



Infant Feeding Practices in Rural Villages of Katihar District, Bihar

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ABSTRACT

Hajipur, a remote village in the Katihar Block of Katihar District inhabited mainly by the poor, largely uneducated and underserved population. The backwardness of the village was the reason for selecting it for study.

Objectives: *Learn the feeding practices of infants and develop strategies by engaging with the different stakeholders to reduce it and gradually eliminate the harmful practices.*

Material and Methods: *50 children between the age group 6 month to 2 years by random sampling.*

Results: *Two thirds of the teen aged mothers had initiated breast feeding within the first day as compared to half in the 20-25 and 61% in 25-30 age groups. Half the illiterate mothers put their child to the breast within the first two hours of delivery as compared to 36% of the literate women. Two thirds of the women delivered at home and less than a third (30%) of the deliveries was conducted in the government institutions with only one (2%) in the district hospital. Pre lacteal feed were given in 29 (58%) of the infants.*

Discussion: *Out of 9 teen age mothers only 2 (22%) mothers who delivered before 18 years. Seven (78%) of the teen age mothers delivering after 18 years especially in a remote, backward society should definitely be looked as a healthy step. The teen age mothers initiated breast feeding early. Literate mothers showing reluctance to breast feeding is catching up in the remote areas also but the disturbing fact is that those breast feeding their infants are delaying bringing their infants to their breasts. This is a disturbing trend which should be reversed. Not only our joint families are collapsing but the entire rich heritage which was passed down the generations is also being lost or going in oblivion. Such a low percentage of institutional deliveries, less than a third, does not speak well about the outreach of the national programme where the government is trying to provide all the facilities including financial incentives. The feeding of the infants is far from satisfactory especially amongst the illiterate women. The issue if not addresses properly will lead to malnutrition which in a poor society will have serious long term consequences as infections are common and will have its toll on growth and nutrition and may even effect cognition and school drop outs.*

Conclusion: *The delivery of services especially their outreach as well as the acceptance by the community is not to the desirable level. Even the institutional deliveries are low. The age of delivery is rising which is a healthy trend but the traditional healthy feeding practices are going down. Engagement with the various stakeholders in the community is needed to improve the infant feeding practices*

Keywords: *Infant feeding practices, pre lacteal feeding, initiation of breast feeding.*

INTRODUCTION

Hajipur village is a remote village in the Katihar Block of Katihar District inhabited mainly by the poor, largely uneducated and underserved population belonging to the minority community. It is around 5 kilometers from Katihar Medical College and 1 kilometer from the Rural Health Training Centre of Katihar Medical College. The backwardness of the village was the reason for selecting it is the field practice area of the department and the study was conducted primarily to learn the prevalent feeding practices of the infants so that strategies may be planned to strengthen the good practices prevalent and efforts be made to improve upon the harmful practices and not so good practices.

OBJECTIVES

The objectives of the study were to:

- 1) Learn the feeding practices of infants prevalent amongst the population in the village.
- 2) Identify and reinforce amongst the population the good feeding practices already being practiced.
- 3) Identify the bad and the harmful feeding practices prevalent and develop strategies by engaging with the different stakeholders to reduce it and gradually eliminate them.

MATERIAL AND METHODS

Sample size: 50 children between the age group 6 month to 2 years.

Sampling method: random sampling

The children to be studied were selected randomly

Inclusion criteria: infant above 6 months and below 2 years of age.

Exclusion criteria: infant below six months of age or a child more than 2 years of age.

METHODOLOGY

In this survey 50 children from the age group 6 month to 2 years were selected randomly. Children more than 2 years and less than 6 month

not included in this study. The reason for not taking children more than 2 years was that mother would not able to recall breast feeding practices in older children and in less than 6 months the exclusive breast feeding was not yet complete.

Detailed information were collected on a predesigned and pretested Performa about place of delivery, timing of breast feeding initiation, prelacteal feed etc. by interview method.

