

LACTATION AND REPRODUCTION

by

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SUMMARY

Breast feeding was almost universal in a group of 807 mothers. Salaried work did not prevent women from breast feeding. Mean duration of lactation was 11.9 months. Lactational amenorrhoea was longer in low income groups. 43.2% of pregnant women were still breast feeding. Mean interpregnancy interval was 30.1 months. About 44% of respondents used contraceptive measures. Condom was used most popularly.

In all mammalian species the reproductive cycle comprises of both pregnancy and breast feeding, in the absence of the latter none of those species, man included could have survived (WHO report, 1984). Epidemiological and laboratory investigations have confirmed the traditional belief that lactation prolongs post-partum amenorrhoea and provides some extent of protection against pregnancy (Prema *et al*, 1981). It is reported that the risk of pregnancy is less than 10% during lactational amenorrhoea (Prema and Philips, 1980). This has important implication especially in third World countries where the availability or acceptability of modern family planning methods may be limited. A comprehensive study was therefore undertaken to obtain detailed information on breast feeding (Natu *et al*). This communication describes some aspects of lactation and reproduction.

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Material and Methods

A questionnaire, prepared on the basis of WHO collaborative study (WHO study 1981) on breast feeding was pretested suitably modified and used for collection of data by personal interview. The study group of 807 families was selected by multistage random sampling from the urban and rural areas of Pune district. Each family had a child of less than 2 years of age. The study was carried out between November 1981 to February 1982 and socio-economic classification was done into A, B, C and R groups as per WHO study (1981).

Results and Discussion

Eight hundred and two out of 807 women studied, breast fed their infants i.e. breast feeding was almost universal. There were about 20% working mothers in the urban and rural groups, most of them doing unskilled work. In the urban elite and middle class group, working

mothers were mainly teachers, clerks and professionals. The proportion of mothers receiving pay, thus contributing towards increase in per capita income was about 25%. Many writers state that salaried work causes women to reject breast feeding. No study including the present one suggests that this is an important impediment (Unicef study, 1981).

As some women were still lactating, enquiry was made about duration of breast feeding in second youngest child. The mean duration of lactation observed was 11.9 months, being higher in C and R groups (13.2 months) as compared to A and B groups (9.7 months). Prema *et al* (1980) report the mean duration of lactation as 19.8 months in their study in low socio-economic groups.

Table I denotes data on lactational amenorrhoea. Three hundred and sixty respondents with various durations of post partum periods, had not experienced return of menstruation till the time of

interview, and hence are not considered. In the remaining (447) there was a marked gradient, return of menstruation occurring later in R groups as compared to A and B groups. It has been shown that 85% of the total variability between countries and groups in respect of return of menstruation can be attributed to differences in breast feeding behaviour (Billewicz, 1979). It was also found that 85% of mothers were breast feeding more than 4 times a day. There is evidence to show that the percentages of women in whom menstruation returns are consistently higher, irrespective of post partum interval, among women who suckle less frequently. Hence, early supplementation to adopt the child to new taste and texture experiences has repercussions on frequency of breast feeding. This in turn affects return of menstruation and thereby the reproductive cycle. Median age at which regular supplementation was done was 5-6 months.

Thirty seven women had confirmed

TABLE I
First Menstruation After Delivery

Study group	Months				Total
	<3	4-5	6-8	9+	
Urban Elite (A)	20 (29.4)	27 (39.7)	11 (16.2)	10 (14.7)	68 (100)
Urban Middle (B)	35 (23.7)	58 (39.2)	32 (21.6)	23 (15.5)	148 (100)
Urban Poor (C)	19 (20.0)	28 (29.5)	28 (29.5)	20 (21)	95 (100)
Rural (R)	8 (5.9)	37 (27.2)	53 (39.0)	38 (27.9)	136 (100)
Total	82 (18.34)	150 (33.56)	124 (27.74)	91 (20.36)	447 (100)

Figures in bracket indicate percentage.

TABLE II
Pregnancy and Breast Feeding

Pregnancy in study group	Urban Elite		Urban Middle		Urban Poor		Rural		Total					
	Still feeding	Not feeding	Still feeding	Not feeding	Still feeding	Not feeding	Still feeding	Not feeding	Still feeding	Not feeding				
No. pregnancy	37	47	1	79	91	3	139	43	227	27	1	482	208	5
Yes	0	4	0	2	5	0	12	9	2	3	0	16	21	0
Confirmed	0	0	0	0	1	0	1	0	0	0	0	1	1	0
Yes	2	0	0	3	0	0	1	0	6	2	0	19	2	0
Not confirmed	0	1	0	1	1	0	8	2	39	0	0	48	4	0
Does not know	39	52	1	85	98	3	168	54	274	32	1	807	307	0
Not stated														
Total														

pregnancy and of these 16 i.e. 43.2% were still breast feeding. In the W.H.O. (1981) study too pregnancy did not preclude the continuation of breast feeding, for in the rural groups of Ethiopia, Zaire and Gautemala and also in B group in India the proportion was of 30% of pregnant lactating women. In Nigeria however, hardly any pregnant women were breast feeding. In 412 respondents there were no pregnancies between the youngest and the second youngest child. In these the mean interpregnancy interval was 30.1 months, being higher in A and B groups as compared to C and R groups (Table III).

