

Breastfeeding: A Review

Favour Franklin^{1*}, Emmanuel Oranwusi¹, & Maryam Jibrin Wunti¹

¹Department of Medicine, College of Health Science, Nile University of Nigeria, Cadastral Zone, Abuja FCT, Nigeria

Corresponding Author: Favour Franklin^{1}

Email: franklynfavourflorence@yahoo.com

Abstract

This paper provides a comprehensive overview of breastfeeding, emphasizing its nutritional, emotional, psychological, and socio-economic importance for both mother and child. It highlights various breastfeeding positions, the nutritional and immunological benefits of breast milk, and the long-term health outcomes for infants and mothers. The study explores challenges associated with breastfeeding, including anatomical, physiological, and societal barriers, as well as the role of breast milk substitutes when necessary. Furthermore, it discusses the global perspective and initiatives by the WHO and UNICEF to promote exclusive breastfeeding through the Baby-Friendly Hospital Initiative. The conclusion reinforces breastfeeding as a natural, cost-effective, and vital practice that requires societal support, education, and healthcare policies to ensure its sustainability and universal adoption.

Keywords: Exclusive breastfeeding, Mother and child health, Breastfeeding benefits, Baby-Friendly Initiative, Breast milk substitutes, Maternal health, Public health

INTRODUCTION

The act of feeding a baby milk from the breast. Breastfeeding or nursing is the process by which human breast milk is fed to an infant directly or indirectly. Babies can be fed directly from the mother's breast, or breast milk can be extracted/expressed and then fed to the baby using alternate feeding methods. Breast milk contains calories, vitamins, minerals, and other important nutrients that help an infant grow and develop.

Breastmilk is the ideal food for infants. It is safe, clean, and contains antibodies that help protect against many common childhood illnesses. Breastmilk provides all the energy and nutrients that the infant needs for the first months of life, and it continues to provide 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.

Breastfed children perform better on intelligence tests, are less likely to be overweight or obese, and are less prone to diabetes later in life. Women who breastfeed also have a reduced risk of breast and ovarian cancers. According to the WHO, exclusive breastfeeding is the practice whereby an infant receives only breast milk from the mother or a wet nurse or expressed breast milk. Commencing within the first 1 hour of birth to the first 6 months of life.

BREAST FEEDING POSITIONS

There are several breastfeeding positions used by different mothers in different situations, but the most popular position is the cradle hold position. The emphasis here is that the mother should be comfortably seated with proper support to ensure a relaxed position. As much as possible, the nipple and areola should be inserted into the baby's mouth.

- **Cradle hold**

The cradle hold is the most common position and helps provide an enjoyable feeding and bonding experience for both of you.

- Sit somewhere with support to keep your arm at the right height, like an armchair or couch. If needed, you can use pillows to support your arm.

- Position your little one in your lap with their head in the crook of your arm.
- Keep your baby's chest against yours so they do not have to turn their head toward your breast. If necessary, use pillows to support your baby's head.

- **Cross-cradle hold**

This position is useful when first learning to breastfeed and is a great option for small babies. It allows you to have good control of your baby's head while helping your little one to latch on. Think of this as the reverse of the cradle hold. To perform the cross-cradle hold, position your baby in the opposite direction of the cradle hold with their head in your hand, rather than the crook of your arm.

- **Under-arm hold, Football hold, or Rugby hold**

If you are dealing with engorged breasts or sore nipples, this is a great position to try. This hold helps to prevent plugged ducts by positioning your baby to empty the bottom ducts – it's a win for both of you!

- While turned on your side, hold your baby like a football or rugby ball along your forearm, with your baby's body on your arm and face toward your breast.
- Position your baby's legs under your arm.
- Use your other hand to support your breast.

The football or rugby hold is also helpful if you have undergone a Cesarean section and can't place your baby on your stomach while nursing.

- **Side-lying position**

If you and your baby are more comfortable lying down, this is a great position to try.

- Lie on your side and place your baby on their side, facing you, with their head at your breast.
- Support your back with pillows and make sure that your baby's nose isn't obstructed.

- **Reclining position**

If your little one has difficulty latching or is restless and crying, this is a calming position to try. In fact, this position is sometimes called "biological nurturing." Support yourself with pillows and lean far enough back for your baby to be fully supported on your reclined body, not completely flat. Lay your baby prone on your chest. To engage in skin-to-skin contact, lay your naked baby on your bare chest and enjoy bonding with your little one.



