

# BREAST-FEEDING PRACTICES IN SCHEDULE CASTE COMMUNITIES IN HARYANA STATE

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## ABSTRACT

*A study was conducted to assess exclusive breast-feeding, continued breast-feeding, bottle-feeding, predominant breast-feeding, timely complementary feeding and other breast-feeding practices in 818 children in the age group of 0-3 years belonging to the Schedule Caste communities of Haryana.*

*The exclusive breast-feeding rate was 0.15 and the predominant breast-feeding rate 0.75 in children <4 months. Timely complementary feeding rate was 0.42. The continued breast-feeding rate at 1 year and 2 years was 0.84 and 0.58, respectively. The bottle-feeding rate, ever breast-fed rate, timely first-suckling rate and exclusive breast-feeding rate by mother were 0.09, 1.0, 0.0 and 0.15, respectively. The median duration of breast-feeding was 16 months.*

**Key words:** Breast-feeding, Bottle-feeding.

In 1991, the WHO Working Group on Infant Feeding recommended definitions of key breast-feeding (BF) indicators and specific methodologies for their measurement. These recommendations were intended to have a common set of measures to assess breast-feeding practices and to evaluate the progress of BF promotional programme(1).

In India, no study has been documented by using these indicators. The present study was conducted to assess the current status of breast-feeding practices in underprivileged section of society in Haryana state.

## Material and Methods

The complete census data of Haryana state was obtained from the Registrar General of India. The total percentage of Schedule Caste population (rural and urban) in each district of Haryana was enlisted. The Schedule Caste (SC) population in different Districts ranged from 13.8% to 29.4% of the total population. One District (Faridabad district with 18.2% population) with less than 20% of rural Schedule Caste population and one (Hisar district with 23.3% population) with more than 20% of rural Schedule Caste population was randomly selected for detailed study. Fig. 1 shows the methodology followed for sample selection.

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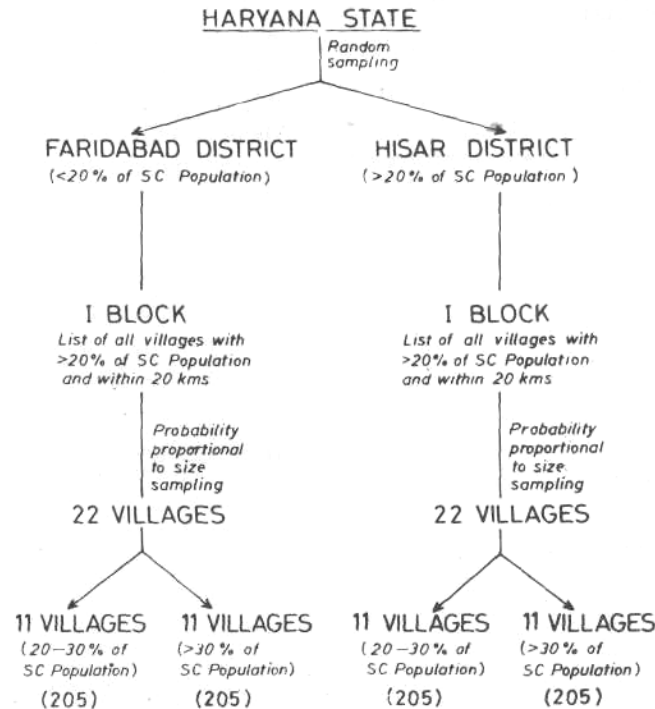


Fig. 1. Flow diagram for sample selection.

In each District, all Blocks were enlisted and one Block was selected using purposive sampling keeping in view the operational feasibility. In each Block, villages were enlisted according to the proportion of Schedule Caste population to the total population. Villages with more than 20% of Schedule Caste population and within 20 km from the district headquarters were enlisted separately. Four hundred and ten children were selected from 22 villages by using probability proportion to size sampling procedure.

Thus, a total of 820 children from 44 villages were included from 2 Districts for detailed study. The data could be collected on 818 children only.

The following indicators were used (as per WHO recommendations, 1991) to assess the breast-feeding practices in the community. The mothers were interviewed regarding the infants' fluid intake in the last 24 hours to assess the parameters given in Table I.

### Results

A total of 818 children (447 males and 371 females) belonging to SC population were studied. The age distribution of children was 0-5 months—158; 6-11 months—187; 12-17 months—147; 18-23 months—102; 24-29 months—130; 30-35 months—94.

The status of breast-feeding practice is summarized in Table II.

**TABLE I***(i) Exclusive Breast-feeding Rate*

$$\begin{aligned} & \text{Proportion of infants less than 4 months of age who are exclusively breast-fed} \\ & \text{Infants <4 months (<120 days) of age who were exclusively breast-fed in the last 24 hours} \\ = & \frac{\text{Infants <4 months (<120 days) of age}}{\text{Infants <4 months (<120 days) of age}} \end{aligned}$$

*(ii) Predominant Breast-feeding Rate*

$$\begin{aligned} & \text{Proportion of infants less than 4 months of age who are predominantly breast-fed} \\ & \text{Infants <4 months (<120 days) of age who were predominantly breast-fed in the last 24 hours} \\ = & \frac{\text{Infants <4 months (<120 days) of age}}{\text{Infants <4 months (<120 days) of age}} \end{aligned}$$

These infants did not receive anything else, particularly non-human milk and food based fluids.

