

BREAST FEEDING IN PRIVATE PRACTICE¹

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WIDELY recognized benefits from breast feeding have been numerous reported. Of these Grulee (1) and Naish (2) emphasized the importance of the transfer of immunity and the lessened tendency to become allergic (3). Many have stressed the convenience and intangible psychological advantages to both mother and child (2, 4). Even while recognizing the advantages of breast feeding there is a defeatist attitude towards breast feeding in the physician (2, 4). In the first place he seemingly thinks it is impossible and in the second place his knowledge of the physiology of lactation is so vague that he misses his opportunities to help the nursing mother at the times she needs him most. The mothers who can nurse do so without substantial medical advice while a large number are lost due to the physician's indifference to the problem. The first purpose of this paper is to show that breast feeding can be done in private practice and the second purpose is to show how it is accomplished.

During the past 4 years 409 infants were cared for by me from the time that the umbilical cord was cut until they were at least 10 months of age. Those infants and their mothers are called the study group. A control group consisting of 596 cases were also cared for by me in my office during the same period of time but did not come under my care until after breast feeding was fairly well established or stopped altogether. Since this group was handled by more than one pediatrician no consistent scheme of management can be reported but, all other conditions being the same, it serves as a control for the methods of management in the study group. The discussion outlined below is devoted to the methods used by the author in the study group.

1. *The First week.*

a. The mothers were not asked if they wanted to nurse, but during a discussion of the advantages of breast feeding it was assumed that they would try even if they did not want to and even if they had been unsuccessful on a previous occasion. Of the 409 cases in the study group, 11 or 3 per cent, refused. Three of these 11 refusals were because of the husband's objections which were made in person.

b. During an examination of the breasts, the mother was taught the technique of hand expression in which she grasped her breast as shown in the photograph (fig. 1). She was instructed to hand express colostrum before and after the baby came to breast. Later, when the milk had come in, she was told to hand express until the milk came out in a stream before putting the baby to breast.

c. The length of time of nursing was limited to one minute. The mother was instructed to hold the baby's nose to make him stop nursing rather than to pull him off the nipple. Both breasts were nursed each feeding. The time of nursing was usually increased one minute per day, depending upon the mother's complexion, shape of nipple and parity.

d. The full-term well babies were taken to breast routinely for practice nursing two or three times the first day, four the second day, five times the third day, and six times the fourth day on a 4-hour schedule including 2:00 a.m.

e. After the first 24 hours all babies were offered water every 4 hours after nursing. After the fifth day, if the head nurse felt that a particular baby was crying too much at a particular time, an occasional bottle of 1 oz. of breast milk or formula was offered. A total of 56 babies, or 14 per cent, received some formula in the hospital. In general it was

¹From the Department of Pediatrics, Northwestern University Medical School. Read before the Chicago Pediatric Society as an Inaugural Thesis, February 20, 1951. Received for publication, June 5, 1951.

