

INTERNATIONAL REVIEW OF

---

# NATURAL FAMILY PLANNING

---

**A New Health Care Initiative for the Church**

*R. L. Walley*

**A Prospective Study of the Preselection of the Sex of  
Offspring by Timing Intercourse Relative to Ovulation**

*John T. France et al.*

**Moral and Philosophical Implications of Sex-Preselection**

*Donald DeMarco*

**Breast-feeding and the Ovulation Method: A Needed  
Means of Ecologically Sound Child-spacing**

*M. Francesca Kearns*

**Use-Effectiveness of the Creighton Model of NFP**

*Joanne Doud*

Volume IX, Number 1

Spring 1985

\$5.50 a copy

---

---

# Breast-feeding and the Ovulation Method: A Needed Means of Ecologically Sound Child-spacing

---

M. Francesca Kearns

## Introduction

Breast-feeding is an integral part of the reproductive process, a natural and ideal way of feeding the infant and a unique biological and emotional basis for child development. This, together with its other important effects on the prevention of infections, on the health and well-being of the mother, on child-spacing, on family health, on family and national economics, and on food production, makes it a key aspect of self-reliance, primary health care and current development approaches.<sup>27</sup>

**I**N THE past decade there have been many reports that women in the developing world are abandoning the custom of breast-feeding their children in favor of bottle-feeding. The interest of demographers has been aroused because of the possible impact on population growth; the length of time a mother continues to nurse her baby can affect the spacing and number of additional children she has. These changes are not only concerns of the demographers but also of all health practitioners in the promotion of maternal/child health.<sup>23,29</sup> The purpose of this paper is to examine the importance of breast-feeding, reasons for its decline,

---

Sister M. Francesca Kearns, C.C.V.I., R.N., M.A., is a missionary who has been teaching the Billings Ovulation Method in El Salvador and Guatemala for the past ten years. She was the chief teacher for the WHO Multicentre Study of the Ovulation Method in El Salvador.

its integra  
promoting

Breast-  
and an im  
of develop  
ing indica

1. Bre:  
the
2. Bre:
3. Bre:
4. Bre:

For rural  
and is ver  
trance for  
other asp  
quires the  
the bottle  
ment and  
the cost o  
300 U.S.  
may dilut  
of clinic v  
The poor  
The decre  
is related  
buy form  
extra mor  
have been

Accord  
ticians in  
of breast-  
serious co  
by the W  
17 percent  
presented  
couples an

its integration with natural family planning, and new ways of promoting this combined health strategy.

Breast-feeding is the best form of nutrition for the young infant and an important way of child-spacing, especially in rural areas of developing countries. Studies on breast milk and breast-feeding indicate that:

1. Breast milk provides some immunological protection for the infant.
2. Breast milk best satisfies the infant's nutritional needs.
3. Breast-feeding costs less than feeding with substitutes.
4. Breast-feeding is effective in child-spacing.<sup>28</sup>

For rural populations, breast-feeding has a special acceptability and is very inexpensive. Its acceptability provides a natural entrance for professionals in health education in the promotion of other aspects of maternal/child health care. Bottle-feeding requires the purchase not only of the breast milk substitute, but also the bottle and nipple. It requires fuel for sterilization of the equipment and, ideally, refrigeration. These costs vary, but generally the cost of adequate feeding for the first year of life costs \$200-300 U.S. dollars.<sup>28</sup> In order to avoid these costs, poor families may dilute the formula. To these expenses must be added that of clinic visits, transportation, medicine, and increased mortality. The poor have a right to know the risks that bottle-feeding implies. The decrease in breast-feeding and shortened time given to it is related to the number of women who go to work, in order to buy formula and have someone take care of their baby. The little extra money earned is spent on health care, which might not have been necessary if the mother was home to breast-feed.

