

Breast feeding practices prevailing in western Rajasthan (urban and rural community)

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ABSTRACT

Breast feeding were assessed by 600 mother's responses using self structured questionnaire. Mother's knowledge regarding breast feeding was recorded. Cause of inappropriate breast feeding practices was ascertained by open ended questions. Individually 61.11% respondents received information about breast feeding from friends in urban community whereas 38.89% in rural community. 85% urban respondents gave colostrum to their children due to the advice of the doctors and health workers in the hospital whereas 60% rural respondents did not give colostrum to their children due to some traditional believes and myths. Individually 86.33% rural respondents fed their babies in either sitting or sleeping position whereas 48.33% urban respondents fed their baby only in sitting position. 45.00% urban respondents continued breast feeding even after one year and 63.67% rural respondents continued breast feeding for same period. Breast feeding was almost proper and knowledge importance of colostrum were known to both in urban and rural mothers.

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Breast feeding is universal in India. During the first 24 hours in the hospital, the baby is usually given boiled water with sugar or diluted milk. The mother's milk does not come between the third and fifth day but in the meantime child may be put to the breast to get practice in sucking and to receive colostrum, the first secretion of the mammary glands. It is a thick, yellowish fluid specially adapted to his needs. It contains less fat and more protein and vitamins. It gives to child some protection against diseases. It also acts as co-laxative but sometimes this combined with the caste oil administered to the mother on the third night, may result in diarrhea for baby and upset him/her unnecessarily. Generally the sucking instinct is very strong in the baby and he takes to the breast without much difficulty. In the beginning, starting with 5-10 minutes, increasing up to 15 minutes at the breast may be enough if the nipples are sore. The baby may be placed on 4-hour feeding schedule or the baby may regulate his own timing. Whether to feed the baby at each feeding to one breast or both depends upon the milk yield and mother's feelings but the baby should be allowed to nurse as long as the child wants and afterwards should be held over the shoulder and patted to make him/her burp. Before and after feeding the baby the breast should be washed with boiled water using a clean cloth to avoid infection.

If the nipples are slightly sore, the doctors should be consulted to avoid further complications and the feeding time should be limited. If a crack develops, a nipple shield may be used while nursing the baby or milk can be extracted through breast pump and given to the baby. Any sore spot in the breast should never be neglected as

later it may develop in to breast abscess. Sometimes, the breast becomes very hard due to excessive supply of milk and it may be difficult to nurse the baby, but gradually itself. However, nursing should not be stopped on this account. Therefore, that advantage of breast-feeding may and may not be over looked.

Breast feeding is natural and hygienically safe:

- Breast milk is pure, easy for babies to digest and always of the right temperature.
- It is nature's food for the infants, supplying more of the nutritional essentials than any other food.
- A breast fed baby is almost never constipated and there is less chance for exposure to certain infections.
- In the earlier stages, breast feeding helps the enlarged uterus to contract easily, and reverts back to its normal position psychologically.
- It helps to develop the maternal instinct in the mother and gives a profound sense of security to the child.
- In a country like India, breast-feeding is more economical than bottle feeding with regard to money time and energy.

If the mother's diet is deficient in protein there is usually a decrease in the flow of milk, while an inadequate intake of minerals may cause a drain on the maternal reserve.

Proper diet is also a peaceful and unhurried life free from worry and tension help in establishing successful lactation. Excitement or worry may sometimes cut down the milk supply temporarily. Sometimes, in spite of the mother's desire for breast feeding her child, she may not

succeed due to various causes such as difficult labour, shock, diarrhea etc., but she should still try for a little while nursing the baby in addition to bottle feeding. Some mothers may be unable to breast-feed their babies because of gainful employment outside the home or some may dislike the idea because they have the notion that nursing the baby may ruin their figure. The decision depends upon individual values. Sometimes severe illness like typhoid, heart disease, T.B. etc. may necessitate bottle feeding.

Recent studies indicate that breast feeding might help to prevent childhood and adult obesity. According to the National Women's Health Information Center (part of the U.S. Department of Health and Human Services), babies who are breastfed tend to gain less unnecessary weight, which may help them be less overweight later.

