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Lactation, Postpartum Amenorrhoea and Abstinence after Delivery in an Urban Population of Bombay

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Introduction

Breastfeeding and lactational amenorrhoea play a unique role in child health, birth spacing and fertility regulation. The duration of breastfeeding which will determine the period of lactational amenorrhoea and the practice of postpartum abstinence are the main determinants of the return of fertility after delivery [1].

Breastfeeding provides some protection against preanancy. The period of lactational infertility varies greatly among individual women and is determined by many factors including frequency, duration and intensity of suckling, introduction of supplementary feeds and other likely individual, cultural, psychological or sociological factors such as prohibition of coitus during lactation [2]. Prolonged lactation serves as a natural birth spacer but it should be kept in mind that pregnancy may occur in an individual fully lactating woman as early as ten weeks postpartum. Studies have al shown that 3 to 8 percent of women are likely to become pregnant without ever resuming menstruation [3]. The percentage of women identified as ovulating before first menses ranges from 12 to 78 percent [4].

The Bellagio study reviewed data from 13 centres, both from developing and developed countries, to determine the conditions under which breastfeeding can used as a safe and effective method of family planning. They came to the conclusion that breastfeeding provides 98 percent protection from pregnancy during the first six months postpartum (a) if the mother is fully or nearly fully breastfeeding and (b) she remains amenorrhoeic. However, the duration of breastfeeding and that of lactational amenorrhoea seems to be declining in many developing countries throughout the world. For example, studies carried out in Taiwan and Thailand have shown that the average length of breastfeeding has dropped by about 5 months in the last decade's [5]. The Pakistan

Fertility Survey also showed a 7.7 percent decline in breastfeeding prevalence over a eight-year period from 1975 to 1983 [6].

The practice of postpartum abstinence also varies greatly among different communities. Many young women initiate intercourse before they come back for the six-week check up after delivery whereas in certain communities women practise abstinence for extended periods after delivery. Singarimbun and Manning [7] observed that the practice of extended abstinence in a Javanese village was due to the general belief that resumption of sexual intercourse prior to weaning has a deterimental effect on both the quality and quantity of the mother's milk. They reported the median duration of abstinence to be 32 months.

An unwanted pregnancy during breastfeeding is a proven and serious risk to the health of the mother and eventually to the health of both the child she is breastfeeding and to the yet unborn child she is expecting. Avoidance of such pregnancies should have high priority for family planning and maternal and child health personnel.

This study was undertaken to determinethe duration of postpartum amenorrhoea and abstinence in the urban population served by the clinics of the Institute for Research in Reproduction in Bombay.

Sample and Methodology

Three hundred and fifty clinically healthy young women who attended our clinics between January 1989 to December 1990 were interviewed to gain information about the following parameters: (a) initiation of supplementary feeds to infants; (b) duration of breastfeeding; (c) period of lactational amenorrhoea; and (d) period of abstinence following delivery in women attending our family welfare clinics.

Data was collected from women using Cu-T since these women could be followed up regularly and since Cu-T would not alter the parameters studied. These women were also participating in another study undertaken to examine the effects of breastfeeding on Cu-T event rates like expulsion, perforation and bleeding, the data of which is being analysed separately. The respondents of this study were followed up, at 1,3,6,9 and 12 months after Cu-T insertion. As many as 70 percent of them had delivered within the past six months, had not resumed menses at the time of first interview and were further interviewed at each follow up visit; the recall information thus was of a short time period. The remaining 30 percent of the respondents had a longer recall period. In both

groups, data was collected only from women who could clearly recall the above mentioned parameters.

Results and Discussion

Most of the women were between 20 to 29 years of age and had one or two living, children. It is well known that exclusive breastfeeding prevents menstruation for a longer period of time than does partial breastfeeding. Thus, giving supplementary feeds to the infant influences the return of menstruation [5].

