

Preventing Malnutrition in Babies



01

Priscilla Blesson, Nutrition Specialist, RajPusht

RajPusht has been working towards improving Infant & Young Child Feeding (IYCF) practices in its quest to reduce the incidence of wasting among children. During a qualitative study conducted last year in five districts of south Rajasthan (Baran, Banswara, Dungarpur, Pratapgarh and Udaipur), we interviewed labour room staff to better understand how medical facilities can promote recommended IYCF practices.

The nursing staff at these facilities wanted training sessions on IYCF as there had been a long gap in trainings during the lockdown. These would better equip them to handle common challenges in initiating breastfeeding within 1 hour of delivery. Many a time, mothers feel too exhausted to breastfeed after a long, complicated delivery. Some people believe that mothers produce breast milk only a couple of hours or days after giving birth. Others feel they aren't producing enough milk to satisfy the baby. Family members sometimes give the newborn gripe water or honey or recommend discarding the colostrum.

To address these issues, RajPusht, in collaboration with the National Health Mission (NHM)-Rajasthan, organised 4-day-long IYCF training sessions for medical staff (nursing officers) from five districts of Rajasthan in May–July 2022. The training was planned keeping in mind that while breastfeeding is a natural act, it is also a learned behaviour.

The training had both theoretical and practical elements. It incorporated audio-visuals and slides as well as demonstrations, role play and games using dolls, dummies, breast models, serving plates, cups, measuring spoons, etc. It emphasised how simple steps such as providing emotional support, counselling and handholding improve breastfeeding and complementary feeding. These go a long way in preventing malnutrition in babies.

In This Issue

- RajPusht's IYCF trainings for medical facility staff
- 2 What should mothers do if they cannot breastfeed
- Meet Mamta Sevak, RajPusht's Poshan Champion of the month
- 4 How water can be dangerous for infants

Highlights of IYCF Training











For the training, 132 staff members were selected from 83 district hospitals, primary health centres, community health centres and satellite hospitals across the 5 districts. These trained staff then trained other medical staff on IYCF to ensure complete coverage across healthcare institutions. The Master Trainers were state trainers of NHM's Mothers' Absolute Affection (MAA) programme for the promotion of breastfeeding. The Child Health section of Rajasthan's Medical, Health & Family Welfare Department nominated these trainers. We used MAA modules for the training. These delved into the importance of breastfeeding, how to counsel individuals regarding IYCF, positioning, attachment, breast condition, timely initiation of complementary feeding, age-appropriate complementary feeding, breastfeeding while HIV+, breastmilk expression and storage and providing referral support for malnourished children. It also touched upon monitoring of IYCF programmes and the Infant Milk Substitutes Act. To ensure that learning continues after the training, we set up district wise online groups to facilitate cross-learning and sharing of experiences.

When Mothers Face Problems in Breastfeeding



Krishna Baldev Rao, Block Programme Manager (Kherwada, Udaipur), RajPusht

Suman gave birth to her first child on 13 March 2022 in a private hospital in Gujarat. Although she lives with her in-laws in Chitora village, Udaipur district, she had gone to her maternal home to deliver the child, as is the custom in the region. Her husband, a labourer, is often out of the village for work.

After her baby's birth, Suman noticed that she could not breastfeed him. Her family and neighbours claimed that someone had done black magic on her and dried up her milk. They took her to a witch doctor, seeking a cure. Meanwhile, they fed the baby goat and cow milk and milk powder mixed with water, but he would throw up on drinking these. Unable to satisfy his hunger, he would cry often.

Some mothers or their families complain of inadequate milk production or no milk production at all. This was also the finding from RajPusht's study on IYCF knowledge and practices in south Rajasthan, conducted in 2021.

Inadequate milk is often a matter of perception, for the mother's body automatically regulates milk production depending on the child's needs. In case of problems, one can visit an ANM or doctor to rule out any underlying physiological causes or talk to a lactation consultant for breastfeeding support.

Thankfully, Suman consulted a doctor for her problem despite her family's belief that it was a result of witchcraft. RajPusht's Poshan Champion Jagdish Chandra Meena met and counselled Suman on 25 March 2022, after her return to Udaipur. Suman was also in constant touch with the Anganwadi Worker, who reinforced proper breastfeeding techniques and practices. These helped her breastfeed again. Her child now subsists only on mother's milk and weighs 6 kg, which is age-appropriate.



Here are some tips to promote adequate breastfeeding

- Breastfeed the child more than 8–10 times a day, including at night, taking at least 10–15 minutes each time. The more a baby suckles, the more the mother produces milk.
- If the infant cannot suck the mother's milk, express the milk in a bowl and feed with a spoon.
- Breastfeed in an anxiety- and stress-free environment in a comfortable position.
- Ensure proper attachment while feeding.
- Mothers should eat a nutritious diet, stay well hydrated and take adequate rest.
- Certain medicines, alcohol and tobacco can reduce milk supply.

Here are some signs that a child is not getting adequate milk

- The infant does not gain adequate weight. In the first six months, weight gain should be at least 500 grams a month.
- The baby constantly stays restless, cries without any reason or makes sucking motions.
- The child passes urine less than 5-6 times in 24 hours.