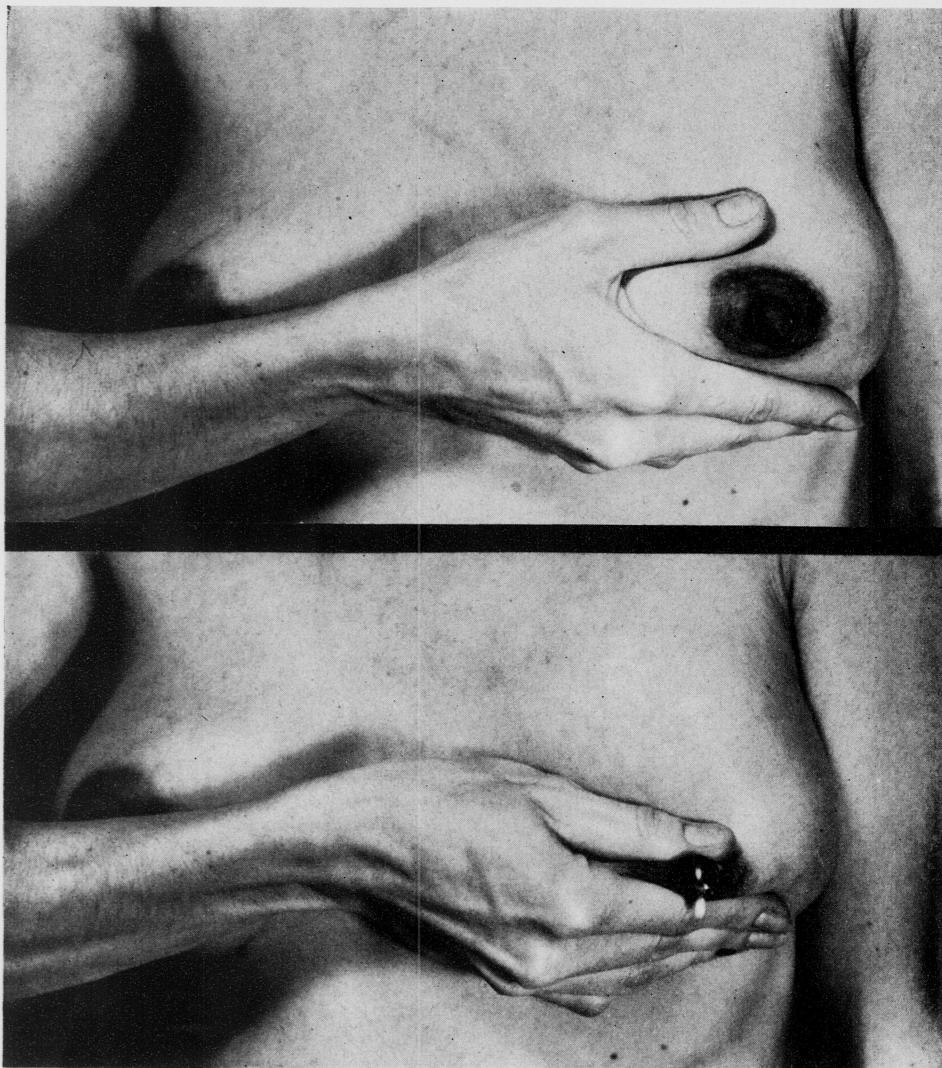


Fig. 1. Note thumb and forefinger are held stiffly. Also, it is less painful if rhythmical motion of thumb and forefinger, held stiffly, parallels ribs rather than pulls out nipple.

the aim to give nothing but water after nursing for the first week of life.

f. It was considered quite compatible with successful nursing if a mother on her fifth post partum day, produced only 5 oz. per day (an average of less than 1 oz. per feeding) provided she rose in production on her seventh post partum day to 7 oz. per day (an average of little over an ounce per feeding). In addition to a good diet and fluid intake for the mothers, beer and wine were prescribed in the

hospital, when possible, to ease worries and dull the pain of stitches. Three of the mothers, who produced on the average only $\frac{1}{2}$ oz. per feeding on the seventh day, rose to full breast feeding, 6-7 oz. per feeding, during their second month of nursing.

g. I visited each mother daily while she was in the maternity pavilion. Purposely I came early before the babies were weighed so that I was not tempted to reveal a day-by-day weight loss to an

anxious mother. The physiology of lactation was explained in as much detail as I thought that she could absorb. In almost every instance I learned to feel optimistic about the mother's ultimate ability to nurse her baby.

2. *The second week.*

a. A didactic schedule of rest was outlined for every mother.

1. For the first 3 days she was instructed to spend most of her time in bed because mothers tend to become depressed and lose their milk before lactation has really begun.
2. For the first month she was told to take 3 one-hour naps.
3. After the first month, and for as long as she nursed, she was to take 2 one-hour naps or 1 two-hour nap each day.

b. It would seem fair to estimate that 76 per cent of the mothers who were successful in nursing followed these instructions more than 75 per cent of the time.

c. Except where there were cultural aversions, beer, wine, highballs or cocktails were discretely encouraged before the rest periods.

d. For the most part the baby determined the schedule for nursing. From 6 to 12 nursings per day were frequent during the first month.

e. The mothers were instructed to nurse from both breasts each feeding—about 10 minutes from each breast.

3. *Second to eighth week (danger weeks).*

a. If the baby cried a lot, even after being breast fed 12 times per day, cereal, particularly Pabena because it is oatmeal and of fine consistency, was recommended, in amounts varying from 1 to 4 table-spoonsfuls in dry measure mixed with expressed breast milk or boiled water or boiled cow's milk, anywhere from one to four times daily. An attitude of as much and as often as necessary was recommended. If the babies would not take the cereal before the breast, the mothers

were instructed to nurse the baby from one breast for 5 minutes, then give all the cereal the baby would take and nurse the baby to sleep from the other breast. Frequently ripe banana or other fruit was added, or the cereal was sweetened with sugar. In the study group almost every nursing baby on some days received cereal or banana once or twice. In about 15 per cent, where the breast milk was abundant, it was discontinued after 2 months when breast milk production was established. In those instances both mother and infant seemed to do better if no extra solid food was prescribed until the breast milk had begun to wane.

b. If the baby still cried after frequent breast and solid feedings, atropine and phenobarbital was prescribed for the baby and a mild alcoholic drink or sedative with bed rest for the mother. The mother was encouraged to take the baby to bed with her when fretful and let the baby lie across her abdomen for about $\frac{1}{2}$ hour, then nurse again until he went to sleep.

