

INCIDENCE AND DURATION OF BREAST-FEEDING IN A GROUP OF PRIMIPARAE AFTER PHYSIOLOGICAL DELIVERY

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The mother's milk was for a long time the only source of nourishment for babies in the first months of life, and still today continues to be the best alimentation, in spite of the progress made in the field of artificial alimentation for the new born^(1, 2). The quality of maternal milk has been confirmed by recent scientific research conducted in various parts of the world, and may be schematically summarized as follows:

- 1) practicality, economy and hygiene;
- 2) optimum nutritive value;
- 3) anti-infective potential and less allergicity;
- 4) better mother-child relationship and stimulation to learning and to the initiative of the child (according to some lines of research still continuing).

At the beginning of the 50's a gradual reduction in the frequency of maternal nursing was noted, as documented, among others, by a prospective study carried out in the USA⁽³⁾. Such a tendency was, however, inverted beginning in 1965, and at present a new increase in the incidence of breast-feeding is recorded (AS)^(4, 5). It must however be said that the distribution of the natural alimentation of the breast-fed in the various social groups is different from one country to another, both considered on the one hand in developed countries and on the other in developing countries, also when the comparison is made exclusively among the developed countries. This indicates that the factors favouring or determining BF¹ vary from one society to another^(6, 7).

The same type of trend has been documented for Italy, although the point of inversion of the tendency took place later here than in the USA^(8, 9). Besides, it seems that the frequency of BS continues to be in constant diminution among the rural population. The results of a study conducted in the province of Sassari from 1946 to 1977⁽¹⁰⁾ did not show differences with the average national tendency.

SUMMARY

A study has been performed on the incidence and duration of breast feeding in a group of 103 primiparous women who delivered in the Obstetrics Department of Sassari in 1980.

The most important maternal variables that could be related with breast feeding were maternal age, level of school education, maternal feelings concerning the present pregnancy and maternal information concerning the advantages of breast feeding.

The promotion of BF has to be effected at various levels. In order that these may be better individuated it is in any case essential to ascertain first of all the dimensions of the problem and to single out the principal aspects of our welfare system that may have a positive or negative influence on BF^(11, 12).

The aim of the work is to analyse the distribution of certain variables which may have some relation to BF, in a group of primipare women resident in Sassari who have had a physiological delivery, and afterwards study the relationship between these same variables and the duration of exclusive BF.

MATERIAL AND METHODS

Included in the study were women having the following characteristics: primiparae, resident in Sassari, those who had been delivered in 1980 within the obstetrical structure of the Sassari hospital group, with single physiological delivery and a healthy newborn. The reasons for this choice were dictated substantially by criteria of homogeneity and practicality.

155 women answered to the requisite conditions required out of a total of 2237 live births in 1980, equal to 6.9%.

For the research a questionnaire was used that provided questions on the socio-demographic conditions of the woman, her life during pregnancy, on the immediate postnatal period and on the type of feeding provided in the first months of the baby's life. The interviews were carried out in the period May-June and September-October 1981, with domiciliary visits pre-arranged by letter or telephone, and in our institute. The interviews has previously had a training in common on the way to conduct the interviews and keep them uniform in the collection of data.

RESULTS

The original group of 155 women was reduced successively to 103: in fact in some cases the addresses were incorrect, in 10 cases the families had moved, in 28, in spite of repeated efforts, it was not possible to trace the mothers, and in 5 cases there was refusal to co-operate.

Table 1. — *Principal socio-demographic characteristics of the mothers and their attitudes toward pregnancy.*

	No.	%
Age at delivery:		
≤ 20	15	14.6
21-25	46	44.7
26-30	30	29.1
> 30	12	11.5
Educational levels:		
Elementary	18	17.5
Secondary	32	31.1
High school	33	32.0
Degree	20	19.4
Profession:		
Professional	4	3.9
Teacher-employee	30	29.1
Salaried in general	11	10.7
Independent workers	6	5.8
Students	4	3.9
Housewives	48	46.6
Wanted pregnancy:		
yes	85	82.5
no	18	17.5
Obstetric examinations during pregnancy:		
0-3	32	31.1
4-5	32	31.1
≥ 6	39	37.8

The principal socio-demographic characteristics of the mothers interviewed are reported in table 1. The majority of the women were, at delivery, under 26 years old, and little more than half had a certificate of higher studies; the professional category most represented was that of teachers or employees (about 30% of the total), while in 51% of cases no paid work was done, as these were housewives or students.

