RULE NUMBER ONE IS, DON'T SWEAT THE SMALL STUFF. RULE NUMBER TWO IS, IT'S ALL SMALL STUFF."
— ROBERT ELIOT



# THE NECTAR OF LIFE

This year's theme for World Breastfeeding Week, which is celebrated in the first week of August, is 'Step Up for Breastfeeding: Educate and Support.' The HEALTH PIONEER presents various aspects of benefits that breastfeeding brings---from promoting bonding between mother and child to providing nutritional and immunological needs and preventing infections in the newborn.

The WHO recommends exclusive breastfeeding (EBF) with no other added food or water for the first six months of life – as it provides ideal and adequate nutrition to infants, protects them from immunological infections and is critical to achieve optimal growth, development and health. However, the baby is allowed to receive drops and syrups including vaccines, vitamins, minerals and medicines. In contrast, children who are not entirely or partially breastfed have a higher risk of diarrhoea and other infections, are more likely to suffer from malnutrition and have an increased risk of death in their infancy.

The World Health Assembly has set a global target to increase the exclusive breastfeeding rate by 50 per cent by 2025. In India, currently, 55 per cent of children under six months are exclusively breastfed.

However, the results of National Family Health Survey (NFHS)- 5 show that the percentage of mothers following the practice of early initiation of breastfeeding has come down in 12 States and UTs in the country.

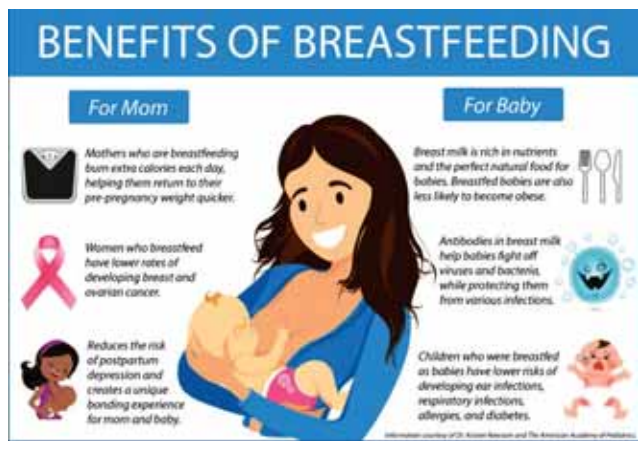
The maximum percentage points decline is observed in Sikkim (33.5 percent) followed by Dadra and Nagar Haveli (24.1 percent), and Assam (15.3 percent). In contrast, a rise in the rates of early initiation of breastfeeding is observed in Lakshadweep, Meghalaya, and Andhra Pradesh. Moreover, as also noted in the NFHS 4 findings, in 10 states and UTs, there is a substantial gap in the percentage of mothers who had institutional delivery and in the mothers who followed the practice of early initiation of breastfeeding. The practice of exclusive breastfeeding shows only a marginal improvement, a matter of concern for the authorities.

**The standard infant feeding guidelines are:**
- Initiation of breastfeeding within one hour of birth,
- Exclusive breastfeeding until babies are six months old, and
- Continued breastfeeding along with nutritionally adequate and safe complementary foods, until age two years old or beyond.

The women in urban regions of Daman and Diu and Dadra and Nagar Haveli along with Bihar, Gujarat, Sikkim, Telangana and Tripura recorded a dip in the practice. Out of the 17 states and five Union territories (UT) whose data was made available under the NFHS 5 (phase l), Dadra and Nagar Haveli and Daman and Diu showed the least percentage of children under three years and who were breastfed within an hour of birth. This was followed by Bihar, Sikkim, Tripura, Telengana and Gujarat. The highest percentage of children under three breastfed within one hour of birth was registered in Meghalaya, followed by Lakshwadeep, Kerala and Mizoram. Significant changes in the last five years were noticed in Meghalaya and Lakshadweep as well as Sikkim, Dadra and Nagar Haveli and Daman and Diu and Assam. While Meghalaya, followed by Lakshadweep, showed a sharp increase in the percentage of children under three years and who were breastfed within one hour of birth, the rest of the surveyed states and UTs reported a significant decline, especially Sikkim.

The percentage of children under three who were breastfed within one hour of birth in Telangana remains almost stagnant. Overall, it was seen that only 10 states as well as UTs — Andaman and Nicobar Islands, Andhra Pradesh, Himachal Pradesh, Jammu and Kashmir, Lakshadweep, Meghalaya, Nagaland, Telangana and West Bengal — of 22 showed increase in the percentage of children that were breastfed. Marked differences were observed in Dadra and Nagar Haveli and Daman and Diu, Manipur and Meghalaya. Kerala showed almost no difference in percentage. But in 13 states and UTs, the percentage of children in rural areas breastfed within an hour of birth was greater than urban areas.

