

BREAST FEEDING PATTERNS AND REPRODUCTIVE BEHAVIOUR OF RURAL WOMEN

By

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SUMMARY

Breast feeding remains the best both for the mother and the child. It acts as a natural birth spacer 'Nature's own Contraceptive'. In the present study of interview of 650 women of child bearing age with 1800 pregnancies from rural area of Eastern Maharashtra, India, it was found that these women are for breast feeding. Mostly they feed their infants regularly on demand. Menstruation was established early in majority if no breast feeding was done. Out of all conceptions within 5 months of child birth 87.5% were from no breast feeding group. There were some conceptions within 5 months of child birth with lactational amenorrhoea. Challenge today is to preserve breast feeding where it is declining and also to provide and promote safe and effective contraception to breast feeding women.

Introduction

Breast feeding remains the best feeding. It is natural and unique system of supply and demand which best serves the mother and baby. But various socio-demographic factors like place of residence, socio-economic status, education, mothers age, parity, support from family and friends, employment, availability of contraceptives and their use etc. affect breast feeding practices. Main causes of the contemporary epidemic of breast feeding failure in some countries seem to be urban life and hospital delivery (King 1984). It is believed that in developing countries breast feeding prevents more pregnancies than all the other

methods of contraception (Rose, 1975). Breast feeding acts as a natural birth spacer, Nature's own Contraceptive. There are many factors which control this lactational infertility, mainly related to breast feeding patterns. We endeavoured to find out reproductive behaviour of rural women in relation to their breast feeding patterns.

Material and Methods

Present study was carried out in the department of Family Welfare attached to the department of Obstetrics and Gynaecology, MGIMS, Sevagram, Eastern Maharashtra, India. A predesigned questionnaire was used and 650 women of child bearing age were interviewed about their breast feeding patterns and reproductive behaviour. 500 women were

interviewed in the outdoor department; 150 indoor patients were also interviewed. 500 patients of outdoor group had 1400 pregnancies and there were 400 pregnancies in indoor group. So the study included 1800 pregnancies. Reported pregnancy wastage was 8.77% (abortions 63, still births 39, neonatal deaths 56) which may be under reporting. Various socio-medico-demographic aspects of these women are shown in Table I.

Observations

Outdoor and indoor patients were from same socio-demographic group and there did not seem to be any difference in relation to place of interview so the results are compiled together. An encouraging answer was that majority breast fed their babies and that too on demand. Few infants were given irregular breast feeding supplemented by artificial feeding (more commonly cow's milk) (Table II). Majority started breast feeding within 4 hrs. but fed only occasionally for first 24 to 48 hrs. These feeds were supplemented by honey water. Regular breast feeding was given sometimes after 48 hrs.

All women were for breast feeding. Some women did not suckle either because of pregnancy loss or for medical reasons. Most of these women had menstruation within 5 months (Table III). If breast feeding was not done 34.07% had conception within 5 months of child birth while there were only few conceptions in first 11 months if breast feeding was done (Table IV). Out of all conceptions within 5 months 87.5% were from non-breast feeding group. There were 16 conceptions with lactational amenorrhoea, 5 within 5 months. Use of contraception between all these 1800 pregnancies appeared to be very low. 48 women

had used copper T. 7 patients used it twice between two pregnancies (55 insertions). Most of them (30) had the insertion 6 months after child birth. 35 couples used condom. 5 used it for spacing between 3 consecutive pregnancies. So total use was by 40. There were only 2 oral pill users. Quite a few stayed at their mother's place for 3 months after child birth, some for 6 months.

Discussion

As amount of milk a woman produces depends much more on frequency, duration and intensity of infant suckling than on maternal nutrition, age, parity etc. the contraceptive action of breast feeding itself is also dependent on all these factors. Howie *et al* (1981) reported that more frequent feeds for more time in a day for more weeks suppressed ovulation for more than 40 weeks far more often as compared to the rest. Although the initiation of ovulation is related to the serum prolactin levels, it is not known whether production itself has any inhibitory effect on the ovary or whether production is simply a convenient marker or disordered hypothalamic activity induced by the suckling stimulus (McNeilly 1979). Perez *et al* (1972) also found that intensity and length of nursing affected the date of first menstruation in their entire study group of 200 women whose first menstruation was detected by endometrial biopsy, basal body temperature, vaginal cytology and cervical mucous. No woman ovulated before 36th day. First menstruation was ovulatory in 78% and in 12 of them pregnancies occurred with first postpartum ovulation. In another study of Rivera *et al* (1985) 50% of non-breast feeding women had resumed ovulation by 3 months as compared to 28% of breast feeding women and by six

TABLE I

Sociomedico-Demographic Aspects of Women

	R.	U.	Age			Soc. Ec.			Education			
			<20 Yrs.	21-30 Yrs.	>31 Yrs.	Poor	Mid.	Aff.	Illi.	<4	5-10	>10
Outdoor	333	167	12	365	123	252	203	45	76	81	238	105
Indoor	116	34	2	133	15	118	28	4	49	22	67	12
Total	449	201	14	498	138	370	231	49	125	103	305	117

	Parity						Obst. Behaviour	
	Preg.			Non Preg.			Vag.	C.S.
	G2	G3	G4	P2	P3	P4		
Outdoor	62	21	16	136	156	109	1283	71
Indoor	11	9	8	53	48	21	347	36
Total	73	30	24	189	204	130	1630	107

R. = Rural. U. = Urban. Soc. Ec. = Socio-economic. Preg. = Pregnant. Non Preg. = Non pregnant. Vag. = Vaginal. C.S. = Caesarean. Mid. = Middle. Aff. = Affluent.

