

Knowledge and Opinions of Postpartum Mothers About the Lactational Amenorrhea Method: The Turkish Experience

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Abstract

Objective: This study was performed to investigate mothers' opinions and knowledge about the contraceptive feature of breastfeeding.

Background: Breastfeeding is quite beneficial in terms of mother, baby, and public health. Although it has long been known to have a contraceptive effect and although it is common in many countries, women usually do not use it as a contraceptive method.

Materials and Methods: This is a descriptive study and included 400 mothers in their early postpartum period. Data were collected with a questionnaire at face-to-face interviews within 3 days of giving birth. Obtained data were analyzed with descriptive statistics.

Results: One third of the mothers were primiparous and 66.5% of the mothers had breastfeeding experience. Of these, 38.9% of the mothers said that they received knowledge about the contraceptive effect of breastfeeding and 68.9% of these mothers received this knowledge from a nurse. Seventeen percent of the mothers receiving this knowledge reported that breastfeeding was a contraceptive and 1.8% of the mothers reported that it was sometimes contraceptive. Around 41.3% of the mothers thought that they would be able to use breastfeeding as a contraceptive method. Almost all the mothers wanted to get information about the contraceptive feature of breastfeeding.

Conclusions: As our research shows, four of every five mothers in their early postpartum period turned out to believe that breastfeeding was not contraceptive, although the mothers are very eager and ready for this information. Therefore, it is important that health professionals providing antenatal and postnatal counseling about breastfeeding and contraception should offer women accurate information about this method.

Keywords: postpartum period, breastfeeding, lactational amenorrhea method, mothers

Introduction

BREASTFEEDING, HAVING MANY BENEFITS for mother, baby, and public health, has a contraceptive effect. It has been proved since 1990s that certain physiological changes during lactation prevent women from becoming fertile again.¹ So that the lactational amenorrhea method (LAM) can be an effective contraceptive method, women have to fulfill certain criteria. First, the baby should be younger than 6 months of age. Second, the woman should have amenorrhea. Third, the baby should be fed on only or nearly completely breast milk. If these criteria are met, the woman has a very low risk for becoming pregnant within 6 months of labor.¹⁻³

The LAM is a modern, simple, and effective contraceptive method which women can use in the postpartum period. It is also knowledge based and depends on women's awareness of importance of breastfeeding and transient suppression of fertility. In addition to its safety and effectiveness, it has some other benefits. It does not require any drugs, instruments, or procedures. It can be under the control of women and their spouses and helps women to gain awareness of fertility.⁴ However, the LAM has some limitations. First of all, women have to receive effective counseling about the principles of its use as research has shown that only a very low number of women reporting to use breastfeeding as a contraceptive fulfilled the third criterion for the LAM¹ and that the reason

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for becoming pregnant while breastfeeding is insufficient knowledge and ineffective practices of the method.⁵ The LAM is a temporary method which women can utilize for only 6 months of the postpartum period. Therefore, it is not appropriate for women not planning or unable to feed their babies with breast milk only.

One of the most important factors affecting postpartum women's selection of contraceptive methods is the reliability of the methods. The LAM is a reliable method and does not affect breastfeeding. However, the fact that it is not used widely suggests that women do not have sufficient knowledge about this method or do not fulfill the criteria to use it. In a study on contraceptive methods used by breastfeeding women from Egypt whose babies were younger than 6 months of age, 52.1% of the women were found not to use any contraceptive methods, only 24.2% of the women met the criteria for the LAM, 34% of the women were not amenorrheic despite breastfeeding and 41.8% of the women were amenorrheic, but did not exclusively breastfeed.⁶ Another study in Egypt showed more than 60% of the breastfeeding women having had unplanned pregnancy reported to believe that the LAM prevented them from becoming pregnant although they did not fulfill all three criteria for the LAM.⁷ In Turkey, although breastfeeding is a widespread behavior, very few women use the LAM as a contraceptive and know about this method (0.1–1.8%).^{8–10} Although 52% of the women said that they used the LAM, only 21% of them satisfied the criteria for this method in Niger.¹¹ In a study in Turkey, although one third of the women having babies younger than 6 months of age (34%) commented that they avoided pregnancy by using the LAM, only 17.2% of these women fulfilled all three criteria for this method.⁵ These studies indicate that women are not aware of the criteria they have to fulfill to use the LAM and even violate the principles of the method. In addition, the very low number of women using the LAM is suggestive of their unwillingness to exclusively breastfeed.