As can be seen from Table IV the proportion of mothers using contraception varied widely. W.H.O. (1981) study similarly reveals a wide range from 95% contraceptive users in Sweden to very few in most rural groups except in Chile and Phillipines. In all countries there was a decreasing gradient from group A to group R, as was also found in this study. The types of contraceptive methods used (Table IV) show that in conformity with W.H.O. (1981) study, condoms were popular here as in Sweden and A and B groups in Nigeria. However, oral contraceptives were used fairly widely in the other developing countries but rather rarely in all Indian groups (Natu *et al*). This fact was rather encouraging since it eliminates any possible adverse effects of oral contraceptives on lactation.

It has been computed (Prema and Philips, 1980) that in all developing countries of Asia excluding China, lactation accounted for 35 million women years of protection while all family planning programmes put together accounted for only 24 million women years of protection. So in countries like India, breast feeding

TABLE III
Interval Between Two Pregnancies (in Months)

Study group	< 12	12-17	18-23	24-29	30-35	36-41	42-47	48+	Total
Urban Elite (A) Mean 33 months	2	3	2	8	10	6	5	5	76
Urban Middle (B) Mean 34.5 months	3	3	6	11	20	11	11	11	123
Urban Poor (C) Mean 31.5 months	3	10	25	18	23	15	15	14	172
Rural (R) Mean 26.4 months	16	21	46	33	21	12	11	12	412
Total Mean 30.1 months	24	37	79	70	74	44	42	42	412

TABLE IV
Couple Practicing Family Planning

Study group	Not applicable	Not practising	Condom	Loop	Diaphragm	Pill	Foam and jelly	Rhythm method	Coitus interruptus	Other methods	Total
Urban Elite (A)	17	28	25	8	0	9	0	0	0	5	92
Urban Middle (B)	16	70	58	12	0	13	0	0	0	17	186
Urban Poor (C)	36	100	25	6	0	7	0	0	0	48	222
Rural (R)	14	179	33	6	0	7	0	5	0	63	307
Total	83	377	141	32	0	36	0	5	0	133	807

should be promoted and propogated not only as a safe, simple and cheap method of infant feeding but an easy and natural method of contraception.

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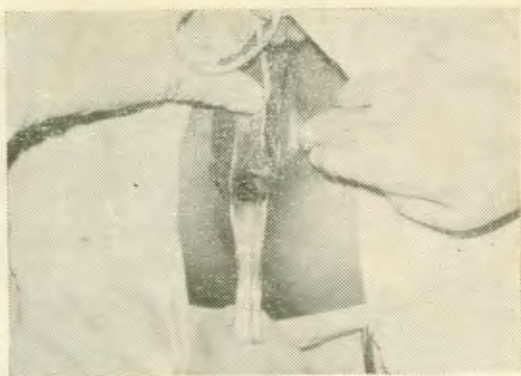


Fig. 1
Showing dissected space.



Fig. 2
Wax mould in place.

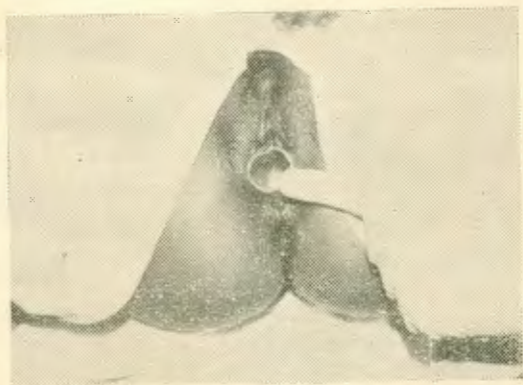


Fig. 3
Acrylic mould in place.

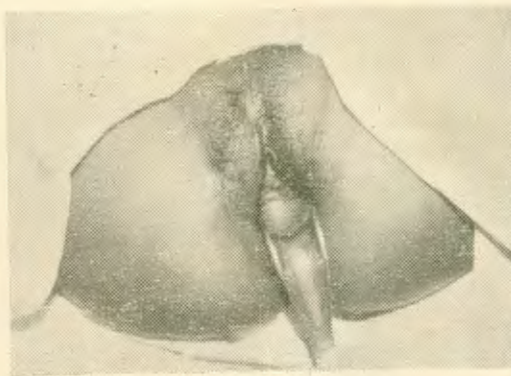


Fig. 4
Neo-vagina at 3 months follow up.

