

## Prevalence of Non-Exclusive Breastfeeding: A Community Based Cross Sectional Study

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### Abstract:

**Background:** Breast milk is the nicest present a woman can give to her child. According to WHO, a kid should only be breastfed for the first 4-6 months before adding semisolid and solid foods to supplement breast milk until they are gradually able to take regular food. Breast milk is recommended by numerous organizations as the best food for infants. For several reasons, these groups advocate for a baby's first six months to be spent exclusively breastfed.

**Aim & Objective:** To determine the prevalence of nonexclusive breastfeeding.

**Methods:** The study involved mothers of children aged 6 months to 2 years from the GMCH, Udaipur's Rural Health Training Center (Loyra, Chiklwas, Thoor, Kavita, Madar) and Urban Health Training Center (Alu Factory, Neemach Kheda, Bhuwana outskirts). The random sampling approach will be used to take a sample from both areas in the same proportion. A well-designed, pre-tested, and pre-structured questionnaire will be used to gather the data (in English).

**Results:** Out of 700 mothers, exclusive breastfeeding was done by 437 (62.43%) and 263 (37.57%) mothers had not given exclusive breastfeed to their infants.

**Conclusion:** It has been concluded from the study that majority of mother are giving EBF to their infants and having good knowledge, positive attitude and practice towards Exclusive breastfeeding as compared to mothers not being able to give EBF to their infant. Even then it was good to see that majority of mothers who were not able to give EBF to the infant were using formula milk as compared to other alternatives of Breast milk.

**Keywords:** Exclusive Breast Feeding, Formula Feeding, Breast Milk.

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### Introduction

The best gift a mother can offer her child is breast milk. The WHO advises supplementing breast milk with semi-solids and solids until the newborn is progressively gaining normal nutrition. The infant should be breastfed exclusively for the first 4 to 6 months.[1] Developing nations like ours, where there is a very low

understanding, acceptance, and availability of modern family planning methods, should place a special emphasis on breastfeeding.[2] For a number of reasons, these organisations, along with health care providers and public health campaigns, should advocate exclusively breastfeeding infants for the first six months of life.[3]

According to the WHO, feeding an infant exclusively breast milk and small amounts of the following liquids—ORS, vitamins, minerals, and medications—is considered exclusive breastfeeding.

ORS, vitamins, minerals, prescription drugs, water, water-based beverages, and ritual fluids are all included in primary breastfeeding. Infant formula supplementation for medical purposes such as weight loss or hypoglycemia is not covered by the WHO criteria. Although pharmaceuticals are included in the WHO definition, it is not clear in certain situations whether formula is regarded as a drug. The WHO definition of "complete breastfeeding" is utilised in this essay. Drugs were seen as supplements taken for medical purposes.[4] Only 35% of newborns worldwide are nursed exclusively until they are four months old, and supplementary feeding that occurs too early or too late results in unwholesome meals. There are usually a lot.[5]

Despite several National Rural Health Mission (NRHM) programmes on nursing and weaning practises and educational messages from the media, sociocultural variables, beliefs, and practises have a significant impact on women. Optimal growth in neonates and infants is promoted by[6] EBF (exclusive breastfeeding) to fulfil 100% of a child's daily nutritional needs by 6 months, 50% of a child's daily nutritional needs from 6 months to 12 months, and 35% of a child's daily nutritional needs. 12 to 12 years old and less than 6 months. two years.[7]

62% of newborns in India were found to be exclusively breastfed at 6 months old.[8] Only 69% of newborns under two months old are exclusively breastfed, according to NFHS-3 statistics, which drops to 51% at 2-3 months and 28% at 4-5 months. Less than 42% of newborns are nursed within the first hour of birth, according to data recently released by NFHS 4, despite the fact that facility

deliveries have climbed to nearly 79% overall. In fact, only 44% of women in India are able to breastfeed their infants within an hour of giving birth, making it the nation with the lowest breastfeeding rates among South Asian nations including Afghanistan, Bangladesh, and Sri Lanka.[9]

Only 38% of infants aged 0 to 6 months are breastfed exclusively worldwide. According to a recent analysis, non-exclusive breastfeeding contributed to 11.6% of under-five mortality in 2011, which amounted to roughly 804,000 deaths. comparable to a child who has died (WHO/UN ICEF). In order to enhance nutrition for women, babies, and young children globally, the World Health Assembly (WHA) adopted six global nutrition goals in 2012. One of these goals was to increase the percentage of exclusive breastfeeding by 2025.[10]

