



STUDY ON THE BREAST FEEDING PRACTICES AMONG MOTHERS IN BISHNUPUR DISTRICT OF MANIPUR

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ABSTRACT

In the study rate of exclusive breast feeding was 50%. Breastfeeding is the gold standard of infant feeding up to 6 months. It remains the most cost-effective way for reducing the risk of diseases such as obesity, hypertension, eczema, type diabetes among others in later life as well as mortality. Breast engorgement, sore nipples, milk insufficiency and availability of various infant formulas are the main factors which influence breastfeeding practice in terms of initiation, exclusivity and duration. On the other hand, complementary foods in terms of nutrient-dense are normally introduced around 4 to 6 months. Difficulties encountered during the weaning process are often refusal to eat followed by vomiting, colic, allergic reactions and diarrhoea. Given related problems associated with breastfeeding, it is highly likely that in the future, nutrigenomics-based research will provide opportunities towards personalized modification of breast milk for optimum health of neonates.

Key words: Breastfeeding, hypertension, engorgement

INTRODUCTION

Breastfeeding has many health benefits for both the mother and infant. Breast milk contains all the nutrients an infant need in the first six months of life. Breastfeeding protects against diarrhoea and common childhood illnesses such as pneumonia, and may also have longer-term health benefits for the mother and child, such as reducing the risk of overweight and obesity in childhood and adolescence. Exclusive breastfeeding means that the infant receives only breast milk. No other liquids or solids are given—not even water—with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines.

Breastfeeding is when you feed your baby breast milk, usually directly from your breast. It's also called nursing. Making the decision to breastfeed is a personal matter. It's also one that's likely to draw opinions from friends and family. Many medical experts, including the American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists, strongly recommend breastfeeding exclusively (no formula, juice, or water) for 6 months. After the introduction of other foods, it recommends continuing to breastfeed through the baby's first year of life.

Although breastfeeding an infant exclusively for the first 6 months of life carries numerous benefits, many studies are centered on the “weanling's dilemma” in developing countries which involves choosing between the protective effects of exclusive breastfeeding against infectious diseases and the (theoretical) insufficient breast milk to meet the infants' energy and micronutrient needs beyond four months of age. However, the author claimed that there is no data giving an estimate of the proportion of exclusively breastfed infants at risk of specific nutritional deficiencies.

Breastfeeding is beneficial both to the infant and the mother. However, owing to certain circumstances, mothers are unable to breastfeed, so they wish to express their milk because it is the only opportunity for the infant to have the human milk. Expressing is simply a way of taking milk from the breast without the baby suckling and this can be achieved either by the hand or manual pump or electric pump. While breast milk in a bottle is far superior to any infant formula, expressing or pumping breast milk do have some disadvantages unlike direct breastfeeding.

Human milk is species-specific and is superior to any other breast milk substitute and it is also assumed to be the ideal food for infant during the first 4-6 months, ensuring proper growth and development. Human milk which is the most natural food available for infant is unique whereby its nutritional composition varies from mother to mother, from day to day, during the day and during a feed. Human milk contains several factors such as immunoglobulin, T lymphocytes, enzymes such as lysozymes, phagocytes among others which are not present in breast milk substitute.

“Breast milk is unique in its physical structure and types and concentrations of protein, fat, carbohydrate, vitamins and minerals, enzymes, hormones, growth factors, host resistance factors, inducers and modulators of the immune system, and anti-inflammatory agents”. There are three phases of milk namely, colostrum, transitional milk and mature milk each with distinct characteristics.

The first milk that is synthesized by the breast for the baby right after birth is thick, yellow-coloured fluid called colostrum. The yellow color is owing to the high concentration of beta-carotene, a precursor of vitamin A which is required for the protection against infection and for early retinal development. It has also been stated that the amount of colostrum obtained is limited but is rich in nutrients and substances that the infant needs in the first days of life. The “liquid gold” is rich in proteins, fat-soluble vitamins, minerals, and immunoglobulins A- sIgA. It should be noted that IgA protects the infant’s immune system by identifying and destroying foreign objects such as bacteria and viruses. Another advantage of colostrum is that the mother will have less blood loss because the uterine contracts as the baby suckle. Furthermore, colostrum also contains white cells which help to prevent infection in the infant and it also consists of lactose which prevents hypoglycemia and at the same time helps the newborn to pass meconium. This in turn, promotes the excretion of bilirubin.