According to Short, the failure of health personnel and politicians in developing countries to appreciate the full significance of breast-feeding for infant health and birth-spacing has had serious consequences for developing countries. Recent studies by the World Health Organization (WHO) estimate that only 17 percent of couples in developing countries use the traditionally presented methods of contraception. Thus 83 percent of the couples are entirely dependent on natural regulation of their fer-

tility, and, by far, the most important of these is breast-feeding.<sup>23</sup> These investigations also indicate that breast-feeding has prevented more pregnancies in developing countries than all the traditional forms of artificial methods combined.<sup>27.15</sup>

#### Breast-feeding and Birth Regulation

The use of traditional artificial methods pose two problems during lactation. Their sporadic use or early discontinuance may displace the fertility regulation of breast-feeding and postpartum abstinence and would lead to the paradoxical effect of shortening the birth interval.<sup>2</sup> Secondly, some of the methods have an adverse effect on the quality and quantity of the mother's milk which may also lead to her abandoning breast-feeding because the child is not satisfied. Hormonal preparations tend to be excreted in small quantities in the milk. The long-term effects on the child have not been determined.<sup>22</sup> Investigations on the use of the IUD (intrauterine device) during lactation indicate an increase in uterine perforation.<sup>10</sup>

Although there is a reduced likelihood of conception during lactational amenorrhoea, couples who wish to avoid a further pregnancy should have knowledge of effective means of identifying the return of fertility.

It is precisely here that two natural methods of fertility control join hands. The Ovulation Method (OM) uses the presence of cervical mucus as an indicator of days of fertility. This sign of fertility, sometimes referred to as fertility awareness, can be identified with reliability by women.<sup>25</sup> Thus, the Ovulation Method as in all other circumstances, gives the women the information by which she can know and understand her present infertility and her possible returning fertility. If she detects some mucus, she has some possibility of fertility. If she has no mucus, she has no possibility of fertility.<sup>12</sup>

There are many complementary bonds between the Ovulation Method and breast-feeding.

---

#### Breast-feeding it:

- Provides antiseptic diseases and
  - Provides for nutrition by the c
  - Gives the n... feeding the c
  - Is psycholog... and child.
  - Provides a... mother and
  - Means that t... when the bal... pacify him v
  - Is reassuring... that her bod... her child.
  - Is the best, c... nutrition in... where conta... environment
  - Is culturally... women who... prefer to use
  - Is acceptable
- 

The Ov... countries ar... month of... educational... natural pro... to rural co... it has a the

#### Breast-f

The imp... of young in... benefit of s

---

**Breast-feeding is best for health because it:**

- Provides antibodies against childhood diseases and other infections.
- Provides for better absorption of nutrition by the child.
- Gives the mother time to rest while feeding the child.
- Is psychologically best for the *mother and child*.
- Provides a special bond between mother and child.
- Means that the mother is less irritable when the baby cries if she can quickly pacify him with breast-feeding.
- Is reassuring to the woman to know that her body makes the best food for her child.
- Is the best, cheapest, and safest infant nutrition in a developing country, where contamination of food in the environment is likely to cause infection.
- Is culturally acceptable to the rural women who respect mother nature and prefer to use her ways and means.
- Is acceptable to all religious groups.

**Ovulation Method is the best for health during lactation because it:**

- Eliminates the need for methods that might cause a decrease in milk quantity and quality.
  - Is the only natural method that measures pre-ovulatory infertility.
  - Provides an opportunity for the couple to participate in the promotion of maternal/child health, since the couple decide how much time and space they need to care for a child and regulate their fertility accordingly.
  - Is reassuring to the woman to know that she can identify at any time if she is fertile or infertile.
  - Is a positive orientation to infertility as a rest time, which may be helpful to the couple in the future in dealing with problems of infertility, such as in menopause or in the case of surgery causing infertility.
  - Costs nothing and provides a greater sense of control and tranquility which can increase the production of milk.
- 

The Ovulation Method has been tested in many developing countries and can be learned by 93 percent of women in the first month of observations regardless of cultural background and educational level. Because it implies a collaboration with the natural processes rather than their frustration, it is very acceptable to rural communities. If the instructions are followed carefully, it has a theoretical effectiveness of 98-99 percent.<sup>25</sup>

