

# Impact of Maternal, Infant and Young Child Feeding (MIYCF) Practices in their Nutritional and Health Statuses in India

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#### Mini Review

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## **Abstract**

The breast-feeding and complementary feeding practices are very poor in almost all the countries across the world. Rarely improvements observed in MIYCF practices even after many policies and programs implemented in all parts of the globe by the Governments and NGOs. In India many initiatives taken by the Government but the rate of EBF remain very poor. It was a matter of great concern to all the policy makers and planners1 to improve EBF rate after assessing national practices, policies and programmes regarding MIYCF practices.

## **Global Scenario**

Globally, only 38 percent of infants aged 0 to 6 months are exclusively breastfed, the majority receiving some other food or fluid in the early months. Complementary foods are often introduced too early or too late and are often nutritionally inadequate and unsafe. Recent analyses indicate that suboptimal breastfeeding practices, including non-exclusive breastfeeding, contribute to 11.6 percent of mortality in children fewer than 5 years of age [1].

#### **Indian Scenario**

In India, prevalence of exclusive breast-feeding (EBF) rate was 46.4% in 2005-06 and 54.9% in 2015-2016. The prevalence was 56.0 % in rural and 52.1% in urban area. The EBF rate for India remained low at 54.9% during 2015-2016 however its prevalence ranges from 35.8 percent in Meghalaya, to 77.2 percent in Chhattisgarh. Goa leading with a 43.2 percentage points increase

## Uttar Pradesh (U.P.) State scenario

U.P. state had the maximum decline of -9.7 percentage points in exclusive breast feeding. Among all 28 States and 8 Union territories only six states Uttar Pradesh, West Bengal,

Chhattisgarh, Karnataka, Arunachal Pradesh and Kerala showed a decline in the prevalence of EBF; According to NFHS 4 (2015-16) Uttar Pradesh has the lowest prevalence (41.6%) in urban areas (35.6%) in rural areas (43.1%) of exclusive breastfeeding among the six states showed a decline in prevalence of exclusive breastfeeding as NFHS-3 has reported 51.3% EBF rate in 2005-06 [2].

## District wise scenario

The disaggregated district-level data from the NFHS-4 highlight that about one third of all the districts have EBF levels that are higher than 60 percent. The top ten districts with the highest levels of EBF belong to Chhattisgarh, Madhya Pradesh, Assam, Maharashtra, Andhra Pradesh and Rajasthan, with Mandsaur (MP), leading with 95.1 percent. Seven out of the bottom ten districts with the lowest EBF rates belong to Uttar Pradesh and in Bareilly district of Uttar Pradesh the EBF rate is 36.1%) in urban areas (41%) in rural areas (33.8%).

## **Morbidity and Mortality**

Poor infant and young child feeding practices have been identified as major reasons for the high burden of childhood morbidity and mortality in many developing countries [3].

Globally, India has the highest under-five mortality (0.9 million deaths in 2016), attributable to an array of factors such as poverty, poor water and sanitation, poor healthcare access and non-EBF. The early stages of child's life, when all parts of the infant are growing physically, mentally and socially, are of great importance, which requires an optimal source of energy and nutrients to the body.

# Impact of awareness and attitude of mothers

Mothers' infant feeding practices are highly influenced by their awareness and attitude. Assessing mothers' awareness regarding infant feeding practices and associated factors will help us to identify the reason for non-adherence to exclusive breastfeeding, and this will help to plan community sensitized breastfeeding promotional activities. Infant and young child nutrition always get maximum attention among the scientists and planners for very simple region that growth rate in early stage of life is maximum and infant and young child feeding practices including breastfeeding as well as complementary feeding play a major role in determining the nutritional status of children.

Breastfeeding is a basic human activity, crucial to infant and maternal health and of huge economic value to households and societies. During early stages of child's life, when all parts of the infant are growing physically, mentally and socially, is of great importance, which requires an optimal source of energy and nutrients to the body. Breastfeeding is the natural and ideal way to provide optimal food and nutrition for growth and development of infant and make a strong bond between mother and child.

## Recommendations

The World health organization advocates that breastfeeding should be initiated of within one hour of birth followed by exclusive breastfeeding for first six months of life. Complementary food along with continued breastfeeding up to two years of age or beyond, also play an important role to reduce the reduce the mortality of children under five year of age. The benefits of breast-feeding, are long being recognized for both mother as well as baby. Breastfeeding is not only associated with a reduced risk of otitis media, gastroenteritis, respiratory diseases, and necrotizing enterocolitis in infancy but also with obesity, and hypertension later in life. It also helps in controlling the health-care costs. Despite these benefits, its prevalence has remained low worldwide and only one third of infants are exclusively breastfed till 6 months of age [4].

