

## Research Article

# Gender discrimination in relation to breast feeding practices in rural areas of Bijapur district, Karnataka

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## ABSTRACT

**Background:** Gender is a common term whereas gender discrimination is meant for women, because females are more often the victims. Denial of equality, rights and opportunity and supplement in any form on the basis of gender is gender discrimination. Gender discrimination is due to the attitude and behaviour of the society towards the girl child. The girl child faces the neglect of the family in the form of a failure to provide her the basic necessities of life in terms of food, clothing, love, shelter, supervision, education and medical care. Differential treatment of the boys and girls within families can be attributed to the social religious, cultural and economic returns that sons provide to their parents relative to daughters. A clear understanding of past trends, current situation and future plans is the need of the hour. Within the scope on hand, this study was undertaken to review the existing situation of under five year children group from the perspectives of disparity in Breastfeeding practices. Objectives: To assess the prevalence of gender bias in breast feeding practices and various socio demographic factors responsible for it.

**Methods:** A cross sectional study was conducted across the ten villages (2 villages per taluk) of Bijapur district from January 2013 to November 2013. A total of 404 children aged less than two years of age were included in the study. After obtaining the oral consent of mothers, data was collected in a pre-tested, pre designed, semi structured questionnaire by interview technique.

**Results:** Out of the 404 children below the age of two years, 45.3% males and 40.6% females were initiated breast milk within one hour after delivery. Around 48 % (41% Male and 55% Female) were administered prelacteal feeds soon after delivery.

**Conclusions:** In spite of the IEC activities which are carried out by the health workers, the practice of prelacteal feed administration was practiced by nearly half of the study population. There was no much difference among the both the gender regarding the breastfeeding practices.

**Keywords:** Gender, Gender discrimination, Bijapur district, Breastfeeding

## INTRODUCTION

Every child has the right to live and be cared for by his or her parents. The responsibility for the child's well-being relies on both the parents and the society. In Indian civilization too the child is believed to be a gift of the God to be nurtured with love, care and affection not only

within the family but also within the society as a whole but unfortunately there exists discrimination between the gender of the child.<sup>1</sup>

These discriminations in India was recognized in the 1901 that - there is no doubt that, she [a girl] receives less attention than would be bestowed upon a son. She is less

warmly clad, . . . she is probably not so well fed as a boy would be, and when ill, her parents are not likely to make the same strenuous efforts to ensure her recovery.<sup>2</sup>

Gender differentials in nutritional status are reported during infancy, with discriminatory breastfeeding and supplementation practices.

Infant girls are breastfed less frequently, for shorter duration, and over shorter periods than boys.

Girls and women face nutritional discrimination within the family, eating last and least resulting in nutritional deprivation, leading to anemia and malnourishment.

The initial growth of a child depends upon the duration and frequency of breastfeeding it receives, since the breast milk provides important nutrients to infants and young children and protects them against certain infections and to some extent acts as a natural contraceptive.

In 2002, World Health Assembly resolved that exclusive breastfeeding for first 6 months is the most appropriate infant feeding practice.<sup>3</sup>

Although the practice of breastfeeding is universal in India, still many studies have showed that female infants are breastfed less frequently and for shorter durations than male infants, their weaning also starts earlier and they are given lower quality foods.<sup>3</sup>

If parents have a fertility preference for sons, as is common in developing countries such as India, they will wean daughters more quickly to try again for a boy, potentially increasing girls' exposure to contaminated food and water as an unintended consequence.

A major area of concern and focus in India is the remarkable degree of variation in demographic profile, socio-economic factors and cultural practices which play a role in gender bias.

Hence in this scenario, this study was conducted to know the gender discrimination in relation to breast feeding practices amongst under five children in rural areas of Bijapur district.

**Objectives**

To assess the prevalence of gender bias in breast feeding practices and various socio demographic factors responsible for it.

**METHODS**

A Cross sectional study was conducted in the rural areas of Bijapur district from January 2013 to December 2013.

Multiphase sampling technique was used as follows. Bijapur district has five taluks. Two primary health centers were selected from each taluk by using simple random sampling (lottery method).

A total of ten primary health centers were selected. From each of these primary health centers using simple random sampling (lottery method) one village was selected for the study. So totally ten villages across the Bijapur district was selected for the purpose of study.

Data regarding the knowledge and practice towards breastfeeding and weaning practices was elicited 404 children aged less than two years of age in order to reduce recall bias in the study

Each village was visited in the first week of every month from January 2013 to November 2013.

Data was collected by interview technique from the mothers after explaining the purpose of the study and obtaining the consent in a pretested predesigned and semi structured questionnaire.