Recent studies suggest that children who were exclusively breastfed for 6 months have IQs 5 to 10 points higher than children who were formula fed. (Choudhury and Measham, 1978; Kent, 1981; Jain and Bongrats, 1981; Bhal and Kaushal, 1987; Clark and Laing, 1990; Khan, 1990; Das, 1992; Gopalan and Puri, 1992; Banapurmath and Selvamuthukamarasamy, 1995; National Family Health Survey, 2000; Anandaiah and Choe, 2000; Heath *et al.*, 2002; Kaushal *et al.*, 2005)

In 1998, Breast Feeding Promotion Network of India (BPNI) took up a study to look into the various factors influencing infant feeding practices in the urban, semi-urban and slum areas. The data clearly showed that the incidence of bottle feeding increases with age of the child. In the first year alone, 16-25 per cent infants in urban areas and 11-13 per cent infants in rural areas are on bottle feeds. It was concluded that though education and work status of mother play an important role both in acquiring knowledge and adopting certain new roles and practices for herself but the overall impact of the feeding practices including artificial milk feeding and introduction of complementary feeding is still played by the family members in semi-urban and slum areas and by television advertisements in urban areas. The doctor's advice has played the most influential source of information.

METHODOLOGY

The present study was conducted in the Government hospital, Private hospital and Aanganwadi centres within the municipal limits of Western Rajasthan. For the purpose of study, Western Rajasthan was selected. In Western Rajasthan six districts Barmer, Bikaner, Jaisalmer, Jalore, Jodhpur and Pali were selected for data collection.

The sampling procedure adopted in the present study was purposive sampling in which samples were selected

arbitrarily because there happens to be a good evidence of having a lactating mothers.

Each of the mothers responded on the basis of the general information of the questionnaire. In urban and rural both community respondents interviewed by investigator filled up the interview schedule.

For the purpose of data collection, a sample of 600 lactating mothers were selected out of which 100 families were selected from each district. Out of these 100 families, 50 urban and 50 rural community respondents were taken, so as to ensure that the sample was representative of different caste, religious groups and socio-economic groups of society. Mothers were respondents in the present study.

The method employed to collect the information was to get the information by filled up the interview schedule by investigators. Research supervisor and the investigator of the study jointly prepared the interview schedule with the help of referred research work on breast feeding aspect. The data were collected with an intention to provide a background to the body of the main study as to yield a broad view of the situation of children in the context of the rural and urban community of the six districts of western Rajasthan. The interview schedule helped together information about status of breast feeding practices.

RESULTS AND DISCUSSION

Individually 61.11% respondents received information about breast-feeding from friends in urban community whereas 38.89% in rural community. 47.46% rural respondents were fascinated from the elderly people regarding information about breast-feeding and 60.42% urban respondents through media like television and radio.

The chi square result depicted the significant difference at 5% level of probability in rural and urban community.

Table 2 depicts the colostrum given by mother to their child. The result showed that 60.00% rural and 85.00% urban respondents gave colostrum to their children. The reason for not given colostrum to their children was some traditional believes and myths. They squeezed and threw the first milk from the breast before they began breast feeding. This was more as in the case of poor families where home deliveries were common. The colostrum was discarded because of the general belief that it is "heavy" - something indigestible hence not good for the child.

Overall results depicted in Table 3 indicate that 55.00% rural and urban respondents responded that colostrum protects from diseases and 28.33% or 16.67%

Table 1 : Source of information about the breast feeding

Source of information	Rural		Urban		Overall	
Mother	64 (21.33%)	50.39%	63 (21.07%)	49.61%	127 (21.20%)	100
Friend	35 (11.67%)	38.89%	50 (16.66%)	61.11%	85 (14.16%)	100
Doctor	121 (40.47%)	44.00%	154 (51.33%)	56.00%	275 (45.91%)	100
T.V. and Radio	19 (6.33%)	39.58%	29 (9.70%)	60.42%	48 (8.01%)	100
Adults	61 (20.33%)	47.46%	31 (10.37%)	52.54%	92 (15.33%)	100
Total	300		300		600	
	100.00		100.00		100	

$$X^2=10.64^x$$

Table 2 : First yellow milk (colostrum) to the child

Colostrum to child	Rural N=300	Urban N=300	Overall N = 600
Yes	180 (60%)	255 (85%)	435 (72.5%)
No	120 (40%)	45 15%	165 (27.5%)

respondents. Individually 86.33% rural respondents fed their baby in either sitting or sleeping position whereas 48.33% urban respondents fed their baby only in sitting position.

Table 7 revealed that overall 42.83% had been delighted about their feeding style and motherhood in rural and urban community. 35.50% urban and rural respondents

Table 3 : Reasons to feed colostrum

Why colostrum given	Rural		Urban		Overall	
It is nutritive	90 (30.00%)	52.94%	80 (26.67%)	47.06%	170 (28.33%)	100.00
Protects diseases	150 (50.00%)	45.45%	180 (60.00%)	54.55%	330 (55.00%)	100.00
As advised by adults	60 (20.00%)	60.00%	40 (13.00%)	40.00%	100 (16.67%)	100.00
Total	300		300		600	
	100.00		100.00		100	

$$X^2=7.31(N S)$$

rural and urban respondents responded that colostrum is nutritive and according to the advice of elders and mother it was given to their children, respectively.