RESULTS

The demographic profile of the village Hajipur was collected from 2 sources viz. the census and the Aganwadi centers.

Demographic profile of village Hajipur according to 2011 census

Total population -	13890
Male -	7350
Female -	6540

The Hajipur village is a fairly large village having 7 anganwadis and the distribution of the population is given in table 1.

Table-1 Distribution of Aganwadis According to Their Population

S. No.	Name of Aganwadi	Population
1.	Bompara	1680
2.	Bhesipara	1785
3.	Camapara	1795
4.	Morghati Tola	2800
5.	Field Tola	1760
6.	Masjid Tola	1550
7.	Kargil Chawak	1020

The population of the village collected from the two sources i.e. the census and the sum of the population of the anganwadis does not tally. This perhaps is due to the not so good quality of record keeping. It was also noticed that the population of some of the anganwadis viz. Morghati tola was 2800 – much more than the sanctioned population for an anganwadi which would definitely be adversely affecting the quality of services delivered.

The distribution of mothers according of her age at the time of interview is given in Table 2. Most of the mothers 41 (82%) were between 20-35

years at the time of the interview. Five of the mothers (10%) were aged 35 or more. Teen age mothers were 4 (8%) but only one (2%) was less than 18 years of age at time of interview.

Table-2 Distribution of Mother According of Her Age at the Time of Interview

Age	No. of Mother
15 -20	4
20 – 25	14
25 – 30	12
30 – 35	15
35 ⁺	5
Total	50

The age at which the mothers initiated breast feeding is given in Table 3. One healthy finding was that 2(22%) of the teenagers had initiated breastfeeding in the first half hour after delivery. Fewer older mothers initiated breast feeding within the first hour, the figures being 18%, 16%, and 16% for mothers 20-25, 25-30 and 30-35 respectively. Again, two thirds of the teen aged mothers had initiated breast feeding within the first day as compared to half in the 20-25 and 61% in 25-30 age groups.

Table-3 Distribution of the Mothers According to their Age of Initiation of Breast Feeding

Age	Within ½ hrs	½ - 2hrs	2hrs – 6hrs	6 – 24hrs	24hrs – 72hrs	3 -6Days	Never
15 -20	2	1	1	2	xxx	1	2
20 – 25	3	4	1	xxx	1	6	2
25 – 30	3	5	2	1	5	1	1
30 – 35	1	4	xxx	1	xxx	xxx	xxx
35 ⁺	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total	9	14	4	4	6	8	5

15 to 18 year – two mothers

18 to 19 years – 7 mothers

In this survey out of 50 mothers, 36 mothers were found illiterate, 11 mothers found educated up to primary class, one till middle school and 02 till secondary school. Table 4. As the number of mothers educated is low (3 i.e.6%), for statistical convenience we are dividing the mothers in two groups viz. literate and illiterate. Seven (19%) of the illiterate mothers breast fed their infants within

the first half an hour after delivery as compared to 2 (14%) of the literate mothers. Half the illiterate mothers put their child to the breast within the first two hours of delivery as compared to 36% of the literate women. Eight percent of the illiterate mothers never breastfed their children as compared to 14% of the literate mothers.

Table-4 Distribution of Mother According to Literacy and Initiation of Breastfeeding

Literacy Status	Within ½ hrs	½ - 2hrs	2hrs – 6hrs	6 – 24hrs	24hrs – 72hrs	3 -6 Days	Never
Illiterate	7	11	3	2	5	5	3
Just literate	xxx	Xxx	xxx	xxx	xxx	xxx	xxx
Primary school	2	2	xxx	1	1	3	2
Middle school	xxx	Xxx	xxx	1	xxx	xxx	xxx
Secondary school	xxx	1	1	xxx	xxx	xxx	xxx
College	xxx	Xxx	xxx	xxx	xxx	xxx	xxx
Total	9	14	4	4	6	8	5

Amongst the 50 families there was an equal representation of joint and nuclear families viz. 25 families each (Table 5). Seven (28%) of the mothers put their infant to the breast within half an hour of delivery while almost a quarter of them 2 (8%) in joint families put their infant to the

breast within half an hour of delivery. The delayed initiation of breast feeding was higher at every stage but the most disturbing fact was that the number of infants who were never breast fed was four times in joint families (4 i.e. 16%) as compared to nuclear families (1 i.e. 4%).

