

Reviewed on the Benefits and Risks of Breastfeeding for Mothers and Children's

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Abstracts: *Breastfeeding has several health benefits for both offspring and mothers, as well as the potential to promote maternal-infant attachment. The offer of the maternal breast to the baby is an undeniable right of mothers and their children and all exertions should be made to stimulate, follow and maintain exclusive breastfeeding for up to 6 months and supplement it until the kid completes 2 years of age. The potential of breast milk is its benefits and health outcomes, stimulating the practice of breastfeeding and supporting campaigns for its application. But it is widely known that breastfeeding is an important step in the reproductive process of women and its practice offers benefits to both mother and child. Most of the available information highlights the benefits of breast milk for children. The multiple benefits of breastfeeding for the physical and emotional health of the nursing mother, Infant feeding decisions affect maternal and child health outcomes worldwide. The decision not to breastfeed can also adversely affect mothers' health by increasing the risk of pre-menopausal breast cancer, ovarian cancer, type II diabetes, hypertension, hyperlipidemia, and cardiovascular disease. Clinicians who counsel mothers about the health impact of infant feeding and provide evidence-based care to maximize successful breastfeeding can improve the short and long-term health of both mothers and infants.*

Keywords: *Breastfeeds, Children, Behavioral, Mothers, uterus*

Introduction

The benefits of proper breastfeeding for individuals and populations of mothers and children have been extensively recognized and studies focus that breastfed infants have fewer respiratory and diarrhea illnesses, with an overall decrease in the hospitalization rates than no breastfed infants[1]. WHO reports that "Breastfeeding is the unsurpassed way of providing ideal food for the healthy growth and development of newborns; it's also an integral part of the reproductive process with significant implications for the health of mothers[2]. The proposition of the mother's breast to her baby is a biologically and ethically unquestionable right of both mother and child and its fundamental importance for the survival and quality of life of the nursing baby during its first years of life. Breastfeeding (BF) appears to be linked to the mother's physical and emotional wellbeing during the puerperium lactation phase and throughout her life. Currently, the benefits of breastfeeding are thought to extend beyond the length of the practice and into adulthood, with implications for long-term quality of life. Many publications about the properties of breast milk, its benefits, and health ramifications are available in the literature, encouraging the practice of breastfeeding and supporting initiatives such as the World Week of Breastfeeding [3].

Breastfeeding can play a major role in facilitating the development of the child-mother relationship in cases of adoption. This evidence will include a discussion of the impact of the physical act of breastfeeding on children and mothers, the way during which the pre-adoption experience of youngsters influences their ability to form relationships, how breastfeeding may be initiated in cases of adoption, and the potential impact of breastfeeding on adopted children[4]. Breastfeeding is associated with many maternal health benefits in addition to improved infant health outcomes including lower risk of infection, obesity, diabetes, and sudden infant death syndrome, and decreased risk for metabolic syndrome [5]. Health outcomes vary substantially for mothers and children who formula-feed, compared with those who breast-feed, even in wealthy countries such as the United States. Unfortunately, rates of breastfeeding in the United States continue to fall short of the World Health Organization's recommendations that children are breastfed for their

first 2 years of life[6].

What is Breastfeeding

Breastfeeding: According to the American Academy of Pediatrics, feeding of child human breast milk is preferred for all infants. This embraces even premature and sick babies with rare exceptions. It is the food least likely to cause allergic reactions, it is inexpensive, 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 infections[7]. Breastfeeding is unique of the most effective ways to safeguard child health and survival. But nearly 2 out of 3 infants are not exclusively breastfed for the recommended 6 months a rate that has not improved in 2 decades. Breast milk is the ideal food for infants and it is safe, clean, and contains antibodies that help protect against numerous common childhood illnesses. Immune system development is significantly enhanced with the introduction of components of breast milk and prematurely discontinued breastfeeding may facilitate the pathogenesis of several chronic diseases[8]. Breast milk offers 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 nutritious needs during the second half of the first year, and up to one third during the second year of life. Breastfed children perform improved on intelligence tests, are less likely to be overweight or obese, and less susceptible to diabetes later in life and also mothers who breastfeed also have a reduced risk of breast and ovarian cancers[9].