Table 4 depicts the knowledge regarding breast feeding act as contraceptive. 50% rural respondents knew about breast feeding work as contraceptive, whereas 60% urban respondents knew about it.

Table 4 : Role of breast feeding as contraceptive

Breast feeding is contraceptive	Rural N=300	Urban N=300	Overall N = 600
Yes	150 (50%)	180 (60%)	330 (55%)
No	150 (50%)	120 (40%)	270 (45%)

Results of Table 5 show the schedule of breast feeding. It was observed that 73.33% urban respondents responded to feed their child from fix duration of time and 61.67% rural respondents responded to feed their child whenever child demands. But only 19.67% rural and 3.00% urban respondents responded to feed their child whenever mothers get time.

Table 6 depicts the breast feeding position of the

Table 5 : Schedule of breast feeding

Schedule of breast feeding	Rural	Urban	Overall	
From fix schedule	56 (18.66%)	220 (73.33%)	276 (46.00%)	100.00
When child cries	185 (61.67%)	71 (23.66%)	256 (42.66%)	100.00
Whenever mother is free	59 (19.67%)	9 (3.00%)	68 (11.33%)	100.00
Total	300	300	600	
	100.00	100.00	100	

responded that they feed their baby with affection. Only 21.67% rural and urban respondents responded that they feed their baby with patting of love.

Table 8 revealed the duration of breast feeding the child by mother. The overall result showed that 71.50% rural and urban respondents responded that they breast fed their child till the child got satisfied.

Table 9 depicted the precaution during breast feeding observed by mother. 89.92% urban respondents cleaned their breasts and only 10.08% rural respondents cleaned their breasts before and after breast feeding.

Table 10 presents the age of continuing breast

Table 6 : Position of mother when breast feed their child

Position of breast feeding	Rural		Urban		Overall	
Sleepy posture	15 (5.00%)	5.00%	-	0.00%	15 (2.50%)	100.00
Sitting posture	-	0.00%	145 (48.33%)	48.33%	145 (24.17%)	100.00
As comfort	26 (8.67%)	8.67%	-	0.00%	26 (4.33%)	100.00
Both ways	259 (86.33%)	62.56%	155 (51.67%)	37.44%	414 (69.00%)	100.00
Total	300		300		600	
	100.00		100.00		100	

Table 7 : Feeling during breast feeding

Feeling during breast feeding	Rural		Urban		Overall	
With affection	100 (33.33%)	46.95%	113 (37.66%)	53.05%	213 (35.50%)	100
With smiling and talking	126 (42.00%)	49.03%	131 (43.66%)	50.97%	257 (42.83%)	100
Patting with love	74 (24.67%)	56.92%	56 (18.66%)	43.08%	130 (21.67%)	100
Total	300		300		600	
	100.00		100.00		100	

$X^2=3.38$ (N.S.)

Table 8 : Period of breast feeding to a child

Duration of breast feeding	Rural		Urban		Overall	
10 Minutes	-	-	-	-	-	-
20 Minutes	82 (27.33%)	47.95%	89 (29.67%)	52.05%	171 (28.50%)	100
When child is satisfied	218 (72.67%)	50.82%	211 (70.33%)	49.18%	429 (71.50%)	100
Total	300		300		600	
	100.00		100.00		100	

Table 9 : Precautions observed during the breast feeding

Precautions during breast feeding	Rural		Urban		Overall	
Cleaning of hands	90 (30.00%)	31.25%	198 (66%)	68.75%	288 (48%)	100
Cleaning of breast	12 (4.00%)	10.08%	107 (35.66%)	89.92%	119 (19.83%)	100
Cleaning of child's mouth	103 (34.33%)	53.37%	90 (30%)	46.63%	193 (32.17%)	100
Total	300		300		600	
	100.00		100.00		100	

Table 10 : Duration of breast feeding

What age	Rural		Urban		Overall	
Till six month	10 (3.33%)	20.00%	40 (13.33%)	80.00%	50 (8.33%)	100.00
Till nine month	8 (2.67%)	16.67%	40 (13.33%)	83.33%	48 (8.00%)	100.00
Till one year	91 (30.33%)	51.70%	85 (28.33%)	48.30%	176 (29.33%)	100.00
Above one year	191 (63.67%)	58.59%	135 (45.00%)	41.41%	326 (54.33%)	100.00
Total	300		300		600	
	100.00		100.00		100	

$X^2=49.15^{xxx}$

feeding. The major difference was observed among 45.00% urban respondents and 63.67% rural respondents responded the age of breast feeding till above one year.

