

PROMOTION OF BREASTFEEDING IN THE POSTPARTUM MOTHER*

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The declining trend in the proportion of breastfed babies observed in recent decades has been successfully reversed in some countries as a result of efforts towards creating a public consciousness of the biological superiority of breast milk¹. Unfortunately, the decline in breastfeeding is still continuing in some developing countries, particularly in urban areas. Rapid urbanization, marketing, advertising and promotion of formulas, insufficient action by governments to promote breastfeeding, lack of knowledge or lack of interest in nutrition can be listed among the causes of this trend²⁻⁷.

Influencing the parents to acquire a positive attitude towards breastfeeding can be most effective during the pregnancy or prepregnancy periods. However, in regions where health services are inadequate in quantity and quality, this aspect of antenatal care is often neglected.

This study was designed to investigate the effect of enlightenment of the postpartum mother on the advantages of breastfeeding using a preprogrammed, systematic approach. The mothers were also subjected to a questionnaire, aiming to assess their level of knowledge on nutritional requirements and on feeding practices of young infants, their expectations with regard to personality development and the future achievements of their babies, and their attitude towards their newborn baby.

Material and Methods

The study was carried out on a random sample of 89 postpartum women at the Obstetrics and Gynecology Department of the Istanbul Faculty of Medicine. Preterm and/or complicated deliveries were not included in the series. The ages

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of the postpartum women ranged from 17 to 35 years, and parity of the group ranged from 1 to 4. All the mothers were free of known metabolic diseases as evaluated by history and physical examination. The gestational ages of the newborn babies ranged from 38 to 40 weeks. The mean weight of the newborns was 3.3 ± 0.4 kg (range 2.8 to 4.0 kg). All babies were clinically well at birth.

The mothers were randomly divided into three groups. The 40 mothers of the first group were approached immediately after delivery, interviewed and given information on the advantages of breastfeeding. A period of approximately 40 minutes was spent with each mother during the first interview, during which a personal contact was established with the mother and she was asked questions on principles of infant feeding, the source of this information, her attitude towards breastfeeding, any relationship she thought existed between breastfeeding and the child's performance, and her thoughts on planned parenthood and on the experience of having a baby. The last 5 – 10 minutes of the interview were spent in enlightening the mother on the advantages of breastfeeding with emphasis on women's ability to breastfeed, and on the higher frequency of diseases such as diarrhea and protein energy malnutrition in infants deprived of mother's milk. The enlightenment session was repeated during the second and third postpartum days. After discharge, the mother-infant pairs were seen at monthly intervals. During these visits a fresh effort was made to convince the mothers to continue breastfeeding. The 14 mothers in the second group were similarly interviewed and briefed on the advantages of breastfeeding, but at a single session after delivery. The mother-infant pairs of this group were seen by the team a second time at the end of the third month. The 35 mothers of the third group were given no information on the advantages of breastfeeding and were not contacted by the team until the end of the first four weeks, at which time they were interviewed and assessed. Chi square and Student's *t* tests were used in the analysis of the results.

Results

The mothers constituted quite a homogeneous group with respect to their socio-economic and cultural level. There were no differences of statistical significance among the three groups regarding the educational levels of the parents, social class, or parity ($p \geq 0.50$). When the group was taken as a whole the mothers were of low socio-economic status according to criteria used by several teams in Turkey⁸. The majority of the mothers were primary school graduates; 17% were illiterate. Most of the mothers (80%) were housewives. The fathers were semi-skilled workmen or engaged in small-scale trade. The mothers had practically no information about nutritional requirements in infancy. Only 25% of the mothers were able to answer simple questions relating to breastfeeding or substitute milk products or to the expected weight gain of an

infant. When asked about the benefits of breastfeeding, very few mothers could adequately explain its nutritional and emotional values; however, 82% of the mothers had been informed about birth control and 73% were determined to apply it in the future. Their expectations concerning the future of their newborn were centered around higher education and traditional moral values. In most cases the emotional conditions surrounding the pregnancy and delivery were not very favorable : 49% reported severe emotional problems during pregnancy such as family strife or being beaten by their husbands, and 38% evaluated their delivery as extremely stressful. A surprising 63% were disappointed by the sex of their babies and 29% expressed various degrees of resentment towards their children.