Transitional milk is used to describe the postcolostral period (7 to 21 days post-partum) when the composition of the milk changes more slowly than in the first few days following parturition. The content of transitional milk includes high levels of fat, lactose, water-soluble vitamins, and contains more calories than colostrum but lower levels of immunoglobulins.

Mature milk (21 days post partum) also varies but to a lesser extent than in early lactation.³⁹ Mature milk looks thinner, paler and is more watery than colostrum. Additionally, it consists of 90% water which is required to maintain hydration of the infant and the remaining 10% consists of carbohydrates, proteins and fats which are important for both growth and to meet energy needs of the baby. There are two types of mature milk: Foremilk and hind- milk.

Foremilk is the first milk available in large amount at the beginning of a feeding which is watery thus, providing all the water the baby needs from it. Therefore, no other drinks such as water or juice are required before 4-6 months, even in hot climate. Foremilk is rich in proteins, lactose and other essential nutrients but contains less fat.

Hind- milk is the richer milk, containing more fat which occurs after the initial release of milk and is more opaque and creamy white in colour. This type of milk induces a feeling of satiety in the infant as well as making the latter feels sleepy.

Therefore, both foremilk and hind-milk are necessary for the baby to receive optimum nutrition in order to grow and develop well.

Breastfeeding is universally endorsed by the world’s health and scientific organizations as the best way of feeding infants. Many studies have been carried out and have highlighted innumerable benefits of breastfeeding for infants, for mothers and the society. Some of them include lowered risk of otitis media, gastroenteritis, respiratory illness, sudden infant death syndrome, necrotising enterocolitis, obesity, hypertension among others in infants. Maternal outcomes include reduced risk of breast and ovarian cancer, Type 2 diabetes, and postpartum depression while societal benefits include decrease health care related cost and fewer absences from work. Although breastfeeding is optimal for infants, there are some controversies surrounding breastfeeding and very few contraindications. Breastfeeding is contraindicated due to the following

- In infants who have special health problems such as galactosemia, maple syrup urine disease and phenylketonuria.
- In cases where mothers have active untreated tuberculosis disease or are human T-cell lymphotropic virus type I– or II–positive. Breastfeeding may not be in the best interest of the baby when breastfeeding mothers have herpes simplex lesions on a breast (infant may feed from other breast if it is free from any lesions).
- In situations where the mother is using drugs of abuse.
- In certain circumstances where mothers are receiving diagnostic or therapeutic radioactive isotopes, antimetabolites or chemotherapeutic agents, small number of other medications or who had been exposed to radioactive materials. They should not breastfeed until these substances are cleared from the breast milk.
- In infants born to mothers who are HIV infected, breastfeeding is discouraged owing to the risk of transmission of HIV to the infant through human milk. Naylor & Wester highlighted that WHO recommends replacement feeding if it is acceptable, feasible, affordable, sustainable and safe (AFASS).

BREASTFEEDING:

Feeding a child human breast milk. According to the American Academy of Pediatrics, human breast milk is preferred for all infants. This includes even premature and sick babies, with rare exceptions. It is the food least likely to cause allergic reactions; it is inexpensive; it is readily available at any hour of the day or night; babies accept the taste readily; and the antibodies in breast milk can help a baby resist infection.

In breast milk, the amino acids (the building blocks of proteins) are well balanced for the human baby, as are the sugars (primarily lactose) and fats. The baby's intestinal tract is best aided in its digestion by the vitamins, enzymes, and minerals found in breast milk. Breastfed babies do eat more often than formula fed babies since breast milk is more quickly digested and leaves the stomach empty more frequently. Exclusive breastfeeding is ideal nutrition and it is sufficient to support optimal growth and development for the first 6 months after birth, according to the American Academy of Pediatrics. Furthermore, it is recommended that breastfeeding continue for at least 12 months, and thereafter for as long as mutually desired. Infants weaned before 12 months of age should not receive cow's milk feedings, but should receive iron-fortified infant formula. See also: Breastfeeding practices; and Breast milk.

Whether delivery takes place in a hut in a rural village or a hospital in a major city, putting newborns to the breast within the first hour after birth gives them the best chance to survive, thrive and develop to their full potential.

