Ecological Breastfeeding and Natural Child Spacing

John and Sheila Kippley (World NFP Congress, Milan, Italy, June 13, 2015))

Abstract

Background: Breastfeeding mothers experience widely different durations of breastfeeding amenorrhea. Some have a first menses by three months; others one or two years later. Research studies, both prospective and retrospective, were reviewed to determine if breastfeeding patterns affect the duration of breastfeeding amenorrhea. Studies from the 1940s up to the 21stth century show that only frequent suckling provides a significant delay of fertility. The type called ecological breastfeeding provides, on average, 14 to 15 months of breastfeeding amenorrhea.

Conclusion: Breastfeeding types need to be defined. The Church should promote and teach ecological breastfeeding as a desirable option for natural family planning. Eco-breastfeeding involves no abstinence, offers many benefits to mother and baby, is ecologically sound, and provides extended natural infertility. God does have a natural plan for spacing babies.

Keywords: natural family planning, NFP, breastfeeding, cultural breastfeeding, exclusive breastfeeding, ecological breastfeeding, natural child spacing

(Talk at Natural Family Planning Conference, Milan, June 13, 2015; Delivered by David F. Prentis)

[My name is David Prentis. I have been asked by the authors of this paper, John and Sheila Kippley, the founders of Natural Family Planning International, based in the USA, to present it to the Congress, as they are unable to attend in person. I am, however, not just a mouthpiece. My own organization, the Couple to Couple League of the Czech Republic, is affiliated to NFP International, and so we too promote the ideas contained in this paper.]

Let's start with a simple question. Does God Himself have a plan for the natural spacing of babies through breastfeeding? In other words, has God Himself created woman in such a way that the suckling of her infant at her breasts will delay the return of her fertility to produce a natural spacing of births? The answer is YES, but only IF the breastfeeding involves frequent and unrestricted nursing. This natural spacing of babies is provided without sexual abstinence.

Some background may be helpful. When Sheila was pregnant with our first baby, she attended La Leche League meetings that supported successful breastfeeding and learned that she could space her babies about two years apart beginning with total breastfeeding. Total breastfeeding means no solids or supplements; it means that the baby receives only breast milk from the mother's breast for the first six months of life. Sheila also was told at these breastfeeding meetings that total breastfeeding was 99% effective in avoiding pregnancy before the return of the first menstrual period during the first six months after childbirth.

However, when she asked her Catholic obstetrician about total breastfeeding for spacing babies, she was told that she would have a period within 3 months no matter how she nursed. He was right. Even though she nursed frequently day and night to maintain an ample milk supply, her periods returned by three months postpartum.

With our second full-term pregnancy, however, Sheila had a different Catholic doctor who told her to nurse exclusively with no supplements, not even water, and to call him when she had her first period. Also, with our second baby God led us to other maternal and parenting behaviors, and Sheila's nursing pattern became similar to ecological breastfeeding. Following that pattern, she experienced her first period at 12 months postpartum. Why the difference? She was nursing a lot with both babies. Why did her periods return within 3 months after childbirth with one baby and 12 months after childbirth with another baby?

In 1967, Sheila's interest in the subject led her to begin studying the research on breastfeeding infertility. This research pointed to the <u>frequency</u> of breastfeeding as the key factor for breastfeeding infertility. That research is currently available at the website of NFP International and is titled **Review of Breastfeeding Infertility Research up to 1972.**¹

Building on those studies, we then did our own research. We developed a two-page survey that was printed at the end of the first edition of Sheila's book, *Breastfeeding and Natural Child Spacing*, and readers were invited to submit it. We were fortunate to publish our results in two journals, one in 1972² and a larger study in 1989.³ Both studies came to the same conclusion: that American mothers doing ecological breastfeeding experienced, on average, 14.5 months without periods after childbirth. We also found that 93% of the mothers doing eco-breastfeeding were without menstruation at 6 months, 56% were without menstruation at 12 months and 34% were still without menstruation at 18 months. This is why ecological breastfeeding is known to be a natural baby spacer. Both studies are available at the website of NFP International.⁴ Three American mothers were not included in the published results because they went a very long time without menstruation, and we did not want to skew the results. These breastfeeding mothers went 41 months, 41 months, and 42 months without menstruation after childbirth. We will soon discuss some cultures where this type of lengthy breastfeeding infertility is not so unusual.

Before we continue, we need to define three kinds of breastfeeding: cultural, exclusive and ecological breastfeeding. They are all defined by maternal behaviors.

