

Human milk banking and human milk donation awareness in young mothers of central India

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Abstract

Background: Human milk continues to be the only milk which is tailor-made and uniquely suited to the human infant. If mother's own milk is unavailable or insufficient, the next best option is to use pasteurized donor human milk. India faces its own unique challenges, having the highest number of low-birth-weight babies, and significant mortality and morbidity in very low birth weight population. Feeding these babies with breast milk can significantly reduce the risk of infections. **Aims and Objectives:** To assess human milk banking and human milk donation awareness in young mothers of central India. **Methodology:** This observational cross-sectional study was conducted among 95 Antenatal and postnatal care mothers attending Obstetric OPD and admitted in Obstetrics and Gynecology wards at Tertiary Care Hospital. After obtaining a written informed consent from the study participants, a predesigned questionnaire was administered to collect the socio-demographic data, knowledge, attitude and practices of antenatal and postnatal mothers about Human Milk Bank and Donation. The data was then subjected to analyses using excel sheets. **Results:** Analysis has indicated that 65(68.42%) had poor knowledge but when they were counseled, their attitude towards receiving Human milk was positive in 81(85.27%) and for Donating milk was 83(87.37%). 94(98.95%) agreed to work in mother support group for motivation of Human Milk Donation. 84(88.42%) said that Human Milk will be their first choice if mother is not able to breastfeed her baby. 52(54.74%) had proper practice of using bowl and spoon for feeding Human milk. **Conclusion:** Counseling and awareness of safer and free of cost Human Milk Bank Services should be provided. Neonatal mortality and morbidity in the form of infection and malnutrition can be reduced. Breast Milk Donation empowers women and is a form of an excellent service to the society. Given the high incidence of sepsis and a large burden of premature births, this intervention will have the potential to result in substantial savings for the nation. **Key words:** Human Milk Banking, Awareness, Donation.

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INTRODUCTION

Breastfeeding is the best method of infant feeding because human milk continues to be the only milk which is tailor-

made and uniquely suited to the human infant. All mothers should be encouraged to breast-feed their infants. When a mother, for some reason, is unable to feed her infant directly, her breast milk should be expressed and fed to the infant. If mother's own milk is unavailable or insufficient, the next best option is to use pasteurized donor human milk (PDHM). India faces its own unique challenges, having the highest number of low-birth-weight babies, and significant mortality and morbidity in very low birth weight (VLBW) population. In our country, the burden of low-birth-weight babies in various hospitals is about 20% with significant mortality and morbidities^{1,2}. Feeding these babies with breast milk can significantly reduce the risk of infections. Mothers of preterm or sick infants face specific difficulties related to early mother and baby separation in a time of

crisis and myths^{3,4}. The infants being sick or immature, the initiation of breastfeeding often results in failure⁴. In Indian scenario due to various social stigma and misbelieve, practice of milk banking is still a challenge, although it is practiced in developed countries extensively.

MATERIAL AND METHODS

It was an observational cross-sectional study conducted in Dr. P.D.M. Medical College and Research Center. 95 ANC and PNC mothers attending Obstetrics and Gynecology

OPD and admitted in Obstetrics and Gynecology wards were assessed. Women who are willing to participate in the study and have given informed consent were included in the study. Critically ill mothers and who were not willing to participate were excluded. Structured questionnaire and synopsis was prepared and ethical clearance was obtained. Knowledge, Attitude and Practices regarding Human Milk Banking and Human Milk Donation assessed. Individual counseling done for wrong attitude and improper practices. Data was analyzed in Microsoft excel software and results were obtained.