The chi square result depicted that there was highly significant difference between the rural and urban community in response to age of continuing breast feeding.

Table 11 revealed the care of child during breast

feeding. The result showed that 70.00% rural children were comfortable whereas 40.00% urban children were moving or uncomfortable while breast feeding.

The chi square results revealed that there was significant difference at 5% level of probability between rural and urban community in response to care of child during breast feeding.

Table 12 presents the data on precaution observed by mothers about pressurization of nipple and alveoli during breast feeding. The overall result depicted that 87.00% rural and urban respondents responded that they pressed their nipple and alveoli between two fingers during breast feeding. Breast feeding mothers got advice from experienced relatives and elderly women which was a factor shown to be of critically important in the maintenance of successful lactation. The attitude of women was positive towards breast feeding. The importance of mother's milk was widely acknowledged in the community.

Table 13 revealed the practices apply on child to discontinue breast feeding by mother. Overall result depicted that 78.33% and 71.00% rural and urban respondents, respectively discontinued breast feeding gradually.

Table 14 revealed the satisfaction level of child regarding breast feeding. The major difference in between the response of rural and urban community was 54.67% urban respondents responded when child slept comfortable showed the satisfaction of breast feeding, while 79.00% rural respondents responded to remove mouth from breast as the satisfaction level of breast feeding by child.

Conclusion:

Thus, it can be concluded that the status of women and children in Western Rajasthan was not very appreciable. The knowledge and practice of child care are quite ancient or it can be labelled quite backward, because though Government has launched many of schemes for the benefit of mothers and children but all these efforts seem to be diluted. The reason for the dilution

Table 11 : Special care of child during breast feeding

Special care during breast feeding	Rural	Urban	Overall
Child was comfortable	210 (70.00%)	53.85%	180 (60.00%) 46.15% 390 (65.00%) 100.00
Child was moving	90 (30.00%)	42.86%	120 (40.00%) 57.14% 210 (35.00%) 100.00
Total	300	300	600
	100.00	100.00	100

$$X^2=6.59^x$$

Table 12 : Precaution about pressurization of nipple and alveoli during breast feeding

Precaution during breast feeding	Rural	Urban	Overall
Yes	262 (87.33%)	50.19%	260 (86.67%) 49.81% 522 (87.00%) 100.00
No	38 (12.67%)	48.72%	40 (13.33%) 51.28% 78 (13.00%) 100.00
Total	300	300	600
	100.00	100.00	100

$$X^2=0.05 (N.S.)$$

Table 13 : Practices to discontinue breast feeding

Practices to discontinue breast feeding	Rural	Urban	Overall
To use medicine	8 (2.67%)	44.44%	10 (3.33%) 55.56% 18 (3.00%) 100.00
Suddenly	22 (7.33%)	45.83%	26 (8.67%) 54.17% 48 (8%) 100.00
Slowly-slowly	235 (78.33%)	52.46%	213 (71.00%) 47.54% 448 (74.67%) 100.00
Children on their own	35 (11.67%)	40.70%	51 (17%) 59.30% 86 (14.33%) 100.00
Total	300	300	600
	100.00	100.00	100

$$X^2=4.61(N.S.)$$

Table 14 : Indicator to know the satisfaction level of child regarding breast feeding

Satisfaction level of child regarding breast feeding	Rural	Urban	Overall
Increased weight	15 (5%)	26.32%	42 (14.00%) 73.68% 57 (9.50%) 100
Passing urine 5-6 times	10 (3.33%)	83.33%	2 (0.66%) 16.67% 12 (2.00%) 100
When child sleeps comfortably	38 (12.67%)	18.81%	164 (54.67%) 81.19% 202 (33.67%) 100
Remove mouth from breast	237 (79.00%)	72.04%	92 (30.67%) 27.96% 329 (54.83%) 100
Total	300	300	600
	100.00	100.00	100

of the Governments and non-Governments efforts are-

– *Illiteracy* - Quite high among man and women both. Especially when it is a concern of girl child, education is totally zero.

– *Excess of population* - Each family had 4 to 5 children. The cycle of poverty can also be noticed by early marriage of both boys and girls.

– When comparison was made between urban and rural community regarding status of mother and child, the condition of rural community was not so good. Educationally, urban respondents were superior and facilities were also more for urban respondents as compared to rural community.

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