In Turkey, it is required by regulations that women have to be followed minimum four times during their pregnancy by health professionals. It is expected that they should be informed about family planning methods and breastfeeding during these follow-ups.¹⁰ However, Turkey Demographic and Health Survey 2013¹⁰ has shown that 18% of the women giving birth have another birth within a period of fewer than 24 months and that 9.5% of the babies, 4–5 months of age, are exclusively breastfed. It has also been pointed out that only 0.1% of the women thought that they would use breastfeeding as a contraceptive. In that study, although most of the women received prenatal care, about one of every five women had short intervals between their pregnancies and that very few women used the LAM.¹⁰ This suggests that they did not trust contraception provided by breastfeeding since they started to feed their babies with food in addition to breast milk earlier and did not have sufficient knowledge about the contraceptive effect of breastfeeding.

Breastfeeding is a traditional attitude, but it is not used as a contraceptive method in Turkey. One reason may be that routine counseling for contraception usually involves intrauterine devices, pills, condoms, and tubal ligation, but does not include injections, diaphragms, implants, and natural contraceptives such as LAM. However, if women's awareness about the LAM is raised, some of them may use it. In

Turkey, it is known that 74% of the married women use contraceptives. The contraceptive most frequently used by women in Turkey is withdrawal (25.5%), followed by intrauterine devices (16.8%).¹⁰

There have been few studies on the LAM use in Turkey and there have not been any studies about knowledge, opinions, and needs about the LAM. Revealing mothers' knowledge and opinions about the LAM can allow making realistic plans to increase rates of using this method. This study was conducted to show what mothers in their early postpartum period know and think about the contraceptive effect of breastfeeding.

Materials and Methods

The study has a descriptive design and was conducted on women in their early postpartum period between January and April in 2014. The study was carried out in a baby-friendly, obstetrics and pediatrics hospital, where about 4,000 births occur every year in a developed city in the west of Turkey. All mothers are briefly informed about breast milk and breastfeeding by nurses or midwives after labor. Mothers having vaginal birth stay in hospital for a minimum of 24 hours and those having cesarean section stay in hospital for at least 72 hours and then discharged.

The study was carried out in a state hospital in a developed city having a high rate of education and high income. There were 4,080 births in the hospital in 2013. Based on 95% confidence interval, at least 352 mothers were expected to be included into the study sample. Four hundred women fulfilling the following inclusion criteria formed the sample: giving birth through cesarean section or vaginal route, going through the postpartum 3 days, completing a gestational period of 37 weeks, giving birth to a live baby, having rooming in babies, having no health problems and the baby with no health problems, and volunteering to participate in the study.

A questionnaire was prepared by the researcher in light of the literature. It was composed of 15 questions about demographic features, prior experiences about breastfeeding, and criteria for and opinions about the LAM. Data were collected at face-to-face interviews with the mothers in the postpartum 1–5 days before their discharge. Data collected were analyzed with Statistical Package Program for Social Sciences 18.0 and evaluated with descriptive statistics.

Ethical approval was obtained from the Ethics Committee of the Hospital to conduct the study. The mothers included in the study were informed about the aim of the study and they all gave both oral and written informed consent.

Results

Of 400 mothers, the youngest and the oldest ones were 15 and 43 years of age. The mean age of the mothers was 26.98 ± 5.54 years. Demographic characteristics of the participants are presented in Table 1. Table 2 outlines the participants' receiving counseling about the LAM. Table 3 summarizes the participants' opinions about the contraceptive effect of breastfeeding and criteria for the LAM.

Out of all the mothers, 6.5% were adolescents, 9.3% were older than 35 years, and 63.3% were primary school graduates. One of every three mothers was living either in a village, a town, or a city and most of the mothers were unemployed (82.3%). The number of births ranged from 1 to 9. One-third

TABLE 1. DEMOGRAPHIC CHARACTERISTICS OF THE MOTHERS

Characteristics	n (%)
Age groups (years)	
≤19	26 (6.5)
20–35	337 (84.3)
≥36	37 (9.3)
Education level	
Illiterate	29 (7.3)
Literate	15 (3.8)
Primary school	253 (63.3)
High school	66 (16.5)
University	37 (9.3)
Employment status	
Working	71 (17.8)
Not working (housewife)	329 (82.3)
Number of births	
1	129 (32.2)
2	155 (38.7)
3	73 (18.3)
4 or more	43 (10.8)
Prior breastfeeding experience	
Yes	266 (66.5)
No	134 (33.5)

of women were primiparas and all of the multiparous women had experience in breastfeeding. Thus, 66.5% of the mothers had experience in breastfeeding (Table 1).

Of these, 38.9% of the mothers received information about the contraceptive effect of breastfeeding and two of every three women receiving information got it from a nurse (68.9%). Almost all the mothers gave the answer “yes” to the question “would you like to get information about the contraceptive effect of breastfeeding?” (Table 2).