Fig 1. Breastfeeding positions (<https://www.belliesabroad.com/wp-content/uploads/2018/04/BF.WHO-poster-A2.jpg>)

NUTRITIONAL BENEFITS FOR THE BABY

- Breast milk as the optimal source of nutrition for infants
 - Balanced nutrients (fats, proteins, vitamins, minerals)
 - Aids easy digestion
 - Immunological benefits
 - Transfer of antibodies
 - Reduced risk of infections (respiratory, gastrointestinal)
 - Reduced risk of contamination
 - Antimicrobial -Lactoferrin
 - Anti-inflammatory - Lysosomes, NK cells, macrophages and pro-inflammatory cytokines (IL-1, IL-6, IL-8, and TNF- α),
 - Immunomodulating -immunoglobulin production, and a suppressive effect on T cells
 - Long-term health advantages
 - Lower risk of obesity, type 2 diabetes, and certain allergies
 - Development of the baby's brain and nervous system
 - Provide laxative effect
 - Clears out the Early passage of Meconium and bilirubin
 - Beneficial for Preterm Infants
 - Decreased necrotizing enterocolitis
 - Decreased infection rates
 - Better able to tolerate feedings
-

BENEFITS TO THE MOTHER

- Less postpartum bleeding
 - More rapid uterine involution
 - Weight loss
 - Decreased premenopausal breast cancer rates
 - Decreased ovarian cancer rates
 - Saves time
 - Lactational amenorrhea can be a FP method, but it is not reliable
 - Should still use progesterone-only contraceptives
 - Combined contraceptives dry up milk
-

EMOTIONAL AND PSYCHOLOGICAL BENEFITS

- Bonding between mother and baby
 - Physical closeness, warmth, and comfort
 - Promotes secure attachment
 - Release of oxytocin and its effects on maternal health
 - Reduces stress and anxiety
 - Enhances maternal instincts and bonding
-

ECONOMIC, SOCIETAL, AND ENVIRONMENTAL BENEFITS

- Economic savings for families
 - Formula costs vs. breast milk
 - Reduction of healthcare costs
 - Fewer infant illnesses mean lower healthcare expenses
 - Environmental impact
 - Less waste from packaging, bottles, and formula production.
 - Reduces littering and defacing of the environment.
-

PROBLEMS WITH BREASTFEEDING

- Anatomical problems (amastia, amazia)
 - Poor latching
 - Appetite spurt
-

- Breast engorgement
- Breast abscess
- Sore and cracked nipples
- Plugged ducts
- Physiological problems
- Psychological problems
- Poor knowledge
- Poor skill
- Poor social support
- Hospital practices
- Traditional beliefs

BREAST MILK SUBSTITUTE

Although breast milk is the gold standard for infant nutrition, especially within ages 0-6 months, some conditions warrant the use of infant substitutes. BMS is the milk of other mammals. It is a specially formulated infant milk formula that is now available. They comprise reconstituted skimmed cow milk mixed with electrolyte-depleted cow's milk whey or casein proteins. The fats added are usually from vegetable, palm, coconut, or corn oils. Human milk fortifiers are used to increase the caloric value, especially for premature infants.

GLOBAL PERSPECTIVE ON BREASTFEEDING

WHO and UNICEF recommend that children initiate breastfeeding within the first hour of birth and be exclusively breastfed for the first 6 months of life – meaning no other foods or liquids are provided, including water. Infants should be breastfed on demand, that is, as often as the child wants, day and night. No bottles, teats or pacifiers should be used. From the age of 6 months, children should begin eating safe and adequate complementary foods while continuing to breastfeed until they are two years old or older.

BABY FRIENDLY INITIATIVE

This was launched in 1991 by WHO and UNICEF to encourage and promote, protect, and support the act of breastfeeding. It is a global movement for mankind and is directed principally at health workers and health facilities. It is aimed at re-orienting them towards adopting policies and practices that promote and encourage breastfeeding.

This is achieved by observing the 10 steps to successful breastfeeding.

Critical management procedures:

- This first part comprises:
 - Comply fully with the International Code of Marketing of Breast-milk Substitutes and relevant World Health Assembly resolutions.
 - Have a written infant feeding policy that is routinely communicated to staff and parents.
 - Establish ongoing monitoring and data-management systems.
- Ensure that staff have sufficient knowledge, competence, and skills to support breastfeeding.