Episodes of diarrhea and/or major infection occurred in four infants. One of these infants was from group 1, and the other three from groups 2 and 3. The percentages of exclusively breastfed babies at different stages are shown for each group in Table I. As can be seen, by the end of the third month the percentages of infants receiving mother's milk only were 95%, 50% and 20% respectively for the first, second and third groups ($p < 0.001$).

TABLE I
Percentages of Exclusively Breastfed Infants in Each Group

	<u>Group I (40)</u>	<u>Group II (14)</u>	<u>Group III (35)</u>
1st month	77.5	—	31.4
2nd month	92.5	—	28.6
3rd month	95.0	50.0	20.0

3rd month : $X^2 = 43.4746$, $p < 0.001$

Table II indicates the mean weight and height for each group of infants from birth through the third month. There were no statistical differences between the weights and heights of the infants in the different groups although weight and height in the first group were slightly greater than in the third group. The mean weight gains (MGVU = g/day/kg) of the infants in the first group were found to be high in comparison to the third group after the first month (Table III)⁹, but these differences did not reach a significant level before the age of three months. Based on the mother's reported observations, no differences could be established between the behavior of the infants in the three groups. However, it must be remembered that the mothers as a group lacked information about, and sensitivity towards, the nuances of behavior in such young infants.

TABLE II
Weight and Height Measurement in Each of the Three Groups*

	Group I (29)		Group II (14)		Group III (25)	
	Weight (kg)	Height (cm)	Weight (kg)	Height (cm)	Weight (kg)	Height (cm)
Birth	3.3±0.3**	50.2±1.2	3.3±0.4	50.3±1.3	3.3±0.4	50.1±1.5
1st month	4.0±0.4	54.7±1.7	—	—	4.0±0.5	53.8±2.4
2nd month	5.0±0.5	60.3±1.5	—	—	4.6±0.6	58.5±2.7
3rd month	5.8±0.5	65.1±1.6	5.8±0.6	62.4±2.6	5.3±0.6	63.4±3.3

* There is no significant difference between the groups.

** Mean ± SD

TABLE III
Weight Gains (MGVU) for the First and Third Groups (g/day/kg)*

	Group I (29)	Group III (25)
Birth – 1st month	7.0±2.6**	7.9±3.4
1st – 2nd month	7.6±2.2	5.6±1.3
2nd – 3rd month	6.2±1.4	5.8±2.2

* There is no significant difference between these values.

** Mean ± SD

$$\text{MGV} = \frac{[\text{Measurement value at each age}] \text{ minus } [\text{Measurement value at previous age}]}{\text{Time (in days) of period between the two ages}}$$

$$\text{MGVU} = \frac{\text{MGV}}{\text{Measurement value at previous age}}$$

Discussion

This simple experiment on the effect of a systematic educational effort in promoting breastfeeding proved to be surprisingly successful. The proportion of breastfeeding was significantly higher in the first group of mothers. It had been possible to establish a good communication with all these mothers during the conversations held on three consecutive days following delivery. Table I shows that the decreasing trend in the percentage of breastfed infants at the end of the first month is reversed following the visit. Indeed, when these mothers brought in their babies for the first visit, it was noted that they had started offering supplements to their infants. This supplementation was started upon the advice of close "experienced" relatives in most instances. During the visit the team was able to convince the mothers that this was quite unnecessary.

There were no significant differences in weight gain in the three groups of infants although the breastfed group did show a relatively higher weight gain.

The results of this study indicate that in Turkey there is a need for health education emphasizing breastfeeding in schools and in the prepregnancy and pregnancy periods. The study also shows that the immediate postpartum days are a vulnerable period during which mothers of a low level of education can be approached and enlightened effectively on the practice of breastfeeding.

Summary

This study was designed to investigate, by means of structured interview and follow-up, how informed a group of lower middle class mothers were on the nutritional needs of young infants and to investigate the effect of enlightening the postpartum mother on the value of breastfeeding. The study was carried out on 89 postpartum women, divided into three groups. The first group were approached immediately after delivery and the sessions with the mothers were repeated during the second and third postpartum days. The second group were briefed in only one session, and the third group were given no briefing. At the end of the third month, the percentage of infants receiving breast milk only was 95% in the first group, 50% in the second, and 20% in the third. There was no significant difference in weight gains in the different groups, and no difference could be established between the behavior of the infants in the three groups.

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