c. Ordinarily, the baby was weighed only once or twice each week; but, if still restless after a few solid feedings and 10-12 nursings per day, a 24-hour test weighing was requested. Complementary feedings were usually prescribed when less than two ounces of breast milk was obtained per nursing and when the daily total was less than 2-2 $\frac{1}{2}$ oz. per pound of body weight. Complementary formula was usually prescribed in 4-oz. quantities after the low points in nursing which usually occurred in the evening. Supplementary formula was prescribed in 6-oz. quantity if the low point in nursing fell below 1 oz., but in such instances the mothers were urged to nurse additionally six or more times per day. These large quantities of formula were found to be more practical after several mothers stated that it seemed to take about 6 oz. of formula to keep a baby almost as happy as he would be after 3 oz. of breast milk obtained from the breast directly or from a bottle.

4. *After eight weeks*, breast feeding was considered to have been established. Most of the mothers who had been

successful had become firm converts to breast feeding and were enjoying nursing their babies four times daily. About 10 per cent were nursing four times daily by the fourth week. For the most part they had learned how to overcome the two great obstacles to breast feeding: *worry* and *fatigue*. The danger weeks had passed. The decline in the percentage of breast feeding was less steep, but in both groups most of the mothers lost their milk because of fatigue from too much housework and outside activities, or they deliberately allowed themselves to lose their milk because of a contemplated trip or vacation. Illness in the mother was relatively unimportant in causing her to lose her milk more than temporarily if she really wanted to keep it. In the study group one mother had gall bladder attacks, another Herpes Zoster, two had mumps, three hemorrhaged requiring curettage, and several had grippe. In every instance the babies continued to breast feed after due assurance; while

similar circumstances in the control group caused the babies to be weaned immediately.

5. Weaning.

Mothers were encouraged to nurse for eight months. However after the second month of nursing if a mother's milk supply dropped to one ounce or less consistently at any one feeding, she was allowed to omit that nursing and substitute a bottle. Almost invariably the 6:00 P.M. breast feeding was the first to go. The next was the 2:00 P.M., then the late morning, and last the early morning. Then she nursed every other day, then every third, fourth, and fifth day, and finally stopped. Almost all the mothers took about a month to wean.

RESULTS

The differences in the percentages nursing are tabulated below:

	STUDY GROUP 409 Cases	additional formula	CONTROLS 596 Cases	additional formula
REFUSED TO NURSE	3%		2%	
STOPPED NURSING IN HOSPITAL	4%		32%	
NURSING WHEN LEAVING HOSPITAL	93%	12%	66%	12%
" AT 2 WEEKS	84%	12%	57%	18%
" AT 1 MONTH	70%	12%	46%	19%
" AT 6 WEEKS	62%	10%	38%	14%
" AT 2 MONTHS	54%	8%	33%	13%
" AT 3 MONTHS	46%	9%	26%	10%
" AT 4 MONTHS	39%	6%	18%	5%
" AT 5 MONTHS	31%	5%	15%	4%
" AT 6 MONTHS	23%	3%	11%	
" AT 7 MONTHS	17%		7%	
" AT 8 MONTHS	10%		4%	
" AT 9 MONTHS	4%		2%	

The smaller percentage receiving additional formula in the study group is offset by the greater frequency of the early use of cereal and fruit in the study group. It is interesting that in the study group there were only 4 per cent who stopped nursing in the hospital, whereas in the control group there were 32 per cent. Most of the 32 per cent stated that they "tried to nurse for 3 days and did not have enough." In the study group no mother could honestly make such a statement. The differences in the percentages nursing in the study group and

control group are shown by graph (fig. 2).

COMMENT

The approach to the mother had to be artful. An examination of the breasts and a demonstration of the hand expression of the colostrum revealed the type of breast and nipple one had to work with and also the degree of reaction to pain in the mother. If a mother was jumpy when her colostrum was being expressed, one postponed obtaining a complete commitment from her as to whether or not she wanted

SHADED AREA REPRESENTS THE DIFFERENCES IN THE PERCENTAGES NURSING IN THE STUDY GROUP COMPARED WITH THE CONTROL GROUP.