TABLE II
Breast Feeding Pattern
(Feeding pattern in %)

Type of Feeding	Regular		Irregular						
	On demand	Timed-feeding	1 to 3 M. Cow milk Powder milk		3 to 6 M. Cow milk Powder milk		Cow milk	Powder milk	
Outdoor	95.85	4.15	63.75	13.37	1.55	7.38	1.25	12.20	0.50
Indoor	99.44	0.56	84.55	6.74	2.53	0.28	—	5.34	0.56
Total	96.65	3.35	68.25	11.94	1.76	5.85	.97	10.72	.51

	Regular Beginning				Weaning		
	Within 24 Hrs.	Within 48 Hrs.	Beyond 48 Hrs.	Six months	One year	Two years	Presently breast feeding
Outdoor	10.66	32.48	56.86	51.08	46.65	2.18	.09
Indoor	19.10	35.95	44.95	29.78	37.64	—	32.58
Total	12.5	33.23	54.27	46.46	44.70	1.70	7.14

TABLE III
Onset of Menstruation in Relation to Breast Feeding

Breast feeding	Time of Menstruation in %					At the time of study unknown	Total
	1 to 5 M.	6 to 11 M.	≥ 1 Yr.	≥ 2 Yrs.	≥ 3 Yrs.		
No breast feeding	71.50	15.30	10.40	—	—	2.80	144
1 to 5 M.	26.80	3.80	1.90	1.90	—	65.60	209
6 to 11 M.	33.40	30.75	22.0	2.55	—	11.30	195
≥ 1 Yr.	26.63	21.45	42.66	8.02	—	1.24	811
≥ 2 Yrs.	19.05	11.57	43.08	23.80	1.14	1.36	441
Total	29.11	17.50	33.22	9.95	0.27	9.95	1800

TABLE IV
Delivery Conception Interval in Relation to Breast Feeding

Breast feeding	Time of Conception in %					At the time of study unknown	Total
	1 to 5 M.	6 to 11 M.	≥ 1 Yr.	≥ 2 Yrs.	≥ 3 Yrs.		
No breast feeding	34.03	11.11	29.87	8.33	8.33	8.33	144
1 to 5 M.	3.35	2.39	12.44	4.78	8.61	68.43	209
6 to 11 M.	—	5.13	34.87	14.36	14.36	31.28	195
≥ 1 Yr.	—	0.49	11.84	48.22	19.97	19.48	811
≥ 2 Yrs.	—	—	0.90	24.50	45.80	28.80	411
Total	3.11	1.94	13.18	30.5	23.44	27.83	1800

months it was 100% and 66% respectively. In the Edinburgh study (Howie and McNeilly 1982) 45% completed menstrual cycles during lactation were anovulatory and of the 55% which were ovulatory, many were associated with defective luteal phase. Our study was done without any hormonal profile. We found that all our women were for breast feeding, but did not know the relationship of breast feeding and reproduction. Many of them did not breast feed regularly. Advantages of early regular breast feeding are not known to them.

Many women did not menstruate for 5

months if breast feeding was done. There were many conceptions within 5 months if breast feeding was not done. There were very few conceptions in 11 months in breast feeding group.

In another study by us (in press) on knowledge of Family Planning methods by interview of 1000 women (indoor patients of Obstetrics and Gynaecology), 72% of which were rural, we found that 58.4% did not know that pregnancy could occur in lactating women and only 17% thought pregnancy could occur within 6 months of child birth though it is known that conception could occur in 2 to 10% of

mothers before first menstruation (Buchanan 1972).

Review of literature and our study suggest that women who are not breast feeding should begin contraceptive use as soon as they resume sexual relationship. Breast feeding women who introduce supplements before third month should also begin contraceptive use as many women ovulate prior to first menstruation.

Challenge for Family Planning Programme, as separate programme as part integrated primary health care, is to preserve breast feeding where it is declining and also to promote safe and effective contraception to breast feeding women at appropriate time to prevent unwanted pregnancies.

This can be achieved by prenatal education, supplementary food to pregnant lactating mothers, mass media advertisement, maternity leave before and after child birth, creches at work site with free hours for feeding and legislation to control marketing and promotion of breast milk substitutes.

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