

# Josephine Quest: Multidisciplinary Research Horizons

Vol.1 | Issue 1 | June 2026

## A Survey on Nutritional and Health status and Associated Feeding Problems of Lactating Mothers in the Areas of Visakhapatnam

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**Abstract:** Exclusively Breastfeed is one of the best and ideal methods and most effective mode to provide sufficient nutrients and energy for the growth of infants and good health of mother and newborn. Indian literature, Vedas depict breast and milk are symbolic of sweetness and endurance, where the breast is full of nectar. The objective of the present study is to assess the socio-economic status, health status and feeding practices of the lactating mothers. The methodology is an observational study to collect information with structured questionnaire, mainly to obtain the socioeconomic parameters, life style, dietary pattern, feeding practices and feeding problems observed by the lactating mothers. Results: More than 90% subjects were well educated out of which 55% were graduates and 37% were post graduates. In spite of having high literacy levels in the sample only 47% were working. Insufficient milk production was complained by 29% subjects. From 7- 30 days and 2<sup>nd</sup> month to 6<sup>th</sup> cracked nipples were still a major complaint by 23 % and 12% subjects respectively. For majority of 90% subjects' source of information on breastfeeding was gathered from their mothers or female relatives. faced during the first few days of feeding the infant.

Keyword: Exclusive Breast Feeding, Colostrum, Feeding Practices

### Introduction:

Malnutrition is one of major underlying causes for millions of deaths among women and children below the age of 5 years in developing countries which impacts on women health and directly affects the children health. Poor health status and poor nutrition of mothers is due to the factors like low socio economical background, low community levels and many

combination factors leads to malnutrition. Low socio economical lactating mothers are considered to be more vulnerable which leads to high infant mortality and maternal mortality.

Due to decreased amount of nutrients and the amount of food in the daily diet affects the quantity of mil production.

Exclusively Breastfeed is one of the best and ideal methods and most effective mode to provide sufficient nutrients and energy for the growth of infants and good health of mother and newborn. Indian literature, Vedas depict breast and milk are symbolic of sweetness and endurance, where the breast is full of nectar. "Drink in the middle of the flood, O Agni, this breast stored full of sap, teeming with water by Yajurveda. Chakra Samhita depicts importance of colostrum Kashyap Samhita depicts quality of breast milk. Sushruta Samhita depicts breastmilk as ocean of milk. Any language or any literature breastmilk is an emotion between a mother and the child. A study on lactating of mothers reveals that high risk of nutrition is been observed in lactating period of mothers due to lack of awareness on importance of nutrition, physiological changes, hormonal changes and high demand of nutrition and energy during lactation, along with micronutrients like Vitamins B & A, folate, Iron, Zinc, Iodine and Calcium. Optimal level of all macro and micronutrients are very much important for the production of breast milk. Breastfed mothers are less prone for breast cancers and ovarian cancers, and studies revealed that breastfed children are most intelligent and less prone to be overweight and other comorbid diseases. To eradicate the malnutrition in lactating mothers, community services like awareness programs in the community to be developed, educate the importance of macronutrients and micronutrient especially minerals and vitamins by using power point presentation, demonstration of iron rich food, lectures by doctors. to bring a change in their attitude, knowledge toward health and emphasizing on the practices for better health.

Research studies from many articles reveals that feeding practices in the communities are very poor, due to lack of proper environmental set up, problems faced by the lactating mothers in the transition from parenthood and working simultaneously decrease the habit of breastfeeding due to lack of proper facilities in working places. The Feeding problems are cracked nipples, sore nipples, insufficient production of milk, breast engorgement are usually observed in first few weeks of breastfeeding, which can lead to decrease breastfed to the children

The objective of the present study id to assess the socio-economic status, health status and feeding practices of the lactating mothers in the areas of Visakhapatnam.

### **Methodology:**

The study was an observational study, carried out rainbow Hospital exclusively for Mother and Child Care. The study population includes 100 lactating mothers for 3 months period. The inclusion criteria are the lactating mothers belong to age group 0f 20-35 years, and willing to participate in the survey. The exclusive criteria was subjects suffering from any chronic disease like cancer, ICU cases, who are not breastfeeding their infants for any reason are not eligible for the study.