**Breast-feeding, Family Planning, and the Responsibilities of Health Practitioners**

The importance of breast-feeding for the nutrition and health of young infants has been emphasized in recent times.<sup>23, 26, 27</sup> The benefit of several months of breast-feeding stems from its nutri-

tional value and the capacity of maternal milk to protect against infectious agents of the diarrhoeal syndrome. This advantage of breast-feeding is of greater relevance for the developing countries where the diarrhoeas are the most important health problems. Knowledge of the physiological benefits of the practice is essential for health professionals interested in convincing mothers to breast-feed. However, recent studies found a low level of knowledge of these benefits among health workers.<sup>20,27</sup> Popkin reports in his survey that almost all workers felt that breast-fed babies are healthier than bottle-fed babies. However, on the question of the importance of colostrum, traditional midwives believed colostrum provided no special benefits. In the same survey, only 10 percent of modern practitioners shared this belief. Over half of the midwives and two-thirds of the health aides agreed with the proposition that the formula "cleanly prepared and given in sufficient quantities is as good as breast milk."<sup>20</sup> Thus rural women who are exposed mainly to midwives and health aides are likely to encounter health practitioners who, despite an almost unanimous belief that breast-fed babies are healthier than bottle-fed ones, are still willing to equate formula to breast milk. The same survey by Popkin reported that when health personnel were questioned on the treatment of engorged breasts, many of them, especially the traditional midwives, indicated that they would counsel the mother to stop breast-feeding for a few days. The WHO survey indicated that women who delivered at home or who had no prenatal care were more likely to breast-feed.<sup>27</sup>

The health practitioner should be able to explain the let-down reflex, the importance of suckling to breast milk production, and methods to overcome inverted nipples, especially for a first-time mother. This valuable information is necessary to help her breast-feed successfully. On the other hand, health workers may contribute indirectly to such problems as insufficient milk by giving inappropriate advice or by teaching faulty breast-feeding techniques.<sup>20,28</sup> This issue requires additional research to pinpoint health professionals' role in helping mothers overcome these problems.

**Breast-**

The rev  
tility reduc  
especially i  
guidelines i  
into family  
programs r  
accurate id  
to run para  
the fertility  
health prac  
effective ir  
this subject  
that breast-  
ception for  
The same a  
tion Metho

**Family**

can play a  
feeding by:

1. Provi  
wom
2. Provi  
expla
3. Helpi
4. Chan  
lactat  
ward:

These meas  
feed and he

**Promo**

Given th  
mendations  
it behooves  
extend its ]

### Breast-feeding and the Integration of the Ovulation Method

The review of the literature adequately documents the fertility reducing effect of breast-feeding. The promotion of health especially in rural areas is likewise well documented. Practical guidelines in the integration of the promotion of breast-feeding into family planning practice and other maternal child health programs need to be developed. Modern developments in the accurate identification of the ovulation period can be introduced to run parallel with breast-feeding practice in order to maximize the fertility control of the latter. There is a growing need to orient health practitioners on the importance of breast-feeding and its effective influence on fertility control and to publish more on this subject. For example, a recent book on contraception states that breast-feeding is not a highly reliable method of contraception for the individual unless she uses complete abstinence. The same author then gives inaccurate instructions on the Ovulation Method which would certainly render it ineffective.<sup>9</sup>

Family planning and maternal and child health programs can play a very practical and positive role in encouraging breast-feeding by:

1. Providing information and support for breast-feeding to women and their families throughout prenatal care.
2. Providing radio programs for the rural populations that explain and reinforce their health practice of breast-feeding.
3. Helping to solve breast-feeding problems.
4. Changing hospital and clinic routines to help establish lactation and to eliminate artificial feeding from maternity wards, except when indicated for strictly medical reasons.<sup>28</sup>

These measures can increase both a woman's motivation to breast-feed and her ability to do so successfully.