This was seen mostly in Dadra and Nagar Haveli and Daman and Diu, Andaman and Nicobar Islands, Andhra Pradesh, Assam, Goa, Gujarat, Himachal Pradesh, Jammu and Kashmir, Maharashtra, Manipur, Meghalaya, Nagaland and Sikkim. Rural women tend to stick with traditions and breast fed their newborns when compared to their ilks in urban.




## Covid Pandemic & Breastfeeding Experiences During Stay-at-home Orders

Investigators from Saint Louis University explored how the Covid-19 pandemic may have impacted mothers' roles and breastfeeding practices in the U.S.

Mothers of a child 12 months of age or younger were asked via an online survey whether they thought their breastfeeding habits would have been different without the pandemic and to answer an open-ended question asking how the pandemic modified or impacted plans to feed their baby.

Of the 1,861 mothers who completed the survey in July or August 2020, one-third thought the pandemic impacted their breastfeeding habits. The survey results revealed that some mothers found that the extra time at home facilitated a bond between them and their baby, resulting in breastfeeding longer than planned. However, many mothers reported the Covid-19 pandemic to be stressful, and in some cases, mothers reported low milk supply due to stress.

## Link between breastfeeding duration and cognitive test scores later in childhood persists even after controlling for socioeconomics and maternal intelligence

Breastfeeding duration is associated with improved cognitive scores at ages 5 through 14, even after controlling for socioeconomic position and maternal cognitive ability, according to a study published in the open-access journal PLOS ONE by Reneé Pereyra-Elías, Maria Quigley and Claire Carson of the University of Oxford, UK.

Previous studies have found an association between breastfeeding and standardized intelligence test scores; however, a causal relationship is still debated. Improved cognitive outcomes could potentially be explained by other characteristics—such as socioeconomics and maternal intelligence—of the women who breastfeed their babies.

In the new study, the researchers analyzed data on 7,855 infants born in 2000-2002 and followed until age 14 as part of the UK Millennium Cohort Study. The cohort was not specifically designed to address the association between breastfeeding and cognition but included the collection of information on duration of any breastfeeding, duration of exclusive breastfeeding, verbal cognitive scores at ages 5, 7, 11, and 14, spatial cognitive scores at ages 5, 7 and 11, as well as potential confounders including socioeconomic characteristics and maternal cognition as based on a vocabulary test.

The unadjusted associations found that longer breastfeeding durations were associated with higher verbal and spatial cognitive scores at all ages up to ages 14 and 11, respectively. After taking the differences in socioeconomic position and maternal cognitive ability into account, children breastfed for longer scored higher in cognitive measures up to age 14, in comparison to children who were not breastfed. Longer breastfeeding durations were associated with mean cognitive scores 0.08 to 0.26 standard deviations higher than the mean cognitive score of those who never breastfed. This difference may seem small for an individual child but could be important at the population level.

The authors conclude that a modest association between breastfeeding duration and cognitive scores persists after adjusting for socioeconomics and maternal intelligence.

The authors add: "There is some debate about whether breastfeeding a baby for a longer period of time improves their cognitive development. In the UK, women who have more educational qualifications and are more economically advantaged tend to breastfeed for longer. In addition, this group tends to score more highly on cognitive tests. These differences could explain why babies who breastfeed for longer do better in cognitive assessments.

However, in our study, we found that even after taking these differences into account, children breastfed for longer scored higher in cognitive measures up to age 14, in comparison to children who were not breastfed. This difference may seem small for an individual child but could be important at the population level."

## Longer duration of exclusive breastfeeding has protective effect on childhood asthma

A new study in Annals of Allergy, Asthma and Immunology, the scientific journal of the American College of Allergy, Asthma and Immunology (ACAAI) shows that a longer period of exclusive breastfeeding was associated with decreased odds of current asthma.

"The results of the study indicated that the longer a mother exclusively breastfed, the lower the relative odds of her child having asthma, or asthma-related outcomes," said Keadrea Wilson, MD, lead author of the study and Assistant Professor of Neonatology at the University of Tennessee Health Science Center. "There was a 'dose-response' effect depending on how long the mother breastfed: Babies that were breastfed for 2-4 months had only 64% likelihood of having as many asthma outcomes as those who were breastfed less than 2 months; those breastfed for 5-6 months had 61% likelihood, and those breastfed for more than 6 months had a 52% likelihood."