A general structured questionnaire was constructed mainly to obtain the socioeconomic parameters, life style, dietary pattern, feeding practices. With the help of a trained dietician physical parameters like height and weight were recorded, biochemical and clinical parameters

are taken. The nutritional status and food intake was recorded by using food frequency questionnaire. Feeding Problems Feeding Practices was also noted down to assess the health status of lactating mothers. The data was entered and analyzed percentages and plotted graph using EXCEL software.

**Results:**

The results are tabulated under the given tables heading

1. Socio demographic parameters
2. Biochemical parameters- severity of anemia
3. Feeding Problems of lactating mothers
4. Feeding Practices of lactating mothers
5. Dietary Practices using Food Frequency Questionnaire

<b>Characteristics</b>	<b>Percentage</b>	<b>Characteristics</b>	<b>Percentage</b>
<b>Age</b>		<b>Residence</b>	
20-25	26	Rural	20
25-30	46	Urban	80
30-35	28	<b>Education</b>	
<b>Type of Family</b>		None	-
Joint family	9	10 <sup>th</sup> class	3
Nuclear family	74	Inter	5
<b>Marital Status</b>		Degree	55
Married	86	PG	37
Divorcee	12	<b>Occupation</b>	
Single Parent	2	Working	47
<b>No of Children</b>		Non-Working	53
1	59	<b>Family Income</b>	
2	40	30000-40000	13
3	1	40000-50000	40
4	-	5000-60000	35
		>60000	12

Table no. 1 indicates demographic details of the subjects, it can be seen that maximum subjects i.e., 46% were in the age group of 25-30 years followed by 30-35 years subjects who comprised 28%. A majority of 80% subjects were residing in an urban locality and 74% had a nuclear family set up. About 86% subjects were married only 2% were single mothers and rest of the subjects were divorced. Among the subjects most of the women i.e 59% were first time mothers. More than 90% subjects were well educated out of which 55% were graduates and 37% were post graduates. In spite of having high literacy levels in the sample only 47% were working.

**Table 2: Haemoglobin profile and its severity in lactating Mothers according to WHO**

Severity	Percentage
Normal =>12	48
Mild Anaemia (10-10.9)	40
Moderate Anaemia (7-9.9)	10
Severe Anaemia (<7	2

From the above table 2: Biochemical analysis of haemoglobin revealed only 48% subjects had healthy Hb levels, rest of the subjects were anaemic in varied intensity. Data is represented as mildly anaemic 40%, moderately 10% and 2% subjects were severely anaemic.

Breastfeeding problems	1 week	7-30 days	2 month-6 month
Cracked Nipples	34	23	12
Sore nipples	22	12	9
Insufficient production of milk	29	12	5
Breast engorgement	5	2	-
Mothers' illness	2	-	-
Infant sickness	8	3	-
Caesarean pains	30	12	-
Difficult of right position	15	3	1

Physical pains and symptoms through first 6 months of breastfeeding period is given in table no. 3, post-delivery in the first week of breast feeding cracked and sore nipples were experienced by 34% and 22% respectively. Insufficient milk production was complained by 29% subjects. From 7- 30 days and 2<sup>nd</sup> month to 6<sup>th</sup> cracked nipples were still a major complaint by 23 % and 12% subjects respectively.

<b>Awareness on Breastfeeding</b>	
Immediately after Birth	76
Within 24 h	18
Don't know	4
<b>Period for exclusive breastfeeding</b>	
1 month	3
2 months	5
3 months	4
4 months	10
5 months	12
6 months	66
<b>Age at which baby should be given liquid/solid foods</b>	
1 month	1
2 months	2
3 months	2
4 months	5
5 months	35
6 months and above	55
<b>Source of information on breastfeeding</b>	
Anganwadi	66

Own mothers/ relatives	90
Gynecologist	78
Dieticians	45

Table No 4. enumerates knowledge regarding breast feeding among participating subjects. Data revealed that 76% mothers knew that breast milk can be given immediately few hours after birth. Two thirds of the participants i.e 66% knew that exclusive breast feeding needs to be done for 6 months. For majority of 90% subjects' source of information on breastfeeding was gathered from their mothers or female relatives.