UNICEF and WHO recommend exclusive breastfeeding for the first six months of life, starting within an hour of birth. Continuing to breastfeed exclusively – without any other food – for the first six months promotes sensory and cognitive development, and protects babies against infectious and chronic diseases.

How often you should breastfeed your baby depends on whether your baby prefers small, frequent meals or longer feedings. This will change as your baby grows. Newborns often want to feed every 2-3 hours. By 2 months, feeding every 3-4 hours is common, and by six months, most babies feed every 4-5 hours.

COMMON CHALLENGES WITH BREASTFEEDING

Sore nipples. You can expect some soreness in the first weeks of breastfeeding. Make sure your baby latches on correctly, and use one finger to break the suction of your baby's mouth after each feeding. That will help prevent sore nipples. If you still get sore, be sure you nurse with each breast fully enough to empty the milk ducts. If you don't, your breasts can become engorged, swollen, and painful. Holding ice or a bag of frozen peas against sore nipples can temporarily ease discomfort. Keeping your nipples dry and letting them "air dry" between feedings helps, too. Your baby tends to suck more actively at the start. So begin feedings with the less-sore nipple.

Dry, cracked nipples. Avoid soaps, perfumed creams, or lotions with alcohol in them, which can make nipples even more dry and cracked. You can gently apply pure **lanolin** to your nipples after a feeding, but be sure you gently wash the lanolin off before breastfeeding again. Changing your bra pads often will help your nipples stay dry. And you should use only cotton bra pads.

Worries about producing enough milk. A general rule of thumb is that a baby who's wetting six to eight diapers a day is most likely getting enough milk. It's best not to supplement your breast milk with formula, and never give your infant plain water. Your body needs the frequent, regular demand of your baby's nursing to keep producing milk. Some women mistakenly think they can't breastfeed if they have small breasts. But small-breasted women can make milk just as well as large-breasted women. Good nutrition, plenty of rest, and staying well hydrated all help, too.

Pumping and storing milk. You can get breast milk by hand or pump it with a breast pump. It may take a few days or weeks for your baby to get used to breast milk in a bottle. So begin practicing early if you're going back to work. Breast milk can be safely used within 2 days if it's stored in a refrigerator. You can freeze breast milk for up to 6 months. Don't warm up or thaw frozen breast milk in a microwave. That will destroy some of its immune-boosting qualities, and it can cause fatty portions of the breast milk to become super hot. Thaw breast milk in the refrigerator or in a bowl of warm water instead.

Inverted nipples. An inverted nipple doesn't poke forward when you pinch the areola, the dark skin around the nipple. A lactation consultant -- a specialist in breastfeeding education -- can give you tips that allow women with inverted nipples to breastfeed successfully.

Breast engorgement. Breast fullness is natural and healthy. It happens as your breasts become full of milk, staying soft and pliable. But breast engorgement means the blood vessels in your breast have become congested. This traps fluid in your breasts and makes them feel hard, painful, and swollen. Alternate heat and cold, for instance using ice packs and hot showers, to relieve mild symptoms. It can also help to release your milk by hand or use a breast pump.

Blocked ducts. A single sore spot on your breast, which may be red and hot, can signal a plugged milk duct. This can often be relieved by warm compresses and gentle massage over the area to release the blockage. More frequent nursing can also help.

Breast infection (mastitis). This occasionally results when bacteria enter the breast, often through a cracked nipple after breastfeeding. If you have a sore area on your breast along with flu-like symptoms, fever, and fatigue, call your doctor. Antibiotics are usually needed to clear up a breast infection, but you can most likely continue to breastfeed while you have the infection and take antibiotics. To relieve breast tenderness, apply moist heat to the sore area four times a day for 15 to 20 minutes each time.

Stress. Being overly anxious or stressed can interfere with your let-down reflex. That's your body's natural release of milk into the milk ducts. It's triggered by hormones released when your baby nurses. It can also be triggered just by hearing your baby cry or thinking about your baby. Stay as relaxed and calm as possible before and during nursing -- it can help your milk let down and flow more easily. That, in turn, can help calm and relax your infant. The determinants of children's growth include genetic potentialities, family size, lifestyle, socio-economic environment, infections, nutrition and the availability of medical care.²⁰ However, nutrition is the most prominent factor which can either directly or indirectly influences children's future development. For instance, those children who are malnourished and manage to survive do not enjoy a good health and experience impaired development in the long run.²¹ Along, there is a rising concern about overweight and obesity in children. Therefore, proper nutrition and nurturing during the early years of life is crucial for an infant to achieve optimal health and well-being. Hence, there is no more precious gift in infancy than breast feeding.