About half of the mothers reported that breastfeeding is not a contraceptive and about one third of the mothers admitted that they did not know about it. The percentage of the mothers reporting that breastfeeding is a contraceptive (17%) and sometimes contraceptive (1.8%) was very low. Breastfeeding was found to be contraceptive for 6 months by only 33.3% of

TABLE 2. RECEIVING COUNSELING ABOUT THE LACTATIONAL AMENORRHEA METHOD

Receiving counseling about the LAM	n (%)
Have you received information about the LAM before?	
Yes	103 (38.9)
No	297 (61.1)
Who did you get information about the LAM from? (n = 103)	
Nurse/midwife	71 (68.9)
Doctor	6 (5.8)
Friend	23 (22.3)
Nursing/midwifery student	3 (2.9)
Would you like to get information about the LAM?	
Yes	382 (95.5)
No	18 (4.5)

LAM, lactational amenorrhea method.

TABLE 3. THE MOTHERS' OPINIONS ABOUT THE CONTRACEPTIVE EFFECT OF BREASTFEEDING AND CRITERIA FOR THE LACTATIONAL AMENORRHEA METHOD

The mothers' opinions	n (%)
Does breastfeeding have a contraceptive effect?	
Yes	68 (17.0)
No	190 (47.5)
I do not know	135 (33.8)
Sometimes	7 (1.8)
How long does the contraceptive effect of breastfeeding last? (n = 75)*	
I do not know	6 (8.0)
Shorter than 6 months	15 (20.0)
6 months	25 (33.3)
6–12 months	18 (24.0)
24 months	11 (14.7)
Does the contraceptive effect of breastfeeding persist when a woman starts to have menstrual bleeding? (n = 75)	
I do not know	16 (21.3)
Yes	16 (21.3)
No	43 (57.4)
Does breastfeeding have a contraceptive effect when the baby feeds on additional food? (n = 75)	
I do not know	20 (26.7)
Yes	14 (18.7)
No	41 (54.6)
Does the contraceptive effect of breastfeeding persist when the baby is not breastfed? (n = 75)	
I do not know	25 (33.3)
Yes	10 (13.3)
No	40 (53.4)
Criteria for the LAM (n = 75)	
Women knowing all the criteria	6 (8.0)
Women not knowing all the criteria	69 (92.0)
Opinions about the contraceptive effect of breastfeeding (n = 75)	
Very effective	10 (13.3)
Quite effective	31 (41.3)
I do not know	32 (42.7)
Effective to some extent	2 (2.7)
Do you think of using the LAM as a contraceptive method? (n = 75)	
I do not know	4 (5.3)
Yes	31 (41.3)
No	40 (53.4)

*This question was asked to the women who marked the responses “yes” and “sometimes” to the question “Does breastfeeding have a contraceptive effect?”

the mothers. It was reported not to have a contraceptive effect by 57.4% of the mothers when a woman started to have menstrual bleeding, by 54.6% when the baby started to eat additional food, and by 53.4% of the mothers when the baby was not breastfed at nights. Only six mothers (8%) knew all three criteria which are necessary for breastfeeding to be contraceptive. More than half of the mothers thought that breastfeeding is an effective/very effective contraceptive method. About 41.3% of the mothers reported that they would be able to use the LAM as a contraceptive method

(Table 3). All six mothers who know the LAM criteria had high school and upper education, and two of them were primiparas, and only one of them had been previously given information by student nurse about LAM.

Discussion

In the present study, which was performed to reveal knowledge and opinions of mothers about the contraceptive effect of breastfeeding, about half of the women in their early postpartum period did not think that breastfeeding was a contraceptive and a considerable number of women (33.8%) did not know whether breastfeeding was a contraceptive. Out of a very small number of the mothers agreeing about the contraceptive effect of breastfeeding, many were found not to know about criteria for the LAM and very few mothers had accurate information about contraception provided by breastfeeding.

About 61% of the mothers said they had not got information about the LAM before. This indicates that the mothers were not told by health personnel about the LAM during pregnancy. This can be considered as a missed opportunity to inform mothers about benefits of breastfeeding. According to Turkey DHS 2013, one of every four postpartum women aged 20–29 years give birth again in shorter than 24 months.¹⁰ For this reason, it is important to offer information about contraceptive methods and contraception which could be provided by breastfeeding to all pregnant women. A study by Özsoy-Gökdemirel et al.¹² in Istanbul revealed that only 4% of the mothers received information about benefits of breastfeeding although they attended antenatal follow-up visits ten times on average. In Bangladesh Population and Health Study,¹³ 9% of the married women noted that they had heard about the LAM before. A study conducted in Italy showed that 40.1% of women did not receive counseling about family planning methods during antenatal or postnatal periods.¹⁴ Consistent with the literature, the present study revealed that the mothers' knowledge about the LAM was insufficient.