Various Importance of Breastfeeding to Children

Breastfeeding has been associated with numerous positive health outcomes for both the child and the mother. That promotes normal infant development because it is the natural extension of life after the womb[10]. Various other benefits have also been reported for the physical and psychological well-being of the mother, for example, an attenuated response to stress and better sleep patterns[11]. The main antibodies in the milk, secretory IgA (SIgA), are established in all exocrine secretions and on mucosal membranes where most infections are initiated especially in childhood. Such antibodies, which together with serum IgA make up about 80% of all immunoglobulins are mainly produced in the intestinal mucosa[12]. Human milk feeding decreases the frequency of various infectious diseases in infancy counting bacterial meningitis, bacteremia, diarrhea, respiratory tract infections, and otitis media, and urinary tract infections. Breastfeeding is the ideal and most natural way of developing infants[13]. The importance of breastfeeding has been proved unambiguously[14]. The global reinforcement of breastfeeding through the multiorganizational 'breast is best' campaign in the past 25 years has been recognized with remarkable improvements in maternal and child health. The practice of breastfeeding carries nutritional, immunological, physiological, and psychological benefits[15]. Most healthcare experts recommend exclusive breastfeeding for at least 6 months or much longer. Breast milk contains everything a baby needs for the first 6 months of life and in all the right proportions. Its composition even changes according to the baby's changing needs, especially during the first month of life. Breast milk contains antibodies against the most important bacterial pathogen of the neonate[16]. During the first days after birth, the breasts produce a thick and yellowish fluid called colostrum. It's high in protein, low in sugar, and loaded with advantageous compounds. It's truly a wonder food and not replaceable by formula Colostrum is the ideal first milk and helps the newborn's immature digestive tract develop. After the first few days, the breasts start producing larger amounts of milk as the baby's stomach grows but, the only thing that may be deficient from breast milk supply is vitamin D.[17].

Middle ear infections

Breastfeeding particularly exclusively and extensive as possible may protect against the middle ear, throat, and sinus infections well beyond infancy. Breastfeeding can protect against *multiple respiratory and gastrointestinal acute illnesses* as well as Colds and infections. Babies exclusively breastfed for 6 months may have a lower risk of getting serious colds and ear or throat infections and also gut infections. Feeding preterm babies' breast milk is linked with a reduction in the incidence of necrotizing enterocolitis. The beneficial effect of breastfeeding on overweight and obesity may have been largely overestimated [18]. Breast milk contains immunoglobulin with antibody activity against numerous micro-organisms. Previously these antibodies have been supposed to be of minor importance since they are not absorbed by the gut of the human infant. Generally, Human milk contains many components which

may both promote a 'normal' bacterial colonization of the gastrointestinal tract and also suppress the invasiveness of certain pathogenic micro-organisms. These qualities of breast milk may be key of importance for the newborn infant's defenses against infection[16]. The Confirmation of breastfeeding could protect against childhood lymphoma, which has been limited to relatively small case-control studies. Reported that children who were artificially fed or breastfed for less than 6 months were 6-9 times more likely than infants breastfed for at least 6 months to develop lymphoma before 15 years of age[19].

Increasing sensitivity and secure attachment of children:

Breastfeeding is also thought to facilitate maternal sensitivity and secure attachment between mother and child mother-infant dyads that increased duration of breastfeeding was associated with maternal sensitive responsiveness which increased attachment security and decreased attachment disorganization when infants were 14 months of age. Brain imaging work also provides evidence for a positive influence of breastfeeding on the mother-child relationship[20]. Breastfeeding progresses infants' overall health, growth, and development and protects against many acute or chronic diseases[21].

Several Importance of Breastfeeding to Mothers

Breastfeeding helps the uterus contract

The most important information on breastfeeding links to limiting the threats of various cancers, osteoporosis, and diabetes uterus to shrink back to the normal[22]. It has also been found to help with uterine involution, weight loss, natural contraception, and stress reduction. The uterus undergoes a process known as involution after delivery, which allows it to recover to its original size. The body secretes high amounts of oxytocin during labor to help deliver the baby and reduce bleeding. Oxytocin also increases during breastfeeding which encourages uterine contractions and reduces bleeding and helping the uterus return to its previous size. The mothers who breastfeed generally have less blood loss after delivery and faster involution of the uterus[17]. One of the benefits of breastfeeding a newborn is that it causes the mother's uterus to contract. For many new mothers, uterine contractions are a sure sign that the let-down reflex is working[23].