<u>Cultural breastfeeding</u> is also known as token or partial breastfeeding. With cultural breastfeeding, mothers supplement breastfeeding with formula and early baby foods or liquids, use bottles and pacifiers, and may follow strict schedules and try to get the baby to sleep through the night. Mother-baby separation with babysitters is often characteristic of cultural breastfeeding. All of these cultural practices interfere with the natural spacing of children due to the lack of frequent and unrestricted nursing. Cultural nursing almost never delays the return of fertility.

<u>Exclusive breastfeeding</u> was called total breastfeeding in the 1960s. Exclusive breastfeeding for the first 6 months of life is recommended by many medical associations world-wide because this type of breastfeeding offers many benefits to both mother and baby. Exclusive breastfeeding means the mother offers the baby only her milk and only at the breast. Repeated research has shown that exclusive breastfeeding is highly effective in avoiding pregnancy, and now it is called the Lactational Amenorrhea Method. Amenorrhea means the absence of periods. The Lactational Amenorrhea Method has 3 requirements:

- 1) The baby must receive only breast milk and directly from the breasts. No other liquid or foods are given.
- 2) The baby must be less than 6 months old.
- 3) After 56 days postpartum, the mother must be in amenorrhea.

This exclusive breastfeeding method offers the mother at least a 98 to 99 percent rate of infertility before her first menstruation until her baby reaches 6 months of age. Some research has shown that about 50% of the breastfeeding mothers doing exclusive breastfeeding had their first period return before six months postpartum. Thus those who promote the Lactational Amenorrhea Method today usually stress two teachings: 1) what is meant by exclusive breastfeeding and 2) the need for frequent nursing day and night. With these emphases, over 80% of mothers were in amenorrhea at 6 months using exclusive breastfeeding.

<u>Ecological breastfeeding</u> is basically natural mothering. Mother and baby are one, and the mother uses her breasts to satisfy the baby's hunger and suckling needs. Eventually the baby requires other foods but the nursing continues. This is the only type of breastfeeding associated with an extended amenorrhea after childbirth; it is the only pattern of breastfeeding associated with the natural spacing of births. Ecological breastfeeding is dependent on certain maternal behaviors. We call these maternal behaviors The Seven Standards.

The Seven Standards of Ecological Breastfeeding are as follows:

- 1) Breastfeed exclusively for the first six months of life. Don't offer your baby other liquids and solids, not even water.
 - 2) Pacify or comfort your baby at your breasts.
 - 3) Don't use bottles and don't use pacifiers.
 - 4) Sleep with your baby for night feedings.
 - 5) Sleep with your baby for daily-nap feedings.
 - 6) Nurse frequently day and night and avoid schedules.
 - 7) Avoid any practice that restricts nursing or separates you from your baby.

The <u>two key factors</u> for natural child spacing are 1) mother-baby togetherness and 2) frequent and unrestricted suckling. If these two key factors are present, it is easy to follow the Seven Standards because the mother remains with her baby. Mother and baby are in essence one biological unit. It is important for everyone present to remember that these specific mothering practices are important in God's plan for natural baby spacing.

We tried to eliminate one or more of the Standards – one by one – in our research, and we found that <u>each Standard is important</u>. Sometime after six or eight months, the mother will no longer be doing *exclusive* breastfeeding so the Seven Standards become Six Standards. We found that breastfeeding amenorrhea can continue for a number of months if the Six Standards are still followed, but dropping any one of those Standards invites fertility to return.

Bed-sharing between mother and baby is extremely important for maintaining breastfeeding amenorrhea. In communities where such bed-sharing between mother and baby is a common practice, Sudden Infant Death Syndrome (SIDS) is almost unknown. We encourage couples interested in natural child spacing with ecological breastfeeding to review the safe bed-sharing guidelines at the website of NFP International.⁸

Here we want to emphasize that **Nature intends for mother and baby to be one, a biological unit.** The World Health Organization described this oneness well: "Mothers and babies form an inseparable biological and social unit; the health and nutrition of one group cannot be divorced from the health and nutrition of the other." ⁹

Some people are quick to say "We know breastfeeding does not work for spacing babies." This is because parents in many countries adopt cultural practices which interfere with God's plan for mother and baby. They use early solids or liquids or formula, pacifiers, bottles, strict schedules, babysitters, and other practices that restrict the amount of breastfeeding at the breast. Such practices give breastfeeding and natural child spacing a bad name. We're here today to tell you that breastfeeding when done right does work as a natural birth spacer.