However, counseling for importance of breastfeeding and contraceptive methods is an important part of both antenatal and postnatal care. Giving information about the LAM in the antenatal and postnatal periods to the women thinking that only breastfeeding is sufficient for contraception and not using any other contraceptives can prevent them from becoming pregnant again in a very short time. Emphasizing exclusive breastfeeding as one of the criteria for the LAM can lengthen the duration of breastfeeding and exclusive breastfeeding since one of the most important problems with nutrition of babies in Turkey is initiation of giving food other than breast milk to babies. According to demographic studies, only 10% of the 5-month-old babies are breastfed and 0.1% of the women use breastfeeding as a contraceptive.¹⁰ In Turkey, there are over 1 million births every year. Offering information about the LAM can increase the number of the women using the LAM correctly and the number of the babies exclusively breastfed and contribute to the country's economy.

In the current study, although 39% of the mothers reported to get information about the contraceptive effect of breastfeeding, only 18.8% of the mothers marked the responses "yes" (17%) and "sometimes" (1.8%) to the question "does breastfeeding have a contraceptive effect?" However, out of

all the mothers reporting to receive information, more than three fourth of the mothers said they got the information from health professionals. These findings suggest that the mothers might have been told that breastfeeding was not a contraceptive. Nurses, midwives, and a small number of doctors and nursing students, offering information about the LAM, might have thought that the women might not be able to fulfill the criteria for the LAM and might experience unwanted pregnancies. Furthermore, even if the women had been supplied accurate information about the method, they might have forgotten about it or disregarded it. It seems that antenatal counseling for family planning methods does not work well and that mothers are provided insufficient counseling. In a study conducted with women having unwanted pregnancies, all the women knew about the LAM and 40% of them learned it from a health professional.¹⁵ Şentürk Erenel et al.⁸ also showed that about 86% of the women had knowledge of contraceptive methods and that more than half of them got it from health staff. They also reported that only 1.8% of the women used breastfeeding as a contraceptive method.⁸ In a study conducted in Turkey, 82.5% of the women said that breastfeeding was not a contraceptive.¹⁶ The results of the present study seem to be compatible with other studies and suggest that the women were not informed about the LAM sufficiently.

Out of 75 mothers reporting that breastfeeding is a contraceptive and sometimes contraceptive, only six (8%) knew all the criteria for the LAM. In a study reviewing results of population and health studies from many countries performed between 1998 and 2011, only 3.7% of the women reporting to use the LAM knew the criteria accurately.¹ In a study by Ekpenyong et al.¹⁵ on postpartum women reporting to use the LAM but having an unwanted pregnancy, 36.6% of the women knew the criteria for the method, but only 14% of them implemented the criteria. Similarly, in a study conducted in Egypt, 42% of the mothers in their early postpartum period noted that breastfeeding prevented pregnancy; however, only 5% of these mothers knew three criteria for the LAM.¹⁷ A study from Bangladesh showed that 32.5% of the women using the method knew its three criteria.¹⁸ Türk et al.⁵ revealed that one third of the women preferred the LAM for contraception and that a considerable rate of these women (82%) found this method sufficient. However, they added that only 17.2% of the women using the LAM fulfilled the criteria for this method.⁵ The results of the current study are consistent with the results reported in the literature. In fact, the women had knowledge of the contraceptive effect of breastfeeding, but did not know the criteria necessary for the LAM to be effective.

In the present study, although six mothers reporting that breastfeeding is contraceptive knew the criteria for the LAM completely, 13.3% of them found it very effective and 41.3% found it quite effective. Although they did not know all the criteria necessary for the method to be effective, they noted that breastfeeding was an effective contraceptive and that a little more than half of the women reported that breastfeeding was not a contraceptive when they had menstrual bleeding, when their baby started to eat additional food, and was not breastfed at night. Seemingly, they thought that exclusive breastfeeding could be an effective contraceptive method. This supports the findings reported by Türk et al.⁵ and Kouyate et al.¹⁸

Another finding of the study showed that almost all the mothers wanted to get information about the LAM. The postnatal period is an important chance for compensation of missed opportunities to provide knowledge in the antenatal period. Result of the previous researches defined that postnatal counseling for the LAM increased adoption and use of the method by women.^{19–21} As a result, provision of accurate information can help women to decide to use breastfeeding as contraception.

Conclusions

To conclude, most of the mothers included in the study had no knowledge of the LAM. About half of very few women reporting to have knowledge about this method thought that breastfeeding was an effective contraceptive. However, only six of these women knew the criteria for the LAM. In addition, mothers are not given sufficient information about the method in the antenatal period and almost all the mothers would like to get information about it. The counseling in antenatal and postnatal periods, not only about LAM but also about general contraceptives, seems to be neglected. Therefore, nurses and other health professionals should create opportunities to discuss and give counseling on contraceptive effect and benefits of breastfeeding in the antenatal and postnatal periods. In fact, whether interests, knowledge, and working conditions of health personnel are eligible for LAM counseling could be a new research topic.

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Disclosure Statement

The authors report no conflicts of interest.

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