OBSERVATIONS AND RESULTS

Table 1

	Socio Demographic Detail	Frequency	Percentage	
	≤25	63	66.32	
	26-36	26	27.37	
	>30	6	6.32	
	Hindu	87	91.58	
	Muslim	6	6.32	
	Other	2	2.11	
	Urban	37	38.95	
	Rural	58	61.05	
	Socio Economis Status	I	6	6.32
		II	35	36.84
III		12	12.63	
IV		44	46.32	
V		0	0.00	
Type of family	Nuclear	45	47.37	
	Joint	50	52.63	

Knowledge score of study participants

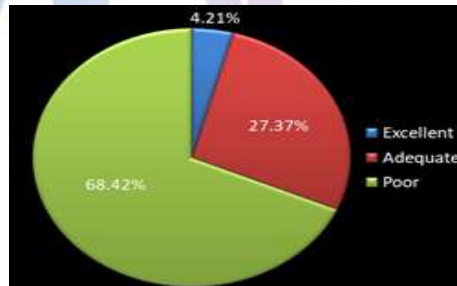


Figure 1: Attitude of ANC and PNC mothers regarding Human Milk Banking and Human Milk Donation

Table 2

S.N.		SA	A	N	D	SD
1	To receive human milk bank services	6.32%	78.95%	3.16%	11.58%	0.00%
2	To donate milk for the benfit of other neonate	5.26%	82.11%	2.11%	9.47%	1.05%
3	TO exclusively breastfeed for the first 6 month	10.53%	88.42%	0.00%	1.05%	0.00%
4	Belief that her baby would receive enough milk if she donates to human milk bank	3.16%	68.42%	13.68%	14.74%	0.00%
5	To work in mother support group for motivation of human milk donation	8.42%	90.53%	0.00%	1.05%	0.00%

SA – Strongly Agree, A – Agree, N – Neutral, D – Disagree, SD – Strongly Disagree.

Table 3

A	N	D	SD
Initiation of Breastfeeding after delivery	Just after	44	46.32
	1-2days after	8	8.42
To improve breastfeeding	Nutritious Diet	79	83.16
	Medication	9	9.47
	Self Motivation	6	6.32
	Repeated Sucking	3	3.16
	other	9	9.47
Diet restriction during breastfeeding period	Yes	60	63.16
	No	35	36.84

Practices of the study participants

Advantages known to mother regarding Breastfeeding

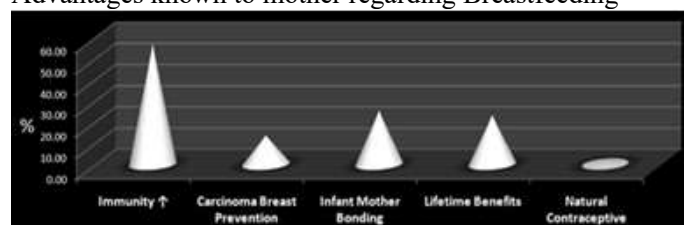


Figure 2

Ways known to mothers to increase breast milk secretion. When counseled individually, 85.27% developed positive attitude to receive milk from Human Milk Bank if not breastfed and 87.37% agreed to donate milk to Human Milk Bank for the benefit of neonates as a good service to the society. Individual counseling helps to improve the breastfeeding myths and improper practices in the society.

DISCUSSION

In our study, we found that the correct knowledge about technique of milk expression was present in 44.21%. In a study conducted by Prabhu PM and Radha BK, they observed correct knowledge about technique of milk expression in 17.9%. This expression in our study observed was much higher than that reported internationally.

Implications

To promote the practice of Human Milk Banking in India, there has to be well equipped services at various health care centers. Government can promote safe and free of cost

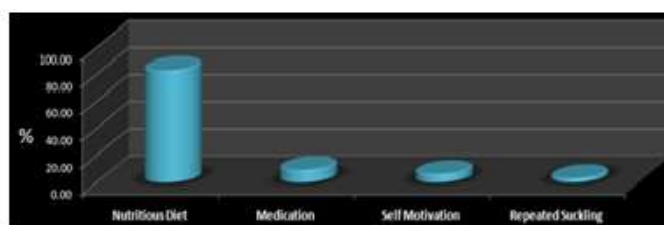


Figure 3

Human Milk Bank Services which may help the privileged population. Breast milk expression should be promoted to avail its full benefits.

Breast Milk Donation empowers women and is a form of an excellent service to the society.

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