Data was entered in SPSSV.21 and analyzed using appropriate statistical tests.

**RESULTS**

In our study data was collected from 404 children who aged less than or equal to two years at the time of interview. Out of 404 children 212 (52.5%) children were boys and 192 (47.5%) were girls.

**Table 1: Socio demographic profile of the under five children.**

		Frequency (n=1045)	Percentage (%)
Age group (months)	0-11	197	48.7
	12-23	207	51.3
Religion	Hindu	308	76.4
	Muslim	94	23.2
	Others	2	0.4
Sex	Male	212	52.5
	Female	192	47.5
SES	1	34	8.5
	2	55	13.5
	3	123	30.4
	4	158	39.3
	5	34	8.3
Birth order	1	174	43
	2	178	44.1
	3	49	12.3
	4	3	0.6
Type of family	Nuclear	198	49.0
	Joint	206	51.0

**Table 2: Distribution of children based on breast feeding practices.**

Breastfeeding	Gender				Total	
	Male	%	Female	%		
Prelacteal administered	86	40.6	106	55.2	192 (47.5%)	
Exclusively breastfeeding	Up to 6 months	88	41.5	52	27.1	140 (34.7%)
	≥6 months	38	17.9	34	17.7	72 (17.8%)
<b>Total</b>	212	100	192	100	404 (100)	
Chi square = 10.6 df = 2 p=0.005						

In our study prevalence of prelacteal administration was 47.5% (40.6% for male and 55.2% for females). The association of prelacteal feeds with gender was statistically significant. Exclusive breastfeeding was practiced for 212 (52.5%) of children. 88 (41.5%) Boys and 52 (27.1%) girls were exclusively breastfed for up to six months respectively. There was statistically significant association with the gender.

Out of the 121 males and 91 females belonging to joint family, 60 (49.6%) males and 44 (48.4%) female children were administered with prelacteal feeds soon after birth and the association was found to be statistically not significant.

Of the prelacteal feeds given sugar water (50%) was most common, followed by honey (35.4%). Around 313 (77.5%) of the children were given colostrum soon after the birth. 172 (81.1%) of the boys and 141 (73.4%) of the girls were administered colostrum after delivery. The difference was statistically not significant.

**Table 3: Distribution of children based on initiation of breastfeeding.**

Initiation of breastfeeding	Gender				Total
	Male	%	Female	%	
<1 hour	96	45.3	78	40.6	174 (43.1)
1-8 hours	92	43.4	96	50	188 (46.5)
8-24 hours	24	11.3	18	9.4	42 (10.4)
<b>Total</b>	212	100	192	100	404 (100)
Chi square = 1.82 df = 2 p=0.403					

In our study 174 (43.1%) new born were breastfed in less than an hour of birth [96 (45.3%) male and 78 (40.6%) females]. The difference was statistically not significant.

**Table 4: Distribution of children regarding duration of breastfeeding.**

Breastfeeding duration	Gender				Total
	Male	%	Female	%	
<6 months	0	0	1	0.5	1 (0.2)
6-12 months	59	27.8	36	18.8	95 (23.5)
12-18 months	146	68.9	151	78.6	297 (73.5)
>18 months	7	3.3	4	2.1	11 (2.7)
<b>Total</b>	212	100	192	100	404 (100)
Pooled: $\chi^2 = 4.97$ df = 2 p=0.08					

Only 1 (0.5%) girl child was stopped breastfeeding completely before the age of six months as secretion of breast milk stopped completely. 146 (68.9%) boys and 151 (78.6%) girls were breastfed till 18 months of the age. There was no statistical significant association.

**Table 5: Distribution of children based on weaning.\***

Weaning started	Gender				Total
	Male	%	Female	%	
<6 months	101	54.5	28	21.7	129 (41.1)
6 months & >	84	45.5	101	78.3	185 (58.9)
<b>Total</b>	185	100	129	100	314 (100)
Pooled: $\chi^2 = 34$ df = 1 p=0.000 *N = 314 (excluding 90 infants below 5 months)					

Weaning was started for 101 (54.5%) male and 28 (21.7%) female children within 6 months of age. The association was found to be statistically significant. Rice items, bread and biscuits were the weaning food among both the gender.

On applying chi square trend test the initiation of breastfeeding and mothers education was found to be statistically not significant for males (p=0.09) and significantly associated with females (p=0.002).

On applying Chi square trend test the association between, initiation of breastfeeding and mother s age was found to be statistically not significant for both males (p=0.81) and females (p=0.67).