#### Promoting Breast-feeding and Natural Family Planning: Strategies for Changes

Given the evidence in the scientific literature and the recommendations from organizations concerned with public health, it behooves health workers to promote breast-feeding and to extend its potential for fertility control by combining it with

simple means of ovulation detection. To promote these changes, it is preferable not to focus on the many issues that make the hospital system a rigid institution. Rather it is desirable to challenge them to promote the best principles of maternal/child health care through the new knowledge that is developing on natural family planning and breast-feeding. For example, recent studies relate breast-feeding to the prevention of future myocardial infarction. It has been reported that breast milk has a satiation factor which helps the child take just enough milk for its caloric requirements, thus avoiding a tendency toward obesity in the future. Also colostrum has high levels of cholesterol, which the infant's body learns to absorb, providing a well developed capacity to do so when it is older.<sup>24</sup> With this and similar information health personnel can be challenged to be enthusiastic about the preventive aspect that has always been implicit in maternal/child health, but sometimes is not expanded in light of the new scientific findings. Recently a family health practitioner stated that it is easy for her to turn to natural family planning, because it presupposes health teaching and some anticipatory guidance that was implied in other forms of family planning, but somehow became lost in the technology.

In planning change in health services and educational programs that could promote breast-feeding and natural family planning, several principles can make this process more successful:

1. Concern for the benefit of the ultimate user and of society; thus the focus is on expanding our ability to apply new knowledge in the service of maternal/child programs.
2. Respecting strongly held values of others: This is usually remembered when treating patients, but must also be remembered when asking health practitioners to change. The changes proposed must be related to the ethical values that they espouse in their profession, for example, the ethic of "do no harm." The use of bottle-feeding versus breast-feeding in rural areas has been well-documented to do harm.

3. Those who participate in the program should be trained in the use of the program and in the use of the program.
4. Reinforce the program in the family.
5. Respect the change in the program with appropriate application.

The whole point of the program is to provide an environment in which the problem of the program or person can be monitored through formal channels and agents to identify the problem.

During the process of change that inhibits the change, no longer is it women who are the imperative and be able to health. The Method program. It is a rural world or health program.



3. Those affected by change have a need and right to participate in decisions for the change. It is important that they be encouraged to do their own research in this area and then help to decide how they can implement procedures indicated to bring about the needed changes.
4. Reinforce a strong sense of identity with the promotion of family health especially preventative and health education.
5. Respect existing institutions; do not ask all of them to change. Rather, enthusiastically share the new information with them that might be helpful to a more meaningful application of their own program.

The whole institution cannot be changed immediately, therefore, it is important to identify a part of the organization and environment that has a primary concern with or relationship to the problem. This group could include nurses in prenatal clinics or personnel working with a newborn nursery. It is important to monitor the responses to change either informally or through formal channels and surveys. This information enables the change-agent to identify new resistance and problems.

During the final stage of change effort, organizational factors that inhibited the original effort now work in favor of formalizing the change. The new program that is carried out with success is no longer resisted and often adds prestige to the institution. As women continue to read and participate in self-care programs, it is imperative that health practitioners be likewise well informed and be able to help and guide them in the promotion of their own health. The combination of breast-feeding with the Ovulation Method provides an exciting program for health self-management. It is ecologically sound and need-oriented for much of the rural world. This potential is not dependent on medical models or health practitioners, but could be helped and guided by them.