In India, the percentage of infants (under 6 months) who are exclusively breastfed has climbed from 46.4% to 54.9% over the past ten years, according to an analysis of (EBF) trends. A third of all districts have EBF levels more than 60%, according to district-level statistics compiled from NFHS-4. Chhattisgarh, Madhya Pradesh, Assam, Maharashtra, Andhra Pradesh, and Rajasthan are the top 10 states with the highest EBF scores, with Mandsaur topping the list with 95.1% and the lowest EBF ratings. Uttar Pradesh is the home state of 7 out of 10 districts.[11] The goal of the current study was to ascertain the prevalence of nonexclusive breastfeeding in the predominantly tribal region of Southern Rajasthan.

### Methodology

It was cross sectional study in which mothers with children aged 6 months to 2 years from Rural Health Training Centers (Loyra, Chiklwas, Thoor, Kavita, Madar) and Urban Health Training Centers (Alu Factory, Neemach Kheda, Bhuwana Outskirts) of GMCH, Udaipur. Samples

are taken in equal proportions from both regions using a random sampling technique. Information was collected using pre-tested, pre-configured and well-designed surveys.

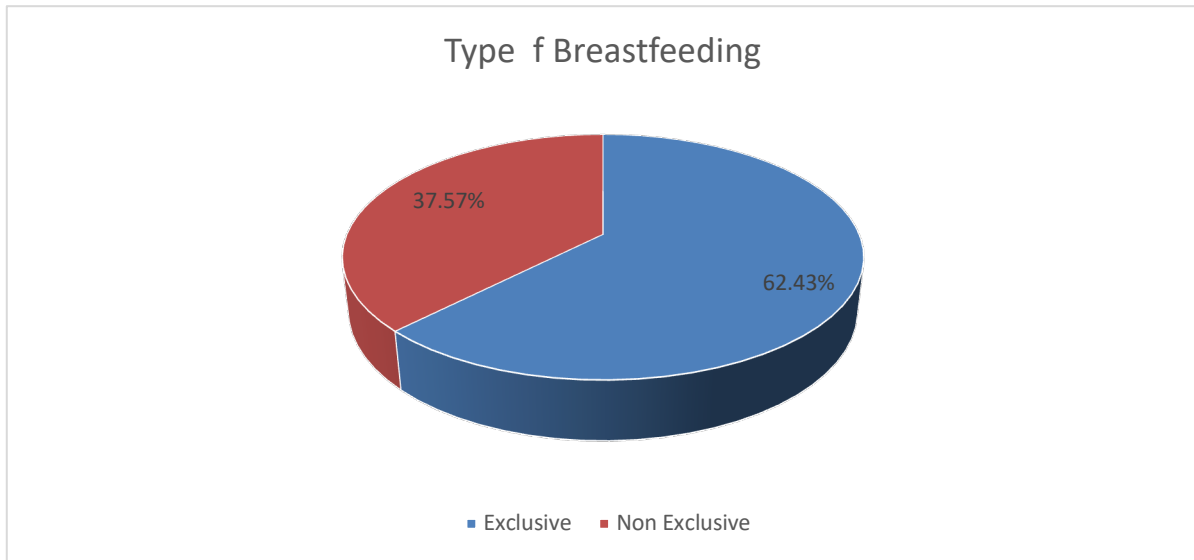
This information was used for further statistical analysis to meet research objectives. After being informed of the purpose of the study and obtaining written consent, subjects are assured of non-disclosure and confidentiality of the information provided.

**Statistical Analysis:** The collected data of the subjects were entered into the MS

office including MS word, MS excel and MS access and will be processed and analyzed for percentages and proportions. Appropriate statistical tests were applied to draw inferences and significance. EPI Info 2000 was used to derive statistical inferences and significance.