# How Govt Can Increase Early Breastfeeding Rate In India

The Union Government should work on strengthening its Mothers Absolute Affection (MAA) programme, a unique initiative launched in 2016 in public, and mobilise the private sector hospitals to aspire to get accreditation for "Breastfeeding Friendly" health care, based on WHO's 'Ten Steps to Successful Breastfeeding', says DR. ARUN GUPTA.

The World Breastfeeding Week, marked during August 1-August 7 this year, has just passed us. Governments, non-government organisations and healthcare professionals have celebrated by organizing webinars and events to mobilize action in this regard. Providing education and necessary logistics' support to mothers by catering to specific health requirements in the maternity care department was the theme for this year. Everyone had one question in mind; why the breastfeeding rate within an hour of birth in India was a dismal 41 per cent when nearly 90 per cent births are delivered in registered healthcare facilities.

To begin breastfeeding within an hour of birth is a public healthcare recommendation. The World Health Organisation, UNICEF and the Government of India have recommended this practice in order to improve the health of newly-born babies, reduce infant mortality, enhance mother-child bonding besides several other benefits for lactating mothers. Early breastfeeding helps achieve better results in the baby's well-being during the first 2 years of life, and has been linked to reducing undernutrition in children.

Early breastfeeding rate, which was 9 per cent in 1992, rose gradually to 41 per cent by year 2015. However, there has been no improvement in it over the last five years. This has been a constant source of worry for the Union Health Ministry, which during the first week of August this year, called a virtual meeting with experts for threadbare discussions on how to increase the rate of early breastfeeding in India.

Experts shared their views on how to better care and support for the mothers who have had caesarean deliveries as such cases are on the rise. They also have suggested measures for addressing low birth weight in babies and the unnecessary use of formula feeding in hospitals. Having worked in this domain over the last four decades, I also have some suggestions to offer, which I feel would help in improving the early and exclusive breastfeeding rate in the country. Let me first begin by differentiating the response in the public and the private sector hospitals.

**Strengthening Action in Public Hospitals**

I would like to first congratulate the Union Ministry of Health and Family Welfare, Government of India for having launched in year 2016 the Mothers Absolute Affection (MAA) programme, with an objective to improve breastfeeding practices in hospitals.

However, the Government has not yet evaluated the performance of the MAA programme since its inception. Review of the MAA programme is recommended to find answers to why there is no improvement in early breastfeeding rate over last five years.

If we want to progress quickly, the Ministry would need to strengthen the MAA programme by taking a string of measures. These include review of current training programme and the skill training of maternity healthcare staff on the basis of 'Ten Steps to Successful Breastfeeding', appointment of dedicated lactation support staff; monthly monitoring of the data on early breastfeeding within an hour of the birth, use of infant formula during hospital stay, and last but not the least, creation of governance structures, like a breastfeeding committee, comprising of 3-4 persons including nurses, pediatrician and obstetrician, under a nodal authority in all the maternity hospitals.

The committee may be mandated to review the data every month or on quarterly basis, with the objective of effecting necessary structural changes so as to provide requisite support to women before and after their delivery. This is an essential and non-negotiable step for making progress.

Further, to achieve sustainable success, the Union Government needs to consider a twin-pronged strategy that ensures recording of decisions on feeding of babies after taking the consent of mothers who wish to use infant formula at birth. Secondly, it should provide support to women during both vaginal and caesarean deliveries.

Why are these two steps necessary? A realtime mother Jincy Varghese from Mumbai put up a public petition "Stop feeding formula milk to newborns without the parent's consent #MyBabyMyDecision" five years back to show her discomfiture at the hospital's decision to formula feed her baby without first taking her consent. More than 1,10,000 people have supported her petition.

**Begin Action in the Private Sector Maternity Hospitals**

Strategically, the Government of India should communicate and coordinate with private hospitals to fulfill the requirements of MAA programme in the maternity facilities as per WHO's 'Ten Steps to Successful Breastfeeding'. Private hospitals should in fact aspire get to their accreditation as "Breastfeeding-Friendly" institutions. Such a new initiative was launched in December last year with the objective of bringing a change in hospital practices.

Adoption of scientific measures and ushering in structural reforms in healthcare facilities is likely to deliver truly exciting results. Enabling every mother to begin breastfeeding within an hour of birth and to ensure direct skin-to-skin contact for the well-being of both the mother and the baby, is very much attainable. A mother who utilizes services of 'Breastfeeding-Friendly' accredited hospitals is more likely to be successful in breastfeeding her baby. This would also benefit the hospital by raising its popularity among public.