Table –5 Distribution of Mother According to Type of Family and Initiation of Breastfeeding

Type of Family	Within ½ hrs	½ - 2hrs	2hrs – 6hrs	6 – 24hrs	24hrs – 72hrs	3 -6 Days	Never
Nuclear	7	9	1	1	3	3	1
Joint	2	5	3	3	3	5	4
Total	9	14	4	4	6	8	5

Almost half (24 i.e. 48%) of the women got married before 18 years of age. (Table 6) the maximum age at marriage was 22 years and minimum age at marriage was as young as 14 years. One third of the mothers who got married between 16-18 years initiated breastfeeding within half an hour and 16.7% of the mothers who got married between 14-16 did so. Sadly this figure dropped down to 2 (13%) in those who married between 18-20 and 1 (10%) for those who married

between 20-22 years. Again in putting the child to the breast within 2 hours of delivery the figures were 7 (58%) for 14-16 years and 6 (50%) for 16-18 years. These figures dropped to 6 (40%) and 4 (40%) for women who married at 18-20 years and 20-22 years respectively. All the women who married before 18 years initiated breastfeeding while the corresponding figures were 2(13%) and 2 (20%) for the women who married at 18-20 years and 20-22 years.

Table –6 Distribution of Mother According to Age at Marriage and Initiation of Breast Feeding

Age at Marriage in years	Within ½ hrs	½ - 2hrs	2hrs – 6hrs	6 – 24hrs	24hrs – 72hrs	3 -6 Days	Never
14-16	2	5	xxx	2	1	2	xxx
16-18	4	2	2	1	1	2	
18-20	2	4	2	xxx	3	2	2
20-21	1	3	xxx	1	1	2	2
22 ⁺	xxx	xxx	xxx	xx	xxx	xxx	1
Total	9	14	4	4	6	8	15

A little more than two thirds of the women (68%) delivered at home (table 7). Less than a third (30%) of the deliveries was conducted in the

government institutions with only one (2%) in the district hospital.

Table –7 Distribution of Mother According to Place of Delivery and Initiation of Breastfeeding

Place of Delivery	Within ½ hrs	½ - 2hrs	2hrs – 6hrs	6 – 24hrs	24hrs – 72hrs	3 -6 Days	Never
Home	6	8	2	3	6	5	4
District hospital	xxx	xxx	xxx	xxx	xxx	1	xxx
PHC/CHC	3	6	2	xxx	xxx	2	1
Private	xxx	xxx	xxx	1	xxx	xxx	xxx
Total	9	14	4	4	6	8	5

The redeeming factor was that about a fifth (21%) of the mothers who had delivered in the PHC/CHC put their baby to the breast within half an hour of the delivery which went up to almost two thirds (64%) in the first two hours. The corresponding figures for the domiciliary deliveries were 18% and 41%. Unfortunately in the lone delivery in the district hospital, the mother was put to the breast after 3 days.

A total of 19 mothers out of 50 (38%) introduced semisolids in the diet of their infants at the

recommended age of 6 months (Table 8). This increases to around half (48%) if we give a relaxation of one month. The sad thing is that around a third (30%) introduced semi solid food after the age of nine months—a factor likely to initiate the development of malnutrition. All the three mothers who were educated up to middle school had introduced semi solid food at the prescribed age of 6 months. Less than half (45%) of the mothers who were educated till primary level had introduced semi solid food at the age of

6 months. This figure went down to less than a third (31%) for the illiterate mothers. Sadly more than a third (36%) of the illiterate mothers

introduced solids in the diets of their babies after 9 months of age.