Here is some of the natural baby spacing research in certain areas of the world. Among the Canadian Eskimos, traditional breastfeeding spaced births naturally. Conception, not childbirth, occurred at 20 to 30 months postpartum due to traditional breastfeeding. When the trading posts came to the Canadian Eskimos, the Eskimo mothers were introduced to the bottle. The use of the bottle among breastfeeding Eskimo mothers reduced the frequency and duration of breastfeeding, and these mothers were now conceiving 2 to 4 months after childbirth. In fact, the closer the mothers lived to the trading posts, the sooner their babies came. They completely lost the natural spacing they previously had through traditional breastfeeding.

Dr. Otto Schaefer, one of the two doctors who did much of the fertility research among the Canadian Eskimos, attended an Eskimo women's conference, and it was the first time he heard the mothers complaining because babies were coming rather quickly. With traditional breastfeeding, babies were well spaced and families averaged 3 to 4 children. From this experience, Dr. Schaefer taught that 1) "breastfeeding had a greater influence on the life and health of infants than any other single factor," and 2) that "the traditional Inuit custom of

breastfeeding until the age of three years...provided an effective type of birth control," and 3) that "lactation allowed for a desirable spacing of children." ¹³

Dr. Schaefer published in 1971, and our first work was published in 1972. A number of studies have corroborated these findings.

In a 1974 Rwanda study, different groups of breastfeeding mothers had different conception rates. In the rural areas 75% of breastfeeding women <u>conceived</u> between 24 and 29 months postpartum, while in the city 75% of the mothers were conceiving between 6 and 15 months postpartum. According to the researchers, the reason the rural mothers conceived much later was due to the fact that they remained with their babies while the city mothers were developing nursing patterns closer to Western cultural nursing and leaving their babies with others.¹⁴

In 1976 Dr. R. V. Short of Scotland stated: "Throughout the world as a whole, more births are prevented by lactation than all other forms of contraception put together." He continued his studies of certain tribes and mammals and in 1984 concluded that frequent nursing is the norm, that is, that the frequent suckling stimulus is the "crucial" factor for postpartum infertility. 16

In 1980 Konner and Worthman reported that a tribe living in the Kalahari Desert in southern Africa had a natural birth spacing of 44 months due to their mothering and frequent nursing pattern. On average, the mothers in this study were conceiving 35 months postpartum. The babies of this non-contraceptive tribe remained physically close to their mothers day and night during their first two years. The researchers concluded that frequent breastfeeding was the likely key to the child spacing of these people.¹⁷

In 1985, Dr. James Wood at the University of Michigan's Population Studies Center studied a New Guinea people, the Gainj, where the child nursed day and night and always slept with his mother. The breastfeeding episodes were short and frequent. These people did not practice contraception or abortion. Their average birth interval was 44 months with an average family size of 4.3 children.¹⁸

The year 1986 saw two publications on breastfeeding and natural child spacing. Both researchers concluded that the most important factor for extended breastfeeding amenorrhea is night feeding associated with bed sharing between mother and baby.¹⁹

In the 1990s Dr. William Taylor studied the frequency of breastfeeding and infertility and concluded that it is the <u>short intervals</u> between feedings that delays ovulation. Mothers who nursed with long feedings and <u>long intervals</u> between feedings tended to ovulate earlier. Those mothers who nursed frequently with <u>shorter intervals</u> between feedings were more likely to ovulate later. His 72 American mothers who tended to follow the more natural pattern of breastfeeding averaged 14 months of postpartum infertility.²⁰

In 1999, Dr. Taylor found that in one of his study groups, the "median waiting time to first menses was 12.8 months." In this paper he drew this conclusion: "Stated positively, when babies (1) sleep with the mother, (2) are held close to the mother's body, and (3) accompany her everywhere, the resulting easy access to the breast may be a causative factor in the ecology of breast-feeding's contraceptive effect."²¹

However, sometimes not everything that is found in a study is published. In personal correspondence, Dr. Taylor gave us some further refined results regarding this study. He wrote: "When we eliminated [from our study results] mothers who returned to work outside the home, did not let their baby sleep with them at night, introduced solids before six months and nursed less than a median of 9 times a day in the first three months, we ended up with a group that might be said to follow the natural mothering norm. For these 55 mothers the median wait to their first menses was 15.9 months."