**Table 6: Adjusted Odd's ratio for initiation of breastfeeding.**

Initiation of breast feeding (<1 hour)	Gender*	Among literate mothers#	Among illiterate mothers#
Adjusted Odd's ratio^	0.99	1.23	0.45

^male as reference variable \*adjusted to mothers age, education and occupation #adjusted to mothers age and occupation

On applying binary logistic regression test for initiation of breastfeeding and the gender of the child, the chance of initiation of breastfeeding within one hour just 1% less for the female children when compared to male children.

Among literate mothers, the chance of initiation of breastfeeding within one hour was 23% more for the female children when compared to male children.

Among illiterate mothers, the chance of initiation of breastfeeding within one hour was 55% less for the female children when compared to male children.

**Table 7: Adjusted Odd's ratio for exclusive breastfeeding.**

Exclusive breast feeding (<6 months)	Gender*	Among literate mothers#	Among illiterate mothers#
Adjusted Odd's ratio^	0.45	0.50	0.10

^male as reference variable \*Odds ratio adjusted to mothers age, education and occupation #Odds ratio adjusted to mothers age and occupation

On applying binary logistic regression test for exclusive breastfeeding till 6 months and the gender of the child, the chance of exclusive breastfeeding till 6 months was 55% less for the female children when compared to male children.

Among literate mothers, the chance of exclusive breastfeeding till 6 months was 50% less for the female children when compared to male children.

Among illiterate mothers, the chance exclusive breastfeeding till 6 months was 90% less for the female children when compared to male children.

## DISCUSSION

Medical literature has suggested multiple mechanisms through which breastfeeding promotes health for infants and young children in developing countries. First, breast milk contains glycan's that are believed to protect the gastrointestinal tract from various infections. Second, breastfeeding protects child from contaminated water and food especially in poor countries/communities with lack of sanitation. Perhaps most importantly, breastfeeding has been shown to be associated with lower child mortality.<sup>4</sup>

### Initiation of breastfeeding

In our study only 45.3% males and 40.6% females breastfeeding was initiated within one hour which is almost similar to the results of the study done by Dhananjay Pathak<sup>5</sup> but high compared to the study done by Pal I and Chaudhuri RN.<sup>6</sup>

### Prelacteal feeds

Prelacteal feeds were given to 48% (40.6% males and 55.2% females) of children in our study, which is comparable to the findings of the study done by Pal I and

Chaudhuri RN<sup>6</sup> but high compared to studies done by Dhananjay Pathak.<sup>5</sup>

### Exclusive breastfeeding

Exclusive breastfeeding up to 6 months were practiced for 34.7% (41.5% male and 27.1% females) which is higher when compared to the studies done by Ayaz Ahmed Sohag et al.,<sup>7</sup> Bhavana R<sup>8</sup> and Suman Chakrabarthy et al.<sup>9</sup>

### Weaning practices

In our study the weaning was started after six months for 36.6% males and 52.6% females, which is low compared to the studies done by Pal I and Chaudhuri RN<sup>6</sup> and Dhananjay Pathak.<sup>5</sup>

### Duration of breastfeeding

Duration of breast feeding has an important aspect on child nutritional and health status. In our study breast feeding till 18 months was practiced by 68.9% males and 78.6% females, which is comparable to the results seen in the study done by Dhananjay Pathak.<sup>5</sup>

Median duration of breastfeeding for children was 25.3 months in NFHS 1, 26.4 months in NFHS 2 and NFHS 3 showed 25.4 months for male and 23.6 months, 24.6 months, 23.6 months in NFHS 1, NFHS 2 and NFHS 3 for females respectively. The Child Disparity Index for Breastfeeding was 0.040, 0.041, 0.042 in NFHS 1, NFHS 2, NFHS 3 respectively.<sup>10-13</sup>

Almost all the children were initiated breastfeeding within 24 hours, maximum being within 1-8 hours. Nearly 48% of the newborn were given prelacteal feeds. Almost all the mothers informed that they want to breastfed as long as the baby wishes and breast secretes the milk.

## CONCLUSION

Large number of the mothers were aware about the importance of initiation of breastfeeding within one hour after delivery, exclusive breastfeeding till 6 months of age and were practicing it. Male children were more favored by the mothers in breastfeeding practices.

In spite of maximum effort to create awareness regarding proper breastfeeding practices by the Field Health workers like ASHA, Anganawadi workers, ANM etc. and also by IEC activities by the government, administration of prelacteal feeds were practiced, which may be attributed to their cultural practices. IEC activities should be enhanced so as to change the behavior of mothers towards the initiation of breastfeeding at the earliest, exclusive breastfeeding and weaning practices.

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