References

- 1 Baer, E. and Winikoff, B., eds. "Breastfeeding: Program Policy and Research Issues." *Studies in Family Planning* 4, April 1981.
- 2 Bordes, A., et al. "The Impact on Breastfeeding and Pregnancy Status of Household Contraceptive Distribution in Rural Haiti." *American Journal of Public Health*, 72, 1982, 835-838.
- 3 Bennis, W. G., et al. *The Planning of Change*. New York: Holt, Rinehart and Winston, 1976.
- 4 Brager, G. and Holloway, S. *Changing Human Service Organizations*. New York: Free Press, 1978.
- 5 Cronin, T. J. "Influence of Lactation upon Ovulation." *Lancet* 2, 1968, 422-424.
- 6 Curtis, E. "Oral Contraceptive Feminization of Normal Male Infant." *Obstetrics and Gynecology* 23, February, 1964, 295-296.
- 7 Ebrahim, G. J. *Practical Mother and Child Health in Developing Countries*. London: Macmillan, 1979.
- 8 Gross, B. A. and Eastman, C. J. "Prolactin and the Return to Ovulation in Breast-feeding Women." Paper presented at Research Seminar on Breast-feeding, Family Planning, and the Return of Ovulation, Manila, Philippines, August 8-11, 1983.
- 9 Hatcher, R. A., et al. *Contraceptive Technology 1984-1985*. New York: Irving Publishers Inc., 1984.
- 10 Heartwell, S. F., and Schlesselman, S. "Risk of Uterine Perforation among Users of Interuterine Devices." *Obstetrics and Gynecology*, 61, January 1983, 31-36.
- 11 Hollen, K. "Attitudes and Practices of Physicians Concerning Breast-feeding and Its Management." *Journal of Tropical Pediatrics*, 1976, 288-93.
- 12 Kearns, M. F. "Teaching the Ovulation Method to Breast-feeding Mothers in Rural Communities of Latin America." *Bulletin: Natural Family Planning Council of Victoria, Australia*, March, 1982, 7-12.
- 13 Kent, M. M. "Breast-feeding in the Developing World: Current Patterns and Implications for Future Trends." *Reports on the World Fertility Survey 2*. Population Reference Bureau Inc., June 1981.
- 14 Kippley, S. *Breastfeeding and Natural Child Spacing*. New York: Harper & Row Publishers, 1974.
- 15 Konner, M., Worthman, C. "Nursing Frequency, Gonadal Function and Birth Spacing among !Kung Hunter Gatherers." *Science*, 207 February, 1980, 788-791.
- 16 Lawrence, R. A. *Breastfeeding: A Guide for the Medical Professional*. St. Louis, Mosby Company, 1980.
- 17 Mata, L. J., et al. "Breast-feeding, Weaning and Diarrhoeal Syndrome in a Guatemalan Indian Village." *Acute Diarrhoea in Childhood*, Ciba Foundation Symposium, July 1976.
- 18 Mosely, W. H., Osteria, T., Hoffman, S. L. "Interaction of Contraception and Breastfeeding in Developing." *Journal of Biosocial Science*, 4, 1977, 92-111.
- 19 Popkin, B. M., Bilsborrow, Akin John S. "Breastfeeding Patterns in Low-Income Countries." *Science*, 218, December, 1982, 1088-1093.
- 20 Popkin, B. M. "Traditional and Modern Health Professionals and Breastfeeding in the Philippines." Forthcoming in *Journal of Pediatric Gastrology and Nutrition*.
- 21 Rolland, R., et al. "The Role of Prolactin in the Restoration of Ovarian Function during the Early Postpartum Period in the Human Female." *Clinical Endocrinology*, 4, 1975, 15-25.
- 22 Rosa, F. W. "Resolving the Public Health Dilemma of Steroid Contraception and Its Effects on Lactation." *American Journal of Public Health*, 66, 1976, 791-792.

23 Short, F  
 24 Walsh, 'Natural  
 25 Wilson, trand R  
 26 Waterlo ing." La  
 27 World I on the V  
 28 "Breast-ber-Dec  
 29 "Breast-

This is a



- 23 Short, R. V. "Breast Feeding." In Press, *Scientific American*, 1983.
- 24 Walsh, W. F. "The Science and Art of Breast-feeding." *International Review of Natural Family Planning*, VII, Winter, 1983, 281-305.
- 25 Wilson, M. A. *The Ovulation Method of Birth Regulation*. New York: Van Nostrand Reinhold Company, 1981.
- 26 Waterlow, J. C., Thomson, Am. "Observations on the Adequacy of Breastfeeding." *Lancet* 2, 1979, 238-242.
- 27 World Health Organization. *Contemporary Patterns of Breast-feeding*. Report on the WHO Collaborative Study on Breast-feeding, Geneva, 1981.
- 28 "Breast-feeding, Fertility and Family Planning." *Population Reports*, 9, November-December, 1981.
- 29 "Breast-feeding." *Annales Nestle*, 39, Nestle, 1977.

## This Publication is available in Microform.



### University Microfilms International

Please send additional information

for \_\_\_\_\_  
(name of publication)

Name \_\_\_\_\_

Institution \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

300 North Zeeb Road  
Dept. P.R.  
Ann Arbor, Mi. 48106