**Results**

Out of 700 mothers, exclusive breastfeeding was done by 437 (62.43%) and 263 (37.57%) mothers had not given exclusive breastfeed to their infants. (figure 1)



**Figure 1: Prevalence of Non-exclusive Breastfeeding in mothers**

**Table 2: Distribution of mothers according to age group and practice of Exclusive and Nonexclusive breastfeeding**

Age group	EBF	%	Non EBF	%	Total	%	P value
20-22	108	24.71	70	26.62	178	25.43	> 0.05
23-25	141	32.27	80	30.42	221	31.57	
26-28	40	9.15	24	9.13	64	9.14	
29-31	87	19.91	51	19.39	138	19.71	
32-34	61	13.96	38	14.45	99	14.14	
<b>Total</b>	<b>437</b>	<b>100</b>	<b>263</b>	<b>100</b>	<b>700</b>	<b>100</b>	

Out of total 700 mothers majority were of age group 20-25 that is 399(48.43%) followed by 138(19.71%) mothers of age group 29-31 years. Out of 437 mothers who had given exclusive breastfeed to the infants majority were of age group 20–25 which was 249 (56.98%) and out of 263

mothers not given exclusive breastfeed to infant 150 (57.03%) were of age group 20–25 years.

Thus out of 399 mother of age group 20-25 years 249 (61.65%) mothers had given exclusive breastfeed to infant and

150(38.35%) had not given exclusive breastfeed infant. Thus overall among all mothers practice of exclusive and non-exclusive breastfeeding was found to be

insignificantly associated with age. (Chi Square value = 0.461, P value = 0.977) (table 2).

**Table 3: Distribution of mothers according to Educational status and practice of Exclusive and Nonexclusive breastfeeding**

Educational status	EBF	%	Non EBF	%	Total	%	P value
Illiterate	20	4.58	15	5.70	35	5.0	> 0.05
Primary	23	5.26	7	2.66	30	4.29	
Secondary	98	22.43	62	23.57	160	22.86	
Sr. secondary	220	50.34	130	49.43	350	50.0	
Graduate	64	14.65	46	17.49	110	15.71	
Post graduate	12	2.75	3	1.14	15	2.14	
<b>Total</b>	<b>437</b>	<b>100</b>	<b>263</b>	<b>100</b>	<b>700</b>	<b>100</b>	

Regarding educational status 665(95%) mothers were literate and only 35(5%) found to be illiterate.

done their post-graduation. Thus overall among all mothers practice of exclusive and nonexclusive breastfeeding was found to be insignificantly associated with educational status. (Chi Square value = 5.952, P value = 0.347).

Out of total 350(50%) had done senior secondary, 160(22.86%) had done secondary and 110(15.71%) were graduates. Only 15(2.14%) mothers had

**Table 4: Association of Area of living, caste & religion with practice of Exclusive and Nonexclusive breastfeeding**

	EBF	%	Non EBF	%	Total	%	P value
<b>Area of living</b>							
Rural	228	52.17	133	50.57	361	51.57	> 0.05
Urban	209	47.83	130	49.43	339	48.43	
<b>Caste</b>							
GENERAL	311	71.17	184	69.96	495	70.71	< 0.001
SC	92	21.05	33	12.55	125	17.86	
ST	34	7.78	46	17.49	80	11.43	
<b>Religion</b>							
Hindu	251	57.44	137	52.09	388	55.43	>0.05
Jain	108	24.71	61	23.19	169	24.14	
Muslim	12	2.75	17	6.46	29	4.14	
Sikh	58	13.27	43	16.35	101	14.43	
Christian	8	1.83	5	1.90	13	1.86	

Out of 700 mothers, 361(51.57%) were from rural area and 339(48.43%) were from urban area. Out of 361 mothers from rural area 228(63.16%) had given exclusive breastfeeding to infant and 133(36.84%) had not given exclusive breastfeed to infant. Out of 339 mothers from urban area 209(61.65%) had given exclusive breastfeeding to infant and

130(38.35%) had not given exclusive breastfeed to infant. Thus overall among all mothers practice of exclusive and non-exclusive breastfeeding was found to be insignificantly associated with area of living of mothers. (Chi Square value = 0.111, P value = 0.739). Out of 700 mothers, 495(70.71%) were from general caste, 125(17.86%) were SC and

80(11.43%) were ST. Out of 495 mothers from general caste 311(62.83%) had given exclusive breastfeeding to infant and 184(37.17%) had not given exclusive breastfeed to infant. Out of 125 mothers from SC caste, 92 (73.6%) had given exclusive breastfeeding to infant and 33 (26.4%) had not given exclusive breastfeed to infant. Out of 80 mothers from ST caste, 34 (42.5%) had given exclusive breastfeeding to infant and 46 (57.5%) had not given exclusive breastfeed to infant. Thus overall among all mothers practice of exclusive and non-exclusive breastfeeding was found to be significantly associated with caste of mothers. (Chi Square value = 20.23, P value < 0.001)