Delays the Period and Serves as a Natural Birth Control

Breastfeeding can be inhibited the period of mothers returning for 3 up to 6 months or even longer. Naturally, menstruation returns approximately one month after stop breastfeeding exclusively. If the breastfeed exclusively without supplementing the child is under 6 months old, and the period has not yet returned then that can use the lactational amenorrhea method (LAM) for birth control. Once they encounter the criteria and follow them correctly this natural birth control method is up to 98% effective[24]. There is convincing evidence that breastfeeding is protecting against evolving premenopausal and probably postmenopausal breast cancer. There is conclusive evidence of a dose-response effect with longer duration and more exclusive breastfeeding being more protective[25]. Multiple sclerosis (MS) is an autoimmune disease that distresses the central nervous system. Breastfeeding could have a protective effect against this sometimes-weakening disease. The American Academy of Neurology has found that mothers who breastfeed for at least 15 months (over one or more pregnancies) are 53 percent less likely to develop MS[26].

A few Risks of Breastfeeding for mothers and children

Get dehydrated

Breast milk production necessitates a lot of water, and any nursing mother knows the agony of sitting down to a breastfeeding session without any water around. Dizziness, fever, and a decrease in the fluid content of your water are all symptoms of dehydration. Breastfeeding moms would consume additional fluids to maintain adequate hydration status, and breastfed newborns do not require additional water for hydration, because water makes up 87 % of breast milk [27]. Burning calories and getting little to no sleep can be a dangerous combination if you're not intentional about taking care of yourself, according to New Parents. Apart from drinking adequate water, you will also need to eat healthy nourishment and be sure to get enough sleep[28].

Physiology and Behavioral changes

Breastfeeding is an impact on mothers which is influenced by the release of the hormone's oxytocin, prolactin, and cholecystokinin during breastfeeding. Oxytocin is released from the hypothalamus in response to skin-to-skin contact and suckling at the breast[4].

Breastfeeding is Significantly related to psychological factors including dispositional optimism, self - effectiveness, belief in breast milk, breastfeeding expectations, anxiety, planned duration of breastfeeding, and the time of the infant feeding decision that after controlling for sociodemographic factors of Mothers[29].

Bed-sharing

Whether you sleep with your baby in the same bed, or you often doze off while breastfeeding, bed-sharing can be risky. About 3,500 infants die each year in the United States from sleep-related deaths including sudden infant death syndrome (SIDS), ill-defined deaths, and accidental suffocation and strangulation, according to the American Academy of Pediatrics (AAP)[30].

Blocked milk duct

When the breast engorgement continues it can lead to a blocked milk duct. That may feel a small, tender lump in your breast. Regular feeding from the affected breast may help which is possible to position the babe with their chin pointing towards the lump so they can feed on that part of the breast[31]. Most mothers reported experiencing their most concentrated engorgement after hospital discharge. To ease the discomfort of engorgement, apart from baby feeding, one could try expressing a little breast milk by hand[32].

Nipple Pain

During the first couple of days of breastfeeding women frequently will complain of slight nipple discomfort for the first minute after latch-on. Severe nipple discomfort that lasts throughout the feeding or nipple distress that doesn't improve once your milk comes in, recommends that the baby is either attached incorrectly or is sucking improperly. The most public problem is baby is not opening wide enough and is latching on to the tip of the nipple instead of taking a large mouthful of the breast[33].

Mastitis Breastfeeding moms have a higher incidence of mastitis an inflammation of the breast that studies demonstrate affects about 10 percent of women. Because mastitis is understood to result partly from inadequate milk removal from the breast optimizing breastfeeding technique is likely to be beneficial[34]. Mastitis doesn't ordinarily cause an infection of breast milk but of the tissues around the breasts. Symptoms include redness, tenderness, or firmness around the breast. You may also have a fever, fatigue, and malaise. Mastitis is a relatively common breast condition it can affect patients at any time but predominates in women during the breastfeeding period[35]. You could need to deal with some of the uncomfortable or even painful problems common with breastfeeding. These include things like mastitis, breast engorgement, plugged milk ducts, and sore nipples[36].