Still on table 1 it is notable that in 17.6% of the cases the pregnancies were unwanted, and that in 62% the women had a suboptimal number (that is, less

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Table 2. — *Replies to the question "during pregnancy did anyone speak to you about BF, if so - who?"*

	No.	%
Family	37	35.9
Doctor	5	4.8
Others	5	4.8
Reading	5	4.8
None	51	49.5

Table 3. — *Type of feeding after discharge from the nursery and frequency of breast feeding.*

	No.	%
Discharge feeding:		
Exclusively maternal	80	77.7
Mixed	12	11.6
Artificial	11	10.7
Breast feeding after discharge:		
yes	96	93.2
no	7	6.8

than 6) of obstetrical checks. As will be seen in table 2, fully 51 women had not received, during the course of pregnancy, any information on breast-feeding, and even when this had been supplied it had been preeminently the role of the family rather than that represented by the doctor or the welfare structure in general.

At the moment of discharge from the nursery 77% of the women were exclusively breast-feeding, 11% were practising a mixed feeding, and in only 10.75% of the cases the milk given to the new born was exclusively artificial (table 3).

The motivations for the use of artificial milk were, in order of frequency, insufficiency of maternal milk (69%) difficulty in the baby's suction (17.4%), medical counter-indications towards breast-feeding (8.7%), and anatomic changes in the nipples (4.3%).

However, of the 11 mothers who, at their discharge, were providing artificial

feeding, 4 were later able to give their babies their own milk, as may also be seen in table 3.

The duration of exclusive breast feeding can be seen from table 4. It must be underlined that more than half the women were still nursing exclusively with their own milk at 3 months of life (55.3%) and that this practice was still fairly frequent at 5 months (19.4%). The duration of exclusive BF in relation to maternal age may be seen in table 5. Even with the due prudence deriving from our limited series, it seems to us worthwhile making certain considerations on the data in this table. In the first place, women over 30 showed a lesser tendency to BF, as can be seen by the relative frequency at the time of discharge. Women aged between 21 and 30 are those who tended more to continuing BF in the first 3 months of life; subsequently the frequency of BF in this group was considerably reduced, the contrary of what was observed in the women between 20 and 30 years.

Table 4. — *Frequency of exclusive BF at varying months of distance from delivery.*

	No.	%
1 month	70	68
2 months	67	65
3 months	57	55.3
4 months	33	32
5 months	20	19.4
6 months	10	9.7
Beyond 6 months	2	1.9

Table 5. — *Frequency of exclusive BF at various periods of time from delivery according to the mother's age.*

Years	Discharge %	1 month %	3 months %	5 months %
≤ 20	26.7	66.7	46.7	33.3
21-25	76	73.9	60.9	21.7
26-30	80	66.7	60	6.7
> 30	66.7	50	25	16.7

Table 6. — Frequency of exclusive BF at various periods of time from delivery according to the mother's educational levels.

Studies	Discharge %	1 month %	3 months %	5 months %
Elementary	77.8	66.7	50	22.2
Secondary	75	71.8	50	31.2
High school	87.9	75.8	66.7	12.1
Degree	65	50	45	5

Table 7. — Frequency of exclusive BF at various periods after delivery by number of medical examinations during pregnancy.