“Breastfeeding is an unequalled way of providing ideal food for the healthy growth and development of infants; it is also an integral part of the reproductive process with important implications for the health of mother”.

REVIEW OF RELATED STUDIES

Saha et al. (2014), reported that the current recommendations of WHO and UNICEF on breastfeeding are as follows:

- Initiation of breastfeeding within the first hour after the birth.
- Exclusive breastfeeding for the first six months.

- Continued breastfeeding for two years or more and proper introduction of solid foods starting in the sixth month which are nutritionally safe and adequate.

Exclusive breastfeeding as defined by WHO and UNICEF is the practice whereby an infant receives only breast milk from the mother or a wet nurse or expressed breast milk. The WHO and UNICEF, both recommend that mothers should breastfeed their child exclusively for the first 6 months and continue breastfeeding up to 2 years or longer rather than stop EBF practice as from 4-6 months.

Additionally, more and more studies are supporting the fact that if an HIV infected mother choose to or must breastfeed, it is essential to breastfeed exclusively for the first six months to reduce the risk of contaminants that may come with formula and other foods and cause gut inflammation allowing HIV organisms to reach the submucosal tissue. Furthermore, antiretroviral drugs can reduce the risk of HIV infection to the infant through breast milk.

Among mammals, the only species in which breastfeeding and weaning have to be learned and are not governed by instinct are the Homo sapiens and breastfeeding problems are very common, but last for a short time and are preventable. According to Giugliani, many mothers are facing breastfeeding problems as their traditional source of learning was lost as extended families are being replaced by nuclear families. This provides few opportunities for the mothers to learn about breastfeeding. Therefore, to enable a mother to start or continue enjoying the lactation process, prevention and treatment is recommended.

BREAST ENGORGEMENT

Breast engorgement is mainly caused by infrequent or ineffective milk removal.³⁸ The breasts become engorged 3-5 days postpartum. The breasts become full, warm and at the time when the “milk comes in” at 3-5 days after delivery, there is a rapid increase in milk volume that cause vascular congestion which is followed by oedema.

Sore nipples/ nipple trauma

One of the reasons why mothers discontinue breastfeeding and opt for early weaning is owing to sore nipples. This usually occurs while the baby is latching during the first week or two and it eventually makes the women feel a mild pain and discomfort. According to Giugliani, the causes of pain during breastfeeding.

Sore nipples can be prevented by teaching proper techniques on the initiation of breastfeeding. Additionally, the breast should be allowed to air-dry for some minutes after a feeding and nursing pads should be changed regularly to prevent milk flow. Other precautions include expressing breast milk if the breasts are engorged and avoiding use of soap, alcohol and extra water on the breast.

Insufficiency of milk

Another reason causing early termination of breastfeeding is insufficient breast milk. Most women produce sufficient milk according to the baby’s needs, however, the complaint of “insufficient milk” is not just owing to the wrong perception of the mother but the latter lacks confidence on her ability to breastfeed. Other reasons that make mothers perceive that they are not producing “sufficient milk” are ineffective suckling and/or infrequent feeding routines, conditions of the baby, such as illness or ankyloglossia, condition of the mother such as fatigue, stress, and use of certain medications, psychological inhibition, pregnancy, and smoking.

Therefore, it is important to determine the aetiology of the milk insufficiency in order to identify necessary interventions to resolve the problem.

There are many other problems that many mothers experience during the lactation process which include gigantomastia, plugged ducts, flat/inverted nipples, medical complications such as mastitis, breast abscess among others.