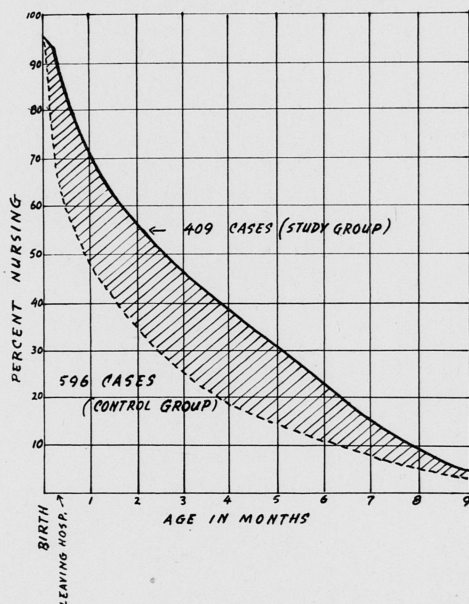


Figure 2

to nurse. It would seem fair to estimate that a third of the primiparae did not care to nurse nor think they could. Obviously no true figures on this point can be obtained short of a complete psychiatric evaluation of every mother. Suffice it to say, many mothers, both primiparae and multiparae, who were unsuccessful in nursing previously, had a decided change in attitude toward breast feeding as soon as they found that they could be successful. Therefore, it was the function of the pediatrician to show mothers how to nurse their babies rather than to ask them if they wanted to. This was all the more important when one considers that a woman's judgment is at its very lowest ebb in the early post-partum period (2). At this time she seemed to do better if her decisions were made for her, especially if she suddenly found her newly awakened mammalian instincts in sharp conflict with a culture that was against breast feeding.

Helping a mother to nurse her baby necessitated a knowledge of the physiology of lactation which might be briefly

reviewed. Naish (2) has conveniently divided this phenomenon into two phases: the flow of breast milk which is primarily nervous and the secretion of breast milk which is primarily hormonal. The afferent nervous impulses from the nipple travel up the cord to the pituitary which releases into the blood an oxytocic substance which causes the smooth muscle in the breast and nipple to contract so that breast milk is observed to flow or squirt from the nipple. The nervous hormonal arc seemed to take one or two minutes in most mothers. The psyche seemed to stimulate the pituitary in the same way because the same phenomenon was observed when the mother heard her baby cry, or when she thought it was time to nurse, or even when she thought about her baby. Likewise, if a mother was nervously upset, the reverse occurred, and in farm language—she would not give down her milk. Then the use of an alcoholic drink or a sedative usually caused, one-half hour later, sufficient euphoria that the flow of breast milk could be re-established again. The secretion of breast milk, which is primarily hormonal, depended upon the withdrawal of breast milk and the reduction of tension within the lobules which allowed more breast milk to be secreted. In this way three mothers had sufficient breast milk to nurse twins, their second pregnancies, when they had just enough to nurse only one their first pregnancies. Also, over feeding adjusted itself and "colic" was usually the result of nervousness preventing the flow of breast milk.

The use of hand expression by the mother in the hospital before each breast feeding put the nervous hormonal arc into operation so that the baby could get something to eat without traumatizing the nipple. During the first few days of nursing the mothers were not allowed to nurse more than one minute from each breast at any one time but were allowed to nurse twice from each breast each feeding. In the past two years in which this regimen was practiced, only one mother had a cracked nipple of degree sufficient to require temporarily taking her baby off the breast. Earlier in the study group series, before hand expression and a limited time for nursing was

routinely practiced, there were more cracked nipples. These results compare favorably with those of Montgomery (5) using a complete self-demand feeding schedule in a rooming-in maternity ward. When the babies were in the same room with the mothers and nursed whenever hungry (ten to fifteen times daily), but for only short periods of time (a few seconds to two minutes), there were practically no cracked nipples.

The steepest fall in the percentage of breast feeding in both the study group and the control group, after leaving the hospital, occurred in the period from the second to the eighth week (fig. 2). In our culture, it would seem to be the most difficult period to guide the nursing mother, taxing the patience and ingenuity of the mother and pediatrician to the very utmost. It is a time when the modern mother feels the need of resuming household and extra familial responsibilities before she has become familiar with her new task and before her natural lactating function has reached its full development. In the study group almost all the primiparous mothers had some trouble during this period from the second to the eighth week. Worry in the primipara and fatigue in the multipara seemed to be the great obstacles. Giving the babies cereal and the mothers reassurance, rest, and a mild alcoholic drink seemed to be the best cures.

There were tremendous individual and day-to-day variations in a mother's ability to produce breast milk the same as

her psyche and hormones varied. Most mothers could nurse if they could be handled properly. Less than 5 per cent were found really wanting in adequate physical equipment to nurse, *i.e.*, glandular tissue, nipple, and hormones. The psyche and the hormonal orchestra seemed to be intangibly related in most instances. Therefore, no matter what the age, attitude, or appearance, all were honestly encouraged. Yet, to feed the baby was the primary object; to get as much breast milk as possible from the mother was secondary.

SUMMARY

1. The efforts in breast feeding of the mothers of 409 infants whom I supervised from birth are compared with those of the mothers of 596 infants handled by other pediatricians.

2. An attempt has been made to describe the methods of management used.

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