By working on these recommendations, the current statistics of early breastfeeding in hospitals can definitely be improved in India. The implementation of an action plan that seeks to attain at least 10 per cent growth in early breastfeeding rate each year in each hospital, and its monitoring at the highest government level would create favourable results for everyone.

*(The writer is a paediatrician, Central Coordinator, Breastfeeding Promotion Network of India (BPNI) and Former Member PM's Council on India's Nutrition Challenges.)*

# India yet to Become 'Aatmanirbhar' in Medical Devices Sector

India is known as the pharmacy of the world but in the medical devices sector, it lags far behind and is hugely dependent on import. Currently imported medical devices account for 80 per cent of the domestic market, hurting profits of many small manufacturers in the sector. THE HEALTH PIONEER brings a report.

With government's push to Make in India 'Aatmanirbhar' in medical device manufacturing during the pandemic, several local units making masks, PPE kits, thermometers, and gloves made their foray, eyeing the growing market.

However, many units had to close down amid declining demand as Covid-19 waned even as imports from countries like China kept on rising. Now, it is estimated that there are around 1,500 such local units, and many more are on the verge of closure, laments Rajiv Nath, forum coordinator, The Association of Indian Medical Device Industry (AiMeD), an umbrella organisation of domestic medical device manufacturers representing the interest of over 1,500 manufacturers of medical devices.

He said during pandemic time, from 1,200 units, the numbers had gone up to 1,800.

However, medical devices imports continue to grow unabated. India imported medical devices worth Rs. 63,200 crore in 2021-22, up 41% from Rs. 44,708 crore in 2020-21, as per data from the Union Ministry of Commerce and Industry. The Association has urged the government to neutralise the 12-15 per cent disability factor in manufacturing medical devices in India.

Nath said, "NITI Aayog and the Department of Pharmaceuticals recognises that Indian manufacturers have a 12-15 per cent disability factor in manufacturing medical devices in India. We urge the Government to neutralise this disability for reduction of medical devices imports in India as was in the case of consumer electronics, including mobile phones and even in the toy industry."

At present, the duty on Chinese imports ranges mostly from zero to 10 per cent, but the bulk of the items are in the 7.5 per cent category and one item at 25%.

The Department of Science and Technology (DST) and Department of Biotechnology (DBT) should sit together and work to seek correction of tariff to a nominal 15 per cent so that the entrepreneurs can survive and have a productive relationship with Academic institutions for innovations in process and product development or incremental improvements in performance to become competitive, Nath added.


The Association has requested the government to expedite steps to end the 80% import dependence and ensure patients' protection, stronger quality and safety regulations, price controls to make medical devices and quality treatment accessible and affordable and ethical indigenous manufacturing viable.

China remained the top import source for India as medical device imports from China grew 48% from Rs. 9,112 crore in 2020-21 to Rs. 13,538 crore in 2021-22. Imports from the USA also increased steeply by 48% to Rs. 10,245 crore in 2021-22 from Rs. 6,919 crore in 2020-21. The value of medical devices from China was nearly the same as the combined value of imports from Germany, Singapore and the Netherlands in 2021-22.

The capacity utilisation of the domestic industry had dropped by the October-December quarter of 2021-22. From the peak utilisation levels of 100 per cent, by November 2021, around 33 per cent, or one-third of India's medical devices making capacity, was estimated to be lying idle. This is even higher currently, said Nath.

Our analysis shows India's top five medical device import sources -- China, USA, Germany, Singapore and the Netherlands – together account for Rs. 37,519 crore, or 68%, of the total value of imports, he added.

The Association has also analysed the top 50 medical device import items from China to identify the areas of greater dependence for India. A bulk of the imported medical devices from China (in value terms) fall in the 'other items' sub-sections under various major categories, it found.

It has called for shifting from an 8 Digit HS Code to a 10 Digit HS Code as done by USA and Europe to give more granular data for enabling better analysis and policy making. Highlighting the urgent need for a separate department for medical devices, the AiMeD has requested Prime Minister Narendra Modi to change the name of Department of Pharmaceuticals (DoP) to Department of Pharmaceuticals & Medical Devices or to have a separate Department of Medical Devices to instill confidence among the local manufacturers.

In fact, recognising this huge import volume, dependency and long technology development cycle of medical devices, the Indian Council of Medical Research too has stressed on need for providing holistic support across the medical device development and commercialization cycle including R&D, scale-up, validation, regulatory compliance, market access etc.

Just a few months ago, it came out with a proposal to support indigenous development, scale-up and pilots of Make-in-India manufacturing of critical medical device and diagnostic products in categories like dialysis machines, ultrasonography, echocardiogram machine and extracorporeal membrane oxygenation (ECMO) machine(s)