Formula Feeding Practices

According to the National Academy of Sciences, multiple health organisations endorse breastfeeding as the optimal form of nutrition for infants for the first year of life. However, not all mothers are able to breastfeed either temporarily or permanently, owing to a small number of health conditions of the infant or the mother. Hence, many infants who were unable to be breastfed were wet-nursed (given breast milk by a woman other than the

child's mother) while others, who were unfortunate were "dry-nursed". Dry nursing refers to home prepared mixture which consisted of a liquid, either water or milk mixed with finely ground grains. Over time, cow's milk was modified to feed infants who were unable to breastfeed. Infant formulas are food products designed to provide for the nutritional needs of infants under 1 year old. They include powders, concentrated liquids, or ready-to-use forms. The first commercial infant formula consisted of wheat flour, cows' milk, malt flour and potassium bicarbonate. Thereafter, new kinds of formula milk were developed whereby certain modifications were needed to make it safe and palatable for human infants. The birth of infant formula industry became more apparent owing to the process of modifying cow milk for large-scale production in the 1920s.

Problems with Infant Formula

Formula feeding have some benefits such as convenience, fewer feeding times and mothers need not worry about their food or liquid intake being passed to the baby.

Complementary Feeding

Complementary feeding is the term used for giving other foods and drinks in addition to breastfeeding after the completion of the 6 months exclusive breastfeeding period. According to WHO, this process covers the period from 6-24 months of age and is a critical period of growth during which infants are at high risk of nutrient deficiencies and illnesses.

The ideal age to begin weaning is 4 to 6 months of age because besides filling the gap between the total nutritional needs of a child and the amounts provided by breast milk, it is the age when nerves and muscles in the mouth develop sufficiently to let the baby munch, bite and chew. Nevertheless, following the WHO recommendations in 2001 there has been considerable debate over the ideal age to begin weaning in healthy term infants. It has been highlighted that gastroenteritis is common in developing countries and is associated with the introduction of formula and complementary foods. It is to be noted that the risks of gastroenteritis is lower in developed countries, thus many are questioning whether the WHO recommendation applies for the developed countries as well.

Early and Late Introduction of Complementary Foods

Timing of the first introduction of solid food during infancy may have potential effects on life-long health. It can be seen that very often solid foods are either given too early or too late. According to UNICEF, the frequency and amounts of food that is given may be insufficient hence; hindering the normal growth of the child or their consistency or energy density may be incorrect in relation to the child's needs.

Early weaning

Some studies have shown that giving solid foods too early may lead to increased risk of chronic diseases such as islet autoimmunity (the pre-clinical condition leading to Type 1 diabetes), obesity, adult-onset celiac disease, and eczema.

Late Weaning

A study by Kuo et al., has shown that late weaning may cause deficiencies of zinc, protein, iron and vitamins B and D that leads to the suppression of growth and cause feeding problems. Iron deficiency anaemia and rickets are also found to be more prevalent among infants who are weaned after 6 months. The best way to help a baby's digestive system to get used to solid foods is by introducing the foods gradually and one new food at a time so that if the infant has had any allergy, it can be spotted easily. Starting new foods is a critical step for the baby and it usually takes some time for infants to get used to this new way of eating.

OBJECTIVE OF THE PRESENT WORK

- To know the advantages of exclusive breastfeeding in Bishnupur District.
- To study about the problems which hinder the practice of breastfeeding among mothers of Bishnupur District.
- To study about the appropriateness of complementary feeding and feeding difficulties which infants encounter in Bishnupur District.
- To study about the hurdles and motivational issues among mothers in Bishnupur District.

HYPOTHESIS OF THE STUDY

- The mothers in Bishnupur District are very much aware about advantages of breast feeding.
- Social tabbos are creating hurdles to the mothers in breast feeding.
- Mothers are very much trained about feeding difficulties which infants encounter in Bishnupur District.
- Mothers are becoming role model of breast feeding in Bishnupur District of Manipur.

CONCLUSION

The final lesson learned is the importance of understanding the underlying reasons for behavioral patterns when developing policy. For example, it is well-documented that women who work are less likely to breastfeed than those who do not, but it is not understood why some working women breastfeed and others do not. To create effective policies to increase breastfeeding among working women, it is crucial to understand the underlying reasons for their differences in behavior. This dissertation demonstrates that both working from home and the availability of employer-sponsored child care are promising practices to increase breastfeeding rates among working women. However, for the most part, these are not the practices promoted by the state breastfeeding laws.

To further understand the role of workplace characteristics in breastfeeding, more information on workplace characteristics is necessary. Of the workplace characteristics offered those most likely to affect breastfeeding include availability of a lactation room, an office with a door, employer policies regarding job-sharing, and the frequency and duration of breaks. Future data collection efforts on the topic should include questions on these workplace characteristics.

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