In addition, breastfeeding also has several maternal benefits. Longer durations of breastfeeding contribute to health and well-being of mothers by reducing risk of diabetes mellitus, ovarian cancer and breast cancer [5]. Longer duration of breast feeding also helps for spacing pregnancies [6]. Breastfeeding helps to make an emotional attachment between mother and child and this emotional bond between mother and child is as vital as the nutritional benefit received from breastfeeding. Poor infant and young child feeding practices have been identified as major reasons for the high burden of childhood morbidity and mortality in many developing countries [7]. Malnutrition during early stage of life can leads to not only damage the health and brain development, but also diminishes the intelligence, educability and productivity of the children. It also leads to a heightened risk of chronic non-communicable diseases in the later life [8]. Breastfeeding is the primary way for providing ideal food for healthy growth and development of infants [8].

Globally, only 38 percent of infants 0 to 6 months of age are exclusively breastfed. According to current statistics suboptimal or non-exclusive breastfeeding, contribute to 11.6 percent of mortality in children under five years of age, this was equivalent to about 804,000 child deaths in 2011. More than 820, 000 children's lives could be saved each year under five years of age, if they still breastfed optimally for 0-23 months of age. Breastfeeding improved their intelligence quotient, school attendance and it's also related with higher income adult life [9]. In 2012, the World Health Assembly (WHA) unanimously endorsed a set of six global nutrition targets (Stunting, Anemia, low birth weight, Childhood overweight, Breastfeeding and Wasting) out of these six nutritional targets exclusive breastfeeding (EBF) rates, to be achieved more than 50% by 2025 to improve maternal, infant and young child nutrition across the world [10].

Suboptimal breastfeeding lead to 100,000 preventable child deaths mainly due to diarrhea and pneumonia [11]. In India, if optimal breastfeeding practices followed, over 34.7 Million cases of diarrhea and 41,882 cases of diarrheal death, 2.4 Million cases of acute respiratory infections and pneumonia, and 40,382 cases of obesity can be prevented [12]. Impact of breastfeeding on mothers health is also crucial that over 7000 cases of breast cancer, 1700 cases of ovarian cancer 87000 cases of type 2 diabetes mellitus can be prevented. If we compared globally, the percentage of breastfeeding might be seem low, but in recent years there has been a significant improvement in breastfeeding practices among both rural and urban Indian women due to intensive promotion by government and non-government organization to promote maternal and child health.

According to the recent National Family Health Survey (NFHS-4) however the percentage of exclusive breastfeeding increased from 46.4% to 54.9% over ten years from 2005-06 (NFHS-3) to 2015-16 (NFHS-4), but it is still variable

from states to states, like Meghalaya 35.8% to 77.2% in Chhattisgarh [13]. Out of six district across the India (Uttar Pradesh, West Bengal, Chhattisgarh, Karnataka, Arunachal Pradesh and Kerala), Uttar Pradesh showed the maximum declining rate of exclusive breastfeeding which is - 9.7%13. 41.6% children under 3 years of age were breastfeeding within one hour of birth in NFHS-4 (2015-16) as compared to 23.4% in NFHS-3 (2005-06) [14]. Government has been promoting breastfeeding in a very large scale, and creating awareness about the benefits of human milk for the healthy growth and development of a newborn child.

Union health ministry launched a nationwide programme-MAA-Mother's Absolute Affection on 5th August 2016 in New Delhi to promote breastfeeding, and also released national guidelines to start lactation management centers in government hospitals to ensure sick and pre-term babies are fed with safe human breast milk [15]. As we all know that there is no alternative to human milk, which is why government is also focusing on human milk banking to ensure pre-term babies and babies whose mothers can't produce milk grow well [16]. The feeding practices adopted by mothers during feeding Infants and young children during initial two years of life are highly influenced by their knowledge and attitude. Assessing mothers' knowledge regarding infant feeding practices and associated factors will be very helpful to identify the reason for non-adherence to exclusive breastfeeding, and this will help to plan community sensitized breastfeeding promotional activities to prevent malnutrition and various specific nutrients deficiency disorders especially among under five children not only in India but various countries across the world. Breastfeeding confers short-term and long-term benefits on both child and mother (16), including helping to protect children against a variety of acute and chronic disorders.

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