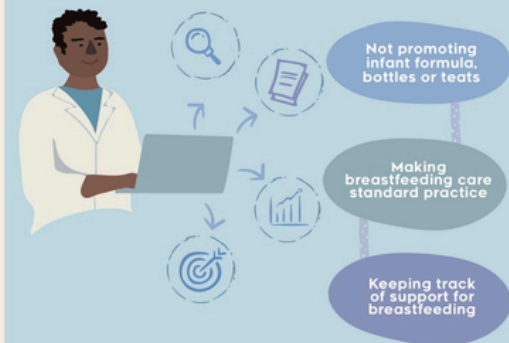
Key clinical practices:

- Discuss the importance and management of breastfeeding with pregnant women and their families.
 - Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth.
 - Support mothers to initiate and maintain breastfeeding and manage common difficulties.
 - Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated.
 - Enable mothers and their infants to remain together and to practice rooming in 24 hours a day.
 - Support mothers to recognize and respond to their infants' cues for feeding.
 - Counsel mothers on the use and risks of feeding bottles, teats, and pacifiers.
 - Coordinate discharge so that parents and their infants have timely access to ongoing support and care.
-

The TEN STEPS to Successful Breastfeeding

1 HOSPITAL POLICIES

Hospitals support mothers to breastfeed by...



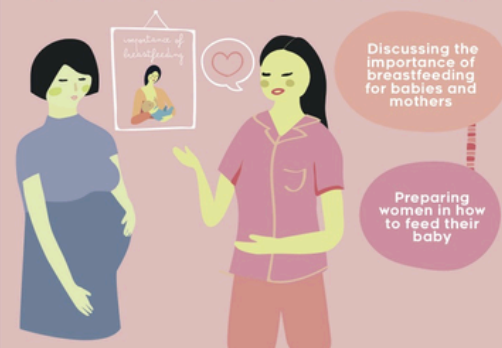
2 STAFF COMPETENCY

Hospitals support mothers to breastfeed by...



3 ANTENATAL CARE

Hospitals support mothers to breastfeed by...



4 CARE RIGHT AFTER BIRTH

Hospitals support mothers to breastfeed by...



5 SUPPORT MOTHERS WITH BREASTFEEDING

Hospitals support mothers to breastfeed by...



6 SUPPLEMENTING

Hospitals support mothers to breastfeed by...



7 ROOMING-IN

Hospitals support mothers to breastfeed by...



8 RESPONSIVE FEEDING

Hospitals support mothers to breastfeed by...



9 BOTTLES, TEATS AND PACIFIERS

Hospitals support mothers to breastfeed by...



10 DISCHARGE

Hospitals support mothers to breastfeed by...



CONCLUSION

In conclusion, breastfeeding is a very important part of childhood life whose importance cannot be overemphasized due to its numerous benefits to both mother and child. Breastmilk provides essential nutrients, promotes emotional bonding, and supports long-term health. Breastfeeding is not only natural, but it also provides a cost-effective way to nourish infants and contributes to the well-being of families and communities. Challenges to effective breastfeeding may arise, but with proper support, education, and societal orientation, exclusive breastfeeding can become a more acceptable and normalized practice. Skilled counseling and support should be provided prenatally and post-partum to all mothers to prevent poor lactation and avert the introduction of pre-lacteal feeds, commercial milk formula (CMF), or other breastmilk substitutes, which are major risk factors for the premature termination of exclusive breastfeeding and any breastfeeding. Mothers, families, and communities must be provided with appropriate educational support and skill development to understand and handle unsettled baby behaviors as an expected phase of human development. Society encouraging a breastfeeding-friendly environment benefits everyone, ensuring that mothers can provide the best start for their babies.

Health workers should be given the required knowledge and skills to promote, protect, and support breastfeeding, and ensure that they comply with the national/ international code on marketing of breast milk substitutes.

REFERENCES

- [https://www.cancer.gov/publications/dictionaries/cancer-terms/def/breastfeeding#:~:text=\(breastfeeding\),an%20infant%20grow%20and%20develop.](https://www.cancer.gov/publications/dictionaries/cancer-terms/def/breastfeeding#:~:text=(breastfeeding),an%20infant%20grow%20and%20develop.)
- <https://www.who.int/teams/nutrition-and-food-safety/food-and-nutrition-actions-in-health-systems/ten-steps-to-successful-breastfeeding>
- <https://www.who.int/health-topics/breastfeeding>
- 500lv pediatric lecture note on INFANT FEEDING by Dr. Ekwem Lilian
- 500lv obstetrics and gynecology lecture note on physiology and disorders of lactation by Dr. N. Khan
- [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(22\)01932-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)01932-8/fulltext)