Our study showed that a large percentage of women introduced supplementary feeds to their infants by the third or fourth month after delivery. Almost half of them had started supplementary feeds by the third month postpartum, and by the sixth month, as many as 91.5 percent were giving supplementation (Table 1). Introduction of supplementary feeds into the infant's diet should not be encouraged until 4-6 months of age unless there is inadequate milk yield. Initiating supplementary feeds early, whether it be due to commercial promotion of milk and food formulas, to the working status of the mother, or to inadequate milk yield or other socio-cultural factors, would increase infant morbidity and also reduce the birth interval (early resumption of menstruation and fertility) adversely affecting the health of both the mother and the child.

Table 1 : Cumulative percentage of various events by months following delivery

Months	**1**	**1½**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**12**
Initiation of supplementary feeds	12.0	12.0	25.1	47.4	68.0	78.6	91.5	94.6	96.3	97.4	98.0	98.3	100.0	-
Discontinuation of breastfeeding	3.4	3.4	7.1	11.4	18.5	22.8	32.8	36.2	41.9	44.8	47.4	48.0	65.4	100.0
Resumption of first menstrual period	-	10.8	22.8	41.7	52.0	61.7	70.8	77.1	82.2	84.8	87.1	89.4	95.7	100.0

Resumption of coitus	4.3	14.3	40.6	67.5	80.6	84.9	94.0	95.1	95.7	96.6	96.6	96.9	98.3	100.0

Table 1 also presents the cumulative percentage of women who discontinued breastfeeding at different time periods following delivery. The findings indicate that 88.6 percent, 67.2 percent, 55.2 percent and 34.6 percent of women were still breastfeeding their infants at 3,6,9 and 12 months after delivery. The percentage of women who started menstruating at 3,4,5 and 6 months after delivery was 41.7 percent, 52 percent, 61.7 percent and 70.8 percent (Table 1).

Menstruation signals an end to breastfeeding as a contraceptive method. Once a women starts menstruating, she cannot depend upon lactation as a "natural birth spacer" and would need an effective contraceptive method just as much as if she was not breastfeeding. The mean duration of lactational amenorrhoea observed in our study was 5.3 months. Thus, though breastfeeding was not discontinued early, it is the early introduction of supplementary feeds and the consequent reduction in the frequency of suckling which result in the early return of menses. A positive relationship was observed to a greater extent between the introduction of supplementary feeds and the length of postpartum amenorrhoea rather than between the duration of breastfeeding and the length of postpartum amenorrhoea.

Table 2 presents the mean duration of lactational amenorrhoea in Indian women observed by various workers over the three decdes [8-11]. The figures clearly indicate a decline in the duration of lactational amenorrhoea.

Table 2 : Lactational amenorrhoea in Indian women

Study	**Mean duration of amenorrhoea (months)**
Baxi (1957), Bombay	11.9
Peters (1958), Bombay	10.8
Karkal (1969), Bombay	8.4
Prema (1972), Hyderabad	11.1

Joshi (1990), Bombay	6.0
Shan (1990), Bombay	5.3

The mean duration of abstinence observed in our study was 3.5 months as against 5.7 months observed by Karkal [13] in 1969. Table 1 also shows the cumulative percentage of women who resumed coitus at different time periods after delivery. Thus, there has been a decline in the period of lactational amenorrhoea and the period of abstinence after delivery during the last two to three decades. Since it is known that protection against conception is lower after the first menstruation, it would seem advisable to start contraception before coitus is resumed rather than to wait until the first menstrual period.

During a WHO/NRC meeting, Lesthaeghe [14] discussed the situation in Kenya where a decline in both the duration of breastfeeding and adherence to postpartum abstinence taboos over the past decades had brought about increased fertility since the adoption of other contraceptive techniques had failed to keep pace. In India too, if increases in fertility are to be prevented, any declines in breastfeeding and postpartum abstinence must be offset by a comparable increase in the use of contraceptives. Women should be educated, particularly through postpartum programmes that during the first six months postpartum, if she is fully breastfeeding and amenorrhoeic she is not likelv to get pregnant. At the same time, it should be stressed that she needs to start a suitable contraceptive if she has started giving supplementary feeds to her baby and before she resumes coitus so as to avoid the occurrence of an unwanted pregnancy.

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