Out of 700 mothers, 388 (55.43%) were from general caste, 169 (24.14%) were Jain, 101(14.43%) were Sikh, 29(4.14%) were Muslim and 13 (1.86%) were Christian. Overall among all mothers practice of exclusive and non-exclusive breastfeeding was found to be insignificantly associated with religion of mothers. (Chi Square value = 7.564, P value = 0.109). (table 4)

## Discussion

In this study, out of 700 mothers, exclusive breastfeeding was done by 437 (62.43%) and 263 (37.57%) mothers had not given exclusive breastfeed to their infants. The significant difference in proportion of mothers who had given exclusively breastfeed and those who had not given exclusively breastfeed to the infant. (Z = 6.305, P value < 0.001) Study reported , 48.43% mothers were of age group 20-25 followed by 19.71% of age group 29-31 years which was similar to the findings of McNiel L.[6] Vennemann M M [8] in his study found that 58% mothers who had given EBF to the infant which was also close to finding of this study where 56.98% mothers who had given exclusive breastfeed to the infants were of age group 20–25 and 57.03% who had not given exclusive breastfeed to the infants were

also of age group 20–25. 61.65% mother of age group 20-25 years had given exclusive breastfeed to infant and 38.35% had not given exclusive breastfeed infant. Thus overall among all mothers practice of exclusive and non-exclusive breastfeeding was found to be insignificantly associated with age. (Chi Square value = 0.461, P value = 0.977) which was similar to findings of other study.[8, 9]

Regarding educational status, 95% mothers were literate and only 5% found to be illiterate which was close to the finding of Iliff P J.[11] Out of total 50% had done senior secondary, 22.86% had done secondary and 15.71% were graduates and only 2.14% mothers had done their post-graduation. Thus overall among all mothers practice of exclusive and non-exclusive breastfeeding was found to be insignificantly associated with educational status. (Chi Square value = 5.952, P value = 0.347) which was similar to findings of other study.[11]

51.57% mothers of current study were from rural area and 8.43% were from urban area. 63.16% mothers from rural area had given exclusive breastfeeding to infant and 36.84% had not given exclusive breastfeed to infant. 61.65% mothers from urban area had given exclusive breast feeding to infant and 38.35% had not given exclusive breastfeed to infant. Thus overall among all mothers practice of exclusive and non-exclusive breastfeeding was found to be insignificantly associated with area of living of mothers. (Chi Square value = 0.111, P value = 0.739) which was similar to findings of other study.[11]

In this study, 70.71% mothers were from general caste, 17.86% were SC and 11.43% were ST which was close to the finding of Edmond K.[14] 62.83% mothers from general caste had given exclusive breastfeeding to infant and 37.17% had not given exclusive breastfeed to infant. 73.6% mothers from SC caste had given exclusive breastfeeding to infant and 26.4% had not

given exclusive breastfeed to infant. 42.5% mothers from ST caste had given exclusive breastfeeding to infant and 57.5% had not given exclusive breastfeed to infant. Thus overall among all mothers practice of exclusive and nonexclusive breastfeeding was found to be significantly associated with age of mothers. (Chi Square value = 20.23, P value < 0.001) which was similar to findings of other study.[14,16]

In this study, 55.43% mothers were Hindu, 24.14% were Jain, 14.43% were Sikh, 4.14% were Muslim and 1.86% were Christian which was close to the finding of Chudasama R K.[17] 62.83% mothers from general caste had given exclusive breast feeding to infant and 37.17% had not given exclusive breastfeed to infant. 73.6% Jain mothers had given exclusive breastfeeding to infant and 26.4% had not given exclusive breastfeed to infant. 42.5% Sikh mothers had given exclusive breast feeding to infant and 57.5% had not given exclusive breastfeed to infant. Thus overall among all mothers practice of exclusive and non-exclusive breastfeeding was found to be insignificantly associated with religion of mothers. (Chi Square value = 7.564, P value = 0.109)

### Conclusion

It has been concluded from the study that majority of mother are giving EBF to their infants and having good knowledge, positive attitude and practice towards Exclusive breastfeeding as compared to mothers not being able to give EBF to their infant. Even then it was good to see that majority of mothers who were not able to give EBF to the infant were using formula milk as compared to other alternatives of Breast milk.

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