Number of examinations during pregnancy	Discharge %	1 month %	3 months %	5 months %
0-3	68.7	59.4	53.1	21.9
4-5	81.2	68.7	50	18.7
≥ 6	82	74.4	59	15.4

This phenomenon might be related to the reassumption of working activity among the intermediate age-group. Table 6 refers to the duration of BF in relation to the mother's educational status. Even in this case interesting considerations emerge. Up to 3 months no great difference was noted among the categories observed; after 3 months there was a marked diminution in BF among women some certificate of higher studies; this could be placed in relation to the return to working activity. It could also be important, however, in this matter, to consider not only the return to work but above all to the type of work undertaken, from the moment that no difference was noted between working mothers and housewives. It must be underlined, finally, that women with degrees were those who nursed the least.

The number of obstetrical examinations effected during pregnancy does not seem to be an important variable in BF, as may be seen in table 7. It is to be remembered in this subject that information on the ad-

vantages of BF supplied during the course of pregnancy was rarely given by doctors.

What is important for BF seems instead the mother's way of living in relation to her pregnancy, as may be seen from table 8. The mothers who were having a wanted child showed constantly, at least up to 3 months, a greater frequency of BF exclusively, and a lower index of decrease from the moment of discharge and the 3 months.

Table 9 demonstrates the exclusive frequency of BF at various ages after delivery in relation to the information received by the mother in the course of her pregnancy. The advantages of the "informed" in relation to the "uninformed" is evident at all ages, and the difference between the two groups, already present at discharge, is accentuated at 3 months, and is met again at 5 months, period in which 30.8% of the informed women were breast-feeding as against 7.8% of the uninformed. On the other hand no difference was noted in the frequency and duration of BF among women who had not received information on its advantages at the moment of discharge from the nursery.

Table 8. — Frequency of exclusive BF at various periods after delivery and maternal attitude in relation to pregnancy.

Pregnancy	Discharge %	1 month %	3 months %	5 months %
Wanted	80	70.6	57.6	18.8
Unwanted	66.7	55.6	38.9	16.7

Table 9. — Frequency of exclusive BF after delivery in relation to information received during the course of the pregnancy itself.

During pregnancy	Discharge %	1 month %	3 months %	5 months %
Yes	92.3	88.5	76.9	30.8
No	62.7	47.1	33.3	7.8

DISCUSSION

The results of our work agree, on general lines, with those in literature. It must be born in mind that the study was conducted at an average distance of time from delivery for about a year, which may have influenced the memories of the mothers interviewed. Besides, the whole group on which the enquiry was carried out had already been selected from the beginning, since it dealt with women who had come to be delivered in the obstetrical departments of the Hospital Group of Sassari; even at the moment of conducting the interview, with the reduction of the original group of 155 participants to 103 the mechanism of the population selection might have intervened, because not all of those seen were of local citizenship. Therefore it is not completely certain that the 103 women interviewed were representative of primipare having had physiological full-term delivery were all of the Sassari population.

The frequency of BF we met is considerably higher than that reported in world literature. In regard to exclusive BF the percentage we found at 4 months (32%) was lower than that reported in the province of Sassari in 1961, the year in which there was a maximum of 64% and in 1976, when the frequency of BF at 4 months was 41 % (10).

The maternal factors that emerge most clearly in relation to BF and its duration are essentially represented by age, educational level and way of life in respect to pregnancy. It would seem that the information situation and the work for motivation give most cause for disquiet, given the fact that these are not supplied by the personnel within the structure of the hospital service, but substantially by the family, which therefore still holds great importance for the incidence and duration of BF. The provisions to be made for an increase in this incidence and duration of BF could be the following:

a) greater information and preparation for the hospital staff on this problem, in order that they might carry out effective work in information and motivation before, during and after pregnancy, and that they be able to pay greater attention to the women's personal lives;

b) that the internal assistential organisation of the hospital allows better conditions for BF; privacy, early and prolonged contact between mother and baby, rooming-in where the structure allows it;

c) instruction and maximum use of para-medical staff, in the maternity and nursery departments, which is where there is the major contact with the mothers;

d) a campaign of information on the advantages of BF directed towards all levels, schools, population in general, and to couples, using the easier and most far-reaching means towards the public, as, for example, television and the press.

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