Breast-Feeding Transmission of HIV

Breastfeeding remarkably increases the risk of HIV-1 transmission from mother to child and the rate of breastfeeding transmission is estimated to be at least 16% and prolonged breastfeeding nearly doubles the overall infant HIV-1 infection rate[37]. The risk factors for mother-to-child transmission of HIV-1 identified here suggested some inexpensive interventions to prevent transmission among breastfeeding mothers. Prophylactic local treatment of the mother during labor or the infant at the time of birth may be a method of preventing the development of infant thrush[38].

Breastfeeding affects the mood and stress of mothers

Breastfeeding has been stated to impact mood and stress reactivity in mothers. Specifically breastfeeding mothers report reductions in nervousness, negative mood, and stress when compared to formula-feeding mothers. Breastfeeding mothers have stronger cardiac vagal tone modulation, reduced blood pressure, reduced heart rate reactivity, and reduced cortisol response when faced with social stress [39]. Generally, Breastfeeding can reduce psychological stress, anxiety, and negative facial expression recognition and enhance positive feelings towards the infant and emotional recognition of happy adult facial expressions[40].

Conclusion

Breastfeeding has been associated with numerous positive health outcomes for both the child and mother. Breastfeeding progresses infants' overall health, growth, and development and protects against several acute or chronic diseases. Mothers donated breast milk can reduce the risk of various pathologies, infectious diseases, and also reduced the risk of mother's breast, ovarian cancer, and

decreased risks of hip fractures. Breastfeeding encounter certain risks for mothers and babies remarkably increases the risk of HIV-1 transmission from mother to child and Breastfeeding has been identified to impact mood and stress reactivity in a mother's social interaction during lactation.

References

1. Senarath, U., M. Dibley, and K.J.E.J.o. C.N. Agho, Breastfeeding practices and associated factors among children under 24 months of age in Timor-Leste. 2007. 61(3): p. 387.
2. Jopson, B.J.H.K., Are early childhood centers breastfeeding friendly? 2016. 4(3): p. 3-8.
3. Ciampo, L.A.D. and I.R.L.D.J.R.B.d.G.e.O. Ciampo, Breastfeeding and the benefits of lactation for women's health. 2018. 40(6): p. 354-359.
4. Gribble, K.D., Mental health, attachment and breastfeeding: implications for adopted children and their mothers. *International Breastfeeding Journal*, 2006. 1(1): p. 5.
5. Krol, K.M. and T. Grossmann, Psychological effects of breastfeeding on children and mothers. *Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz*, 2018. 61(8): p. 977-985.
6. Stuebe, A.M. and E.B. Schwarz, The risks and benefits of infant feeding practices for women and their children. *Journal of Perinatology*, 2010. 30(3): p. 155-162.
7. William et al., Medical Definition of Breastfeeding. Accessed online, <https://www.medicinenet.com/script/main/art.asp?articlekey=38708>, 2020.
8. Jackson, K.M. and A.M.J.T.J.o.t. A.O.A. Nazar, Breastfeeding, the immune response, and long-term health. 2006. 106(4): p. 203-207.
9. WHO, Breastfeeding, https://www.who.int/health-topics/breastfeeding#tab=tab_1. accessed online 2020.
10. Oddy, W.H.J.B.R., Breastfeeding protects against illness and infection in infants and children: a review of the evidence. 2001. 9(2): p. 11.
11. Figueiredo, B., C. Canário, and T. Field, Breastfeeding is negatively affected by prenatal depression and reduces postpartum depression. 2014.
12. Hanson, L.Å. and M. Korotkova. The role of breastfeeding in the prevention of neonatal infection. in *Seminars in neonatology*. 2002. Elsevier.
13. Pound, C., et al., The Baby-Friendly Initiative: Protecting, promoting and supporting breastfeeding. *Paediatrics & Child Health*, 2012. 17(6): p. 317-321.
14. Bayyenat, S., et al., The importance of breastfeeding in Holy Quran. 2014. 2(4.1): p. 339-347.
15. Africa, S.-S., HIV, Breastfeeding, and Infant Mortality: Weighing the Impact of the Non-evidenced-based WHO/UNAIDS Recommendations in the Low-income, Low-resource Countries. 2001.
16. Hanson, L.A. and J.J.A.o.D.i.C. Winberg, Breast milk and defense against infection in the newborn. 1972. 47(256): p. 845.
17. Healthline, <https://www.healthline.com/health/breastfeeding/11-benefits-of-breastfeeding>, Benefits of Breastfeeding for Both Mom and Baby. Accessed online, 2020.
18. Grube, M.M., et al., Does breastfeeding help to reduce the risk of childhood overweight and obesity? A propensity score analysis of data from the KiGGS study. 2015. 10(3): p. e0122534.
19. Heinig, M.J. and K.G.J.N.r.r. Dewey, Health advantages of breastfeeding for infants: a critical review. 1996. 9(1): p. 89-110.
20. Krol, K.M. and T. Grossmann, Psychological effects of breastfeeding on children and mothers. *Bundesgesundheitsblatt - Gesundheitsforschung - Gesundheitsschutz*, 2018. 61(8): p. 977-985.
21. Weimer, J.P.J.F.R.N.F.R., The economic benefits of breastfeeding. 2001. 24(1482-2016-121501): p. 23-26.

