At about 9 months the baby can start chewing on soft food. The food at this time need not be mashed but it can be chopped or pounded. A variety of household foods should be given four or five times a day and the quantity gradually increased. By about one year, young children should be eating foods cooked for the family at least four to five times a day. A child between the age of one and two years needs about half the food that the mother needs.

At times mothers feel that the child is not eating enough or rejecting the food. They should make sure to offer food to the child in a responsive manner when the child is hungry. The food should be cooked and served in a pleasant way.

Child should be encouraged to eat with his own hands and for this finger foods should be offered to the child and caregiver should allow the child to learn the technique of eating. Children are usually able to pick things with their finger and thumb by ten months age and they develop the skill of eating with a spoon without spilling by one and a half years.

Forced feeding is a punishment to the child and it should be avoided. Caregivers and food handlers should take care of food hygiene during preparation, storage, serving and feeding. Infant feeding should be a part of comprehensive child care.

Breastfeeding retains its nutritional value even during the second year of life and should be continued in addition the food that the child eats. Breast milk continues to provide almost half of the energy needs of the child between six months and one year of age and one-third during the second year of life. It is an important means of fighting infection and it has better quality nutrients than artificially prepared formula.

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**Myths prevalent in the community regarding complimentary feeding.**

1. The child is too small and not capable to start eating at six months. The fact is that the child is physiologically ready to swallow at this age and this is the right time to acquire the skills of swallowing the liquid foods that are offered with spoon.

2. Mother’s go for bottle feeding at this age because they think that with the use of bottle their child will take more milk and become healthier. It is wrong to think so. In fact the children on bottle feed miss out on a lot of essential minerals, vitamins and fibres that a child with correct complimentary feeding gets. Bottle fed babies are more prone to respiratory and gut infections. They have a very high incidence of ear infection as compared to non bottle fed babies. Bottle fed babies tend to develop obesity and they lag behind in developing the skill to eat themselves.
Role of media in promoting proper young child feeding

Media is a vital tool in spreading the messages to the public at large. Print and electronic media have a wide reach and audience. Almost every household in Rajasthan has access to either the newspaper, television or the radio. Media has been used to spread correct guidelines and communicate the do’s and don’ts in face of mass epidemics like swine flu.

The role of media in promotion of proper infant and young child feeding guidance is equally important. Lack of awareness on this issue has killed more children of malnutrition than because of any other epidemic or natural calamity.

Media should act as a watch dog of the policy planners and governments that they have agreed under millennium development goal 4 (MDG 4), of achieving an Infant Mortality rate of 28/1000 live births and under 5 mortality rate of 38/1000 live births by 2015, but in order to reach this figure, India will have to achieve a rate of reduction of 7.6 percent annually as against the 2.6 percent that we are currently achieving.

The population of Rajasthan as per the 2011 census is 6,86,21,012 of which 1,05,04,916 are children below six year age group. Deaths are higher in the under 5 age group and neonatal deaths contribute a very high percentage in the total under 5 mortality. 52 percent of under-five deaths continue to occur in the first month of life. 75% of neonatal deaths occur in first week of life itself.

Promote of correct age appropriate infant and Young Child Feeding practices is a low cost intervention of proven value in lowering neonatal, infant and under two year mortality rate for Rajasthan. Most of the neonatal deaths can be prevented by the simple intervention of starting breastfeeding within one hour of birth.
Media should focus on and promote measures that are required to be taken urgently to ensure the survival of children.

Key interventions needed at the family level

- Understand that breastfeeding within one hour is essential for ensuring child survival.
- All members of the family must help the mother in establishing lactation and no one should insist for giving prelacteals like honey or jaggery, or waiting for washing of the breast before feed.
- Baby and mother should be kept together in same bed and covered with same blanket.
- Practice exclusive breastfeeding for the first six months and give only breast milk and nothing else—not even water, during this period.
- Realize the importance of adequate and correct nutrition of the young child in child survival and growth. Understand that besides having short term benefits it is also an investment for lifelong benefits.
- Give the child adequate complimentary feed starting at 6 months of age with continued breastfeeding up to two years or beyond.

Key interventions at the community level

- Create facility for antenatal breastfeeding counselling, institutional delivery and promote correct infant and young child feeding practices.
- Create opportunity for making available correct complimentary foods at six months.
- Sarpanches and panchayat members should ensure that lactating mothers
are given breaks at the NREGA sites to ensure they are able to feed their infants at regular intervals

Key interventions by service providers

- Be aware of the correct Infant and young child feeding guidelines and propagate the same. Keep abreast with the latest guidelines.
- Receive training and equip themselves to provide counselling and practical help when needed.
- Make policies and programmes with a view to decrease the infant and young child mortality.
- Include training on IYCF with focus on counseling skills in pre service undergraduate medical course (MBBS), GNM nursing, ANM nursing, B Sc Nursing, ayurved nursing (BUMS) curriculum, Home Science curriculum and in service. Health & ICDS Training modules.
- Provide a lactation counsellor in all medical colleges and preferably train at least one health functionary as lactation counsellor in the first referral units.
- Establish at least one lactation clinic/help lines in all districts.

Regular monitoring by the government

- The government should include Infant and young child feeding parameters in their routine growth and monitoring of the child through ICDS workers and through the health providing systems like Medical Colleges, district hospitals and PHCs and all other facilities where deliveries or immunisation takes place.
- Private hospitals should be asked to follow correct Infant and young child feeding policies and guidelines. They should also be asked to report on parameters like early initiation of breastfeeding on a regular basis.
- Ensure the proper implementation of the Infant Milk substitute Act, 1992 which was subsequently amended in 2003 and the cable television networks regulation amendment act 2000 in the right perspective.