*(iii) Timely Complementary Feeding Rate*

$$\begin{aligned} & \text{Proportion of infants 6-9 months of age who are receiving breast milk and complementary} \\ & \text{foods} \\ & \text{Infants 6-9 months (180-299 days) of age receiving complementary foods in addition to} \\ & \text{breast milk in the last 24 hours} \\ = & \frac{\text{Live infants 6-9 months (180-299 days) of age}}{\text{Live infants 6-9 months (180-299 days) of age}} \end{aligned}$$

*(iv) Continued Breast-feeding Rate (1 year)*

$$\begin{aligned} & \text{Proportion of children 12-15 months of age who are being breast-fed.} \\ & \text{Children 12-15 months of age breast-fed in the last 24 hours} \\ = & \frac{\text{Live children 12-15 months of age}}{\text{Live children 12-15 months of age}} \end{aligned}$$

*(v) Continued Breast-feeding Rate (2 years)*

$$\begin{aligned} & \text{Proportion of children 20-23 months of age who are breast-feeding} \\ & \text{Children 20-23 months of age breast-fed in the last 24 hours} \\ = & \frac{\text{Live children 20-23 months of age}}{\text{Live children 20-23 months of age}} \end{aligned}$$

*(vi) Bottle-feeding Rate*

$$\begin{aligned} & \text{Proportion of infants less than 12 months of age who are receiving any food or drink} \\ & \text{from a bottle} \\ = & \frac{\text{Infants <12 months (<366 days) of age who were bottle-fed in the last 24 hours}}{\text{Infants <12 months (<366 days) of age}} \end{aligned}$$

*(vii) Ever Breast-fed Rate*

$$\begin{aligned} & \text{Proportion of infants less than 12 months of age who were ever breast-fed Live} \\ & \text{infants <12 months of age who were ever breast-fed Live} \\ = & \frac{\text{infants <12 months of age who were ever breast-fed Live}}{\text{infants <12 months of age}} \end{aligned}$$

**TABLE I** (Contd.)*(viii) Timely First-suckling Rate*

$$\text{Proportion of infants less than 12 months of age who rust suckled within one hour of birth} \\ = \frac{\text{Infants <12 months of age who rust suckled within one hour of birth}}{\text{Infants <12 months of age}}$$

*(ix) Exclusive Breast-feeding Rate by Mother*

$$\text{Proportion of infants up to 4 months of age who are exclusively breastfed by their natural mother} \\ = \frac{\text{Infants <4 months (<120 days) of age who are exclusively breast-fed by their mother}}{\text{Infants <120 days) of age}}$$

*(x) Median Duration of Breast-feeding*

The age (in months) when 50% of children are no longer breast-fed.

**TABLE II - Indicators of Breast-feeding Practices**

Indicators	Age group	No. of children	Rate
1. Exclusive breast-feeding	0-<4 months (n=107)	16	0.15
2. Predominant breast-feeding	0-<4 months (n=107)	81	0.75
3. Timely complementary feeding	6-9 months (n=130)	55	0.42
4. Continued breast-feeding at one year	12-15 months (n=139)	117	0.84
5. Continued breast-feeding at 2 years of age	20-23 months (n=17)	10	0.58
6. Bottle-feeding	<12 months (n=345)	32	0.09
7. Ever breastfed	<12 months (n=345)	345	1.0
8. Timely first suckling	<12 months (n=345)	0	0
9. Exclusive breast-feeding by mother	0<4 months (n=107)	16	0.15

**Discussion**

In the present study, the ever breast-fed rate was 100% which is indicative of the continuation of traditional practice of breast-feeding.

Only 15% of infants were exclusively breast-fed during first four months of life, Eighty-five per cent infants received water thereby increasing the risk of gastrointestinal infection. Water supplementation is practiced with the belief that it will increase the fluid intake and thereby improve the hydration status(2). Fluid (tea, camomile or fennel infusion) supplementation is commonly advised by parents, paramedical staff, and even doctors. It is believed that these fluids will relieve pain (*e.g.*, from constipation), soothe fretfulness and especially, quench thirst. Recent research has demonstrated that giving young infants supplementary fluids such as water and teas addition to breast milk is associated with significant increase in the risk of diarrheal disease(3), decreased milk intake and premature termination of breast-feeding(2,4). Similar findings have been reported by earlier workers(5-7). It was found that 'ghutti', a herbal decoction was given to 98% of children to improve the digestive capabilities. The encroachment of traditional practice of exclusive breast-feeding is of serious concern.

In the present study, the median duration of breast-feeding was 16 months. The earlier studies have reported the median duration of 22 months(8) and 23 months(9) amongst Muslim communities. The lower median duration observed in the present study may be due to the cultural and regional variation.

Infant formula (breast milk substitute) is received by 2% of children below one

year of age. This was a disheartening finding as these products, when used improperly under un-hygienic conditions can pose a health hazard of, menacing proportions. Similar findings have been observed by earlier studies(10,11).

The present study provides the baseline data in Haryana on exclusive breast-feeding and other indicators recommended by the WHO. There is a need to conduct similar studies in other parts of the country so that the baseline situation and progress of breast-feeding promotional programmes can be evaluated.

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