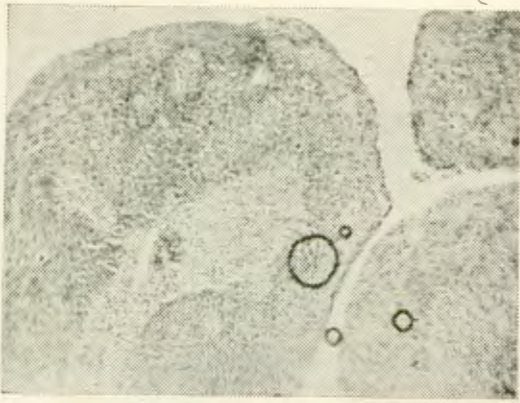


Fig. 1

(Low power) shows thickening of the epithelium, formation of papillae, immaturity and disorganisation of the cells. One papillae in the upper right quadrant shows a very dark staining nucleus at the margin of the picture. The circular markings on photograph (1) are artifacts (air bubbles).

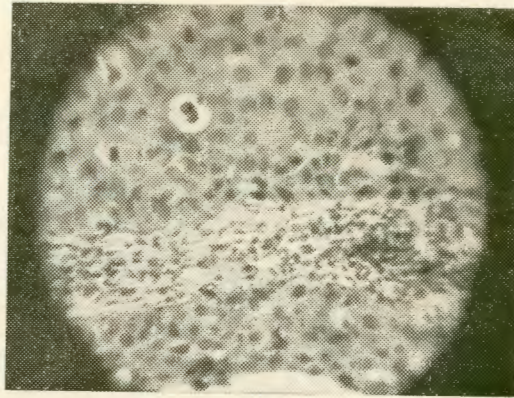


Fig. 2

(High power) shows abnormal, dark stained pleomorphic nuclei.

Intussusception Following Caesarean Section—Devi & Sai p. 408



Fig. 1

Intussusception following caesarean section.



Fig. 1
Hermaphrodite.

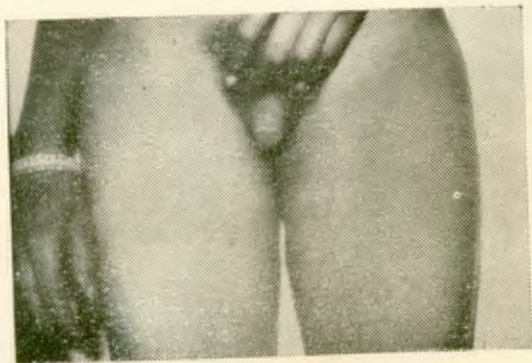


Fig. 2
External genital organs.



Fig. 3
External genital organs.

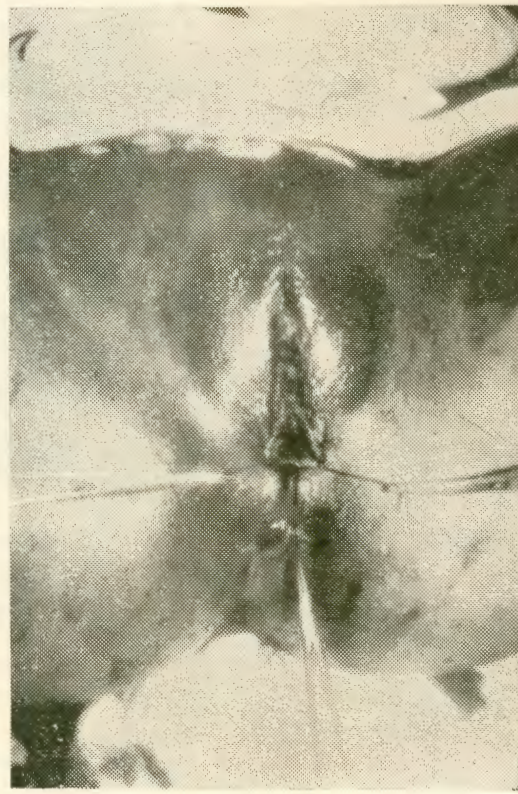


Fig. 4
External genital organs after operation.

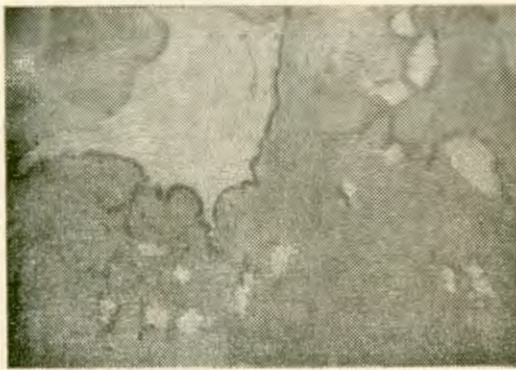


Fig. 5
Cystic spaces lined by respiratory epithelium,
fat and muscle in the wall.