22. Anderson Carole Lucia et al., h.w.p.c.b.b.t.-b.-o.-b., The health benefits of breastfeeding for mothers. Accessed online, 2005.
23. Schack-Nielsen, L., A. Larnkjær, and K.F. Michaelsen. Long Term Effects of Breastfeeding on the Infant and Mother. in Early Nutrition and its Later Consequences: New Opportunities. 2005. Dordrecht: Springer Netherlands.
24. family, v., The Advantages and Disadvantages of Breastfeeding. Accessed online, 2020.
25. Allen, J. and D. Hector, Benefits of breastfeeding %J New South Wales Public Health Bulletin. 2005. 16(4): p. 42-46.
26. parent, T.s., surprising ways breastfeeding benefits moms' health, <https://www.todayparent.com/baby/breastfeeding/surprising-ways-breastfeeding-benefits-moms-health/>. Accessed online, 2018.
27. JOSEPH, B.T., Dehydration When Breastfeeding: Causes, Symptoms, And Treatment. Accessed online, 2020.
28. Youngs, O., 5 Breastfeeding Risks You Should Know About, <https://www.romper.com/p/5-breastfeeding-risks-you-should-know-about-20308>. 2016. Accessed Online.
29. O'Brien, M., E. Buikstra, and D.J.J.o.a.n. Hegney, The influence of psychological factors on breastfeeding duration. 2008. 63(4): p. 397-408.
30. lifestyles, F.N., 7 breastfeeding dangers every new mom should know, <https://www.foxnews.com/lifestyle/7-breast-feeding-dangers-every-new-mom-should-know>. Accessed online, 2017.
31. <https://www.nhs.uk/conditions/pregnancy-and-baby/problems-breastfeeding/>, N., Breastfeeding problems. Accessed online, 2019.
32. Hill, P.D. and S.S. Humenick, The Occurrence of Breast Engorgement. 1994. 10(2): p. 79-86.
33. Mom's, D., Common Breastfeeding Problems Every New Mom Should Know About. Accessed online, <https://www.familyeducation.com/life/breastfeeding-challenges/common-problems-when-you-begin-breastfeeding>, 2020.
34. Spencer, J.P.J.A.f.p., Management of mastitis in breastfeeding women. 2008. 78(6): p. 727-731.
35. Boakes, E., et al., Breast Infection: A Review of Diagnosis and Management Practices. European journal of breast health, 2018. 14(3): p. 136-143.
36. verywellfamily, The Advantages, and Disadvantages of Breastfeeding. Accessed online, <https://www.verywellfamily.com/what-are-the-pros-and-cons-of-breastfeeding-431895>, 2020.
37. John-Stewart, G., et al., Breast-feeding and transmission of HIV-1. 2004. 35(2): p. 196.
38. Embree, J.E., et al., Risk factors for postnatal mother-child transmission of HIV-1. 2000. 14(16): p. 2535-2541.
39. Krol, K.M. and T. Grossmann, Psychological effects of breastfeeding on children and mothers. Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz, 2018. 61(8): p. 977-985.
40. Bailey, J., M. Clark, and R.J.B.J.o.M. Shepherd, Duration of breastfeeding in young women: psychological influences. 2008. 16(3): p. 172-178.