Table – 8 Distribution of the Mothers According to their Literacy Status and Introduction of Semi Solid Food to Their Infants

Literacy status	Less than 4 months	4 – 5 months	5 – 6 months	6 – 7 months	7 – 8 months	8 – 9 months	9+ months	Never breastfeed
Illiterate	xxx	3	xxx	11	4	2	13	3
Just literate	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Primary school	xxx	1	xxx	5	1	xxx	2	2
Middle school	xxx	xxx	xxx	1	xxx	xxx	xxx	xxx
Secondary school	xxx	xxx	xxx	2	xxx	xxx	xxx	xxx
college	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total	xxx	4	xxx	19	5	2	15	5

Pre lacteal feed were given in 29 (58%) of the infants (Table 9). Half of the educated mothers had given pre lacteal feeds and one of the two mothers educated till the secondary level had

given pre lacteal feeds. The practice was more common among illiterate women with 22 (61%) of the mothers giving pre lacteal feeds.

Table – 9 Distribution of Mother According to Education and Prelacteal Feeding

Literacy status	Given	Not Given	Total
Illiterate	22	14	36
Just literate	xxx	xxx	xxx
Primary school	6	5	11
Middle school	xxx	1	1
Secondary school	1	1	2
College	xxx	xxx	xxx
Total	29	21	50

DISCUSSION

The population from the census 2011 and the anganwadis did not tally and the population in anganwadis was lower though the census population was of 2011.

There were only 2 (4%) mothers who delivered before 18 years. Seven (78%) of the teenage mothers delivering after 18 years especially in a remote, backward society should definitely be looked as a healthy step.

The age of the mother at the time of delivery was less than the age at the time of interview (Table-2) as they had delivered 6months to one and a half years earlier.

The teenage mothers initiated breast feeding early. If we take into consideration that 2 (22%) of the teen age mothers never breast fed perhaps because of delivering very early, the early initiation of teenagers goes further up to around 85%.

Literate mothers showing reluctance to breast feeding is catching up in the remote areas also but the disturbing fact is that those breast feeding their infants are delaying bringing their infants to their breasts. This is a disturbing trend which should be reversed.

Traditionally in joint families' health education like menarche, menstrual hygiene, ante and intra natal care was taught to the young girls viz. the daughters and daughters-in-law. This was the strength of joint families maintaining the high level of healthy practices despite being illiterate. These findings are very disturbing. Not only our joint families collapsing but all the rich heritage which was passed down the generations is also being lost or going in oblivion.

Such a low percentage of institutional deliveries, less than a third, does not speak well about the outreach of the national programme where the

government is trying to provide all the facilities including financial incentives.

The early initiation of breast feeding was not being emphasized upon in the village. The saddest thing was that not only the women hardly delivered in the district hospital (2%) but breastfeeding initiative was hardly followed with the lone mother putting the baby to the breast after 3 days. The feeding of the infants is far from satisfactory especially amongst the illiterate women. The issue if not addresses properly will lead to malnutrition which I a poor society will have serious long term consequences as infections are common and will have its toll on growth and nutrition and may even effect cognition and school drop outs.

Half of the educated mothers and 58% of the mothers overall giving pre lacteal feeds is again not a healthy practice and requires counseling of the mothers and mother-in –law by the anganwadi workers and ANMs on a war footing.

CONCLUSION

The delivery of services especially their outreach as well as the acceptance by the community is not to the desirable level. Even the institutional deliveries are much lower than the state average leave alone the national average. The age of delivery is rising which is a healthy trend but the traditional healthy feeding practices are going down. The healthy practices advocated are not being accepted by the population to the desired level. Serious engagement with the various stakeholders in the community is needed to improve the infant feeding practices.

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