Just as the reproductive cycle is at rest during pregnancy, the reproductive cycle is also at rest for a lengthy period of time during breastfeeding – if you take nature as the norm. Sheila remembers well her favorite physiology teacher in high school stressing that the end of the reproductive cycle is not childbirth but breastfeeding. Unfortunately, many nursing mothers have their menstruation return soon after childbirth. But if you take nature as the norm, having menstruation return early is the exception. Extended breastfeeding infertility is the norm.

Someone might ask "How many mothers become pregnant before their first period?" In 1895, basically a non-contraceptive time, this question was researched by Dr. Leonard Remfry who reported that 5.77 percent of the women in his study became pregnant before a first postpartum menstruation.²³ In 1969 a similar rate of 5.4% was found in Rwanda.²⁴ In 1971, Dr. Konald A. Prem, a professor of Obstetrics and Gynecology at the University of Minnesota, studied this question and found "only five percent" of his breastfeeding mothers became pregnant before a first menstruation.²⁵ The studies of Dr. Remfry and Dr. Prem are available at the website of NFP International.

Conclusions.

- 1. When teaching about breastfeeding and its relationship with natural baby spacing, it is imperative to distinguish the types of breastfeeding. The kind of breastfeeding that is common in Western culture provides very little postponement of the return of fertility and is not associated with natural baby spacing.
- 2. Ecological Breastfeeding IS a form of natural baby spacing. The Seven Standards of ecological breastfeeding are maternal behaviors associated with an extended breastfeeding amenorrhea, a time without menstruation after childbirth. The two key factors are mother-baby togetherness and frequent and unrestricted suckling. For an ecologically breastfeeding mother to go one or two years without menstruation is perfectly normal. To experience breastfeeding amenorrhea beyond two years is not abnormal and is typical in some cultures.
- 3. Every woman and every man have a God-given right to learn the wonderful health benefits that God has built into the breastfeeding relationship and how these are maximized through ecological breastfeeding.

Ecological breastfeeding offers many benefits to both mother and baby, even years later after the breastfeeding has ceased. In the NFP International user's manual, *Natural Family Planning: The Complete Approach*, you will find a list of 21 very specific health advantages for babies plus another six general advantages such as fewer sick days and higher scores on cognitive and IQ tests at school age. You will also find two lists of advantages for breastfeeding mothers.²⁶

More benefits of breastfeeding are discovered every year. At the website of NFP International, in the upper right corner for "blogs", you can find the Breastfeeding Research articles for the years 2013 and 2014.

- 4. Every woman and every man have a basic God-given right to know about the Seven Standards of Ecological Breastfeeding. This option should be taught to older students and couples worldwide, especially in the Catholic Church.
- 5. Because natural birth spacing through ecological breastfeeding is important for the well-being of babies and mothers, the Catholic Church should be insisting that every engaged couple learn about ecological breastfeeding well before they are married. When couples realize the benefits of mother-baby togetherness, this can influence some of the decisions they make. To afford living on one income after the first baby comes, they may decide to live in a lower priced house and to buy less expensive furniture. No one can force such decisions, but if they want to do what is best for their children, many well informed couples might order their priorities accordingly.

- 6. Many couples and priests are extremely grateful for this knowledge because they had never heard about breastfeeding and natural child spacing before. Some couples then use only breastfeeding to space their children.
- 7. God's plan through ecological breastfeeding involves no abstinence. On the other hand, some couples using systematic NFP sometimes complain about the abstinence.

Every Natural Family Planning program ought to teach the evidence-based Seven Standards of Ecological Breastfeeding. It is not sufficient just to recommend breastfeeding in general in a natural family planning course. In such courses, it is essential to distinguish between the kind of breastfeeding that DOES space babies and the kinds that DO NOT or at least greatly limit the duration of breastfeeding amenorrhea.

- 8. Teachings about "continued" or "extended" breastfeeding are insufficient and backwards because they take us back to the "Total Breastfeeding" talk of the mid-1960s. Such talk ignores all the research done since then. Also some natural family planning organizations tell the exclusively breastfeeding mother to chart a few weeks after childbirth. These organizations seem to ignore the ample research done on exclusive breastfeeding in many sites throughout the world.
- 9. Catholic bishops need to ensure that every NFP program that is operating under any sort of diocesan approval or endorsement teaches the Seven Standards of Ecological Breastfeeding. And if bishops really want what is best for their mothers and babies, they need to require them to participate in the **right kind** of natural family planning course. This is the course that encompasses Catholic moral teaching, the New Evangelization, all the common signs of fertility, and the Seven Standards of Ecological Breastfeeding.²⁷ It is not consistent to talk about evidence-based systems of fertility awareness and to ignore the evidence-based Seven Standards of Ecological Breastfeeding.
- 10. Our Catholic bishops and priests need to proclaim authentic Catholic teaching on love, marriage and sexuality including ecological breastfeeding with confidence and joy. When they provide the right kind of practical help, they will be more believable. The right kind of cooperation between the hierarchy and the laity can help the Church to rebuild Christian civilization throughout the world.