Poshan Champion of the Month

Mamta Sevak has been working with RajPusht since its inception in Dungarpur in November 2020. Over the years, she has excelled as a Poshan Champion and become an influential advocate for maternal and child nutrition in and around Khadagda, her village close to the city of Sagwara. Mamta has conducted over 2,300 counselling sessions at households regarding nutrition, pregnancy care and childcare, surpassing her stipulated targets by two to three times. She has worked closely with frontline workers to ensure that about 300 first-time and 350 secondtime mothers in her catchment receive cash transfers under PMMVY and IGMPY respectively.

"I learned a lot about maternity and childcare once I started working with RajPusht," says Mamta. "I wish I had known more about exclusive breastfeeding, complementary feeding and the importance of green leafy vegetables when I gave birth to my children. But now, I make sure other mothers don't make the same mistakes I did. Many women in Dungarpur live alone or with their in-laws. Their husbands migrate for work to Gujarat or Kuwait. I feel it is my duty to ensure that these women and their children receive the best care and nutrition during pregnancy and after childbirth."

Mamta was born and raised in Mumbai. She has a B.Com. from Pune University. A mother of two children, she moved to Dungarpur after her marriage and has since lived in the district. This is her first job in the nutrition sector—she has earlier worked with financial institutions, call centres and schools. Growing up in a cosmopolitan milieu, she became a polyglot—she can understand Hindi, Bengali, Marathi, Punjabi, English and the local dialect Vagdi. Working as a Poshan Champion helped Mamta realise her lifelong dream of riding a scooter. She bought an electric scooter and learned to drive it at the age of 37 so that she could easily travel for work. "I was active in theatre once and have always loved going to new places, meeting and talking to people. So, I enjoy going to different households and counselling them regarding maternity and childcare," says Mamta.









When Water Is Harmful



Rupakshi Shankar Mathur, Associate, Documentation, RajPusht

The amount of food I eat for just one meal makes me wonder how I survived my life's first six months on mother's milk alone. But a child has a small stomach and developing kidneys, so mother's milk provides all the ingredients for their growth and development. Breastmilk keeps changing its composition in response to the baby's needs, not just from day to day, but even within one feeding session. Take the case of melatonin, a hormone that promotes sleep. It is present in higher concentrations in breastmilk at night than during the day.

The first milk, colostrum, provides concentrated nutrition and lays the foundation for immunity. Breastmilk provides optimal nutrition and energy for the first six months of life. It supplies up to half or more of a child's nutritional needs during the second half of the first year and up to one-third during the second year of life. It is safe, clean and contains antibodies, which protect against illnesses. Exclusive breastfeeding is associated with decreased odds of fever, cough and diarrhoea.

When a baby starts feeding, the milk they get first is known as foremilk, which largely comprises water and nutrients. This is followed by hindmilk, which has high fat, lactose and protein. Breastmilk is roughly 4% fat, 1% protein, 7% lactose and 88% water. Thus, it is sufficient to hydrate children; there is no need to feed them water. However, many communities consider water a cure for indigestion and a source of hydration during the summer for the child. Following unscientific traditions and rituals, some parents give infants water and other foods like honey, gripe water, etc. This breaks the exclusivity of breastfeeding and exposes the child to several risks.

According to the World Health Organization, giving supplementary fluids such as water and honey to young infants in addition to breastmilk is associated with a significant increase in the risk of diarrhoea, decreased breastmilk intake and premature termination of breastfeeding. A newborn's stomach can hold only 5–10 millilitres (1–2 teaspoons). While it empties fast, considering its limited capacity, feeding a baby nutrition-free water might cause them to drink less nutritious breastmilk.

Feeding water to the child directly or indirectly by mixing with prelacteals or formula milk increases the risk of water intoxication. Infants' kidneys are not fully developed and when they receive more water than they can handle, the excess water ends up in the bloodstream. This dilutes the blood and lowers the concentration of important electrolytes like sodium. Excessive dilution leads to hyponatremia [too little (hypo) salt in the blood (natremia)]. This can cause brain swelling and death.

Children's bodies and immune systems are not as developed as adults', so feeding them contaminated water could have dire consequences. Take the case of nitrates, which may be present in well water due to contamination from fertilisers and manure. Infants under one year of age exposed to nitratecontaminated water can suffer from methaemoglobinemia, commonly called blue baby syndrome. In such cases, their bodies convert nitrates to nitrites, which bond with haemoglobin, forming methaemoglobin. Haemoglobin in red blood cells transports oxygen across the body, but methaemoglobin does not have oxygen-carrying capacity, resulting in the skin turning blue. Other symptoms include rapid heartbeat, shortness of breath. nausea, diarrhea, lethargy, loss of consciousness, and seizures. Infants are more prone to nitrate contamination than adults because of underdeveloped metallic enzymes, relatively small blood volume and greater reactivity of fetal haemoglobin. Exclusive breastfeeding helps parents avoid such risks posed by contaminated water.