² Kippley, J. and Kippley S. "The Relation Between Breastfeeding and Amenorrhea," *Journal of Obstetrics, Gynecologic and Neonatal Nursing,* 1:4, November-December 1972.

⁵"Consensus Statement: Breastfeeding as a Family Planning Method," *The Lancet*, November 19, 1988.

¹http://www.nfpandmore.org/reviewbreastfeeding.shtml.

³ Kippley, J. and Kippley S. "The Spacing of Babies with Ecological Breastfeeding," *International Review of Natural Family Planning*, Spring/Summer 1989.

⁴ http://www.nfpandmore.org/nfpresearch.shtml.

⁶ Perez, A., Labbok, M., and Queenan, J. "Clinical study of the lactational amenorrhoea method for family planning," *The Lancet*, Vol. 339, April 18, 1992.

⁷ Personal conversation with breastfeeding researcher Miriam Labbok at Science, Faith & Human Fertility conference, Milwaukee WI 2002.

⁸ http://www.nfpandmore.org/links.shtml.

⁹ World Health Organization, "Infant and young child nutrition," Fifty-Fifth World Health Assembly, April 16, 2002.

¹⁰ Hildes, J. and Schaefer, O. "Health of Igloolik Eskimos and Changes with Urbanization." Paper presented at the Circumpolar Health Symposium, Oulu, Finland, June 1971.

¹¹ Schaefer, Otto. "When the Eskimo Comes to Town," Nutrition Today, November-December 1971.

¹² Hankins, Gerald. *Sunrise Over Pangnirtung: The Story of Otto Schaefer, M.D.,* Calgary, Alberta: The Arctic Institute of North America of the University of Calgary, 2000, 192.

¹³ Ibid, 180.

Bonte, M. et al., "Influence of the Socio-Economic Level on the Conception Rate During Lactation," *International Journal of Fertility*, 19 (1974) 97-102.

¹⁵ Short, R. "The Evolution of Human Reproduction," *Proceedings of the Royal Society of London,* 195, (1976) 3-24.

¹⁶ Short, R. "Breast Feeding," Scientific American (April 1984) 35.

¹⁸ Wood, J. "Lactation and Birth Spacing," *Journal of Biosocial Science*, Supplement, 9 (1985) 159.

²⁰ Taylor, W., et al. "Post-Partum Anovulation in Nursing Mothers," *Journal of Tropical Pediatrics* (December 1991) 286-292.

²¹ Taylor, H. W., et al, "Continuously Recorded Suckling Behaviour and It's Effect on Lacational Amenorrhoea," *Journal of Biosocial Science*, 1999, 31, 296; 308.

²² Taylor, W. Personal correspondence, May 27, 1998.

Remfry, L. "The Effects of Lactation on Menstruation and Pregnation," *Transactions of the Obstetrical* Society of London, 38 (1897) 22-27. Available at http://www.nfpandmore.org/remfrys_article_1895.pdf. ²⁴ Bonte, M. and van Balem, H. "Prolonged Lactation and Family Spacing in Rwanda," *Journal of Biosocial*

Science, April 1969, 97-100.

²⁵ Prem, K. "Post-Partum Ovulation," Paper presented at the La Leche League International Conference, Chicago, July 1971. Available at http://www.nfpandmore.org/Postpartum_ovulation_prem.pdf.

²⁶ Natural Family Planning: The Complete Approach, Chapter 6, 103-104.

¹⁷ Konner, M. and Worthman, C. "Nursing Frequency, Gonadal Function, and Birth-Spacing Among !Kung Hunter-Gatherers," Science (February 15, 1980) 788.

Howie, P. "Synopsis of Research on Breastfeeding and Fertility," *Breastfeeding and Natural Family Planning*, Bethesda, Maryland: KM Associates, 1986; Elias, M., et al, "Nursing Practices and Lactation Amenorrhea," Journal of Biosocial Science, January 1986.

²⁷ Teaching list of "Your Right to Know" at http://www.nfpandmore.org/right_to_know.shtml.