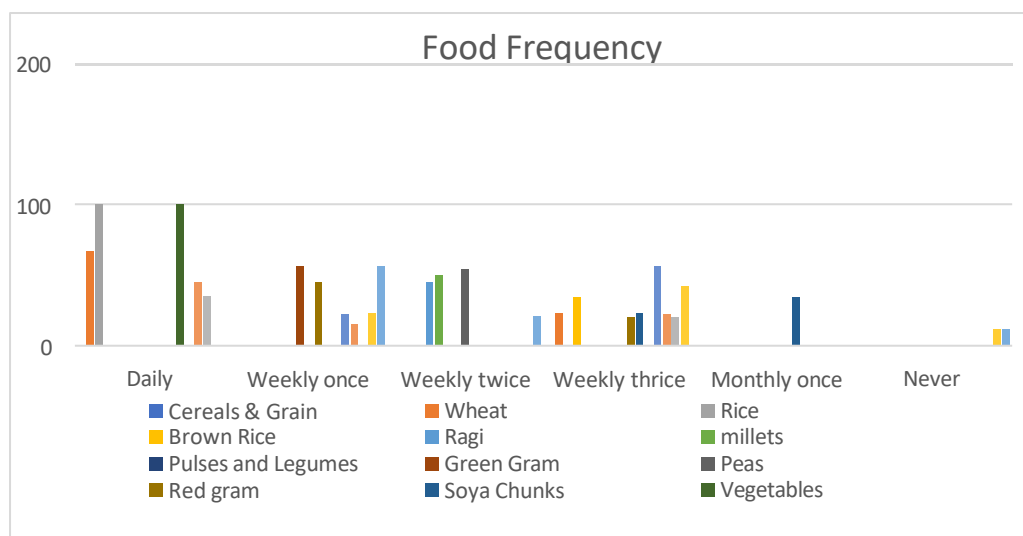


Fig No 1 shows the food frequency data of the selected subjects. For the ease of understanding foods are divided according food groups. Among cereals major consumption was rice by 100% of subjects daily. About 50% subjects consumed millets weekly twice. Pulses were mostly consumed on the alternative days by most of the subjects. Everyday different variety of vegetables were eaten 100% of subjects. Animal foods were not consumed daily but weekly once by more than 50% of subjects. About 45% included fruits as part of Healthy diet daily, 35% consumed nuts and seeds very regularly on daily basis

#### Discussion:

Motee et al according to his study majority of the mothers belong to 25-31 years, 50% of them completed secondary education among them 60% mothers are aware about introduction of breastmilk and colostrum immediately after birth, and self-motivated to provide a good health status to their infants and for themselves believed, mothers milk is the best milk.

According to United Nation and their study, mothers are aware of importance of breastfeeding for 6 months, but mothers are not practicing, and not following the guideline of WHO, introducing formulas and water prior to 6 months.

Vasanthakumar Velusamy et al in the study, 11% of Indian mothers practice exclusive breastfeeding for their children due to factor of low socio-economic background, joint family, more than 3 children, birth during summer. He concluded that education on importance of Exclusive breastfeeding need to be imparted in the community.

Semenic et al according to the study first week after delivery, highest frequency of breastfeeding problems was observed until 1 month, later the frequency of problems decreased

with the help and support assisted by their family, with the experience of practicing the frequency decreased and helped in improving breastfeeding. In many developing countries high frequency was observed in first few days and this can slow decrease with the support of friends, family and nurses. (Bergmann RL)

According to Shams, majority of the mothers feed their children without any difficulties, but particular number of mothers complain of sore nipples, breast engorgement, fatigue, back pain, cracked nipple. Study reveals due to feeding problems, working mothers and insufficiency of milk production, need to start infant formula, in early stage of newborn. The infant who receives formula milk are more prone to constipation, diarrhoea and vomiting. (Savino et al)

### **Conclusion:**

The study reveals that prevalence of exclusive breastfeeding is significantly increased compared to previous years, but there is still a dark side is prevailing, nutritional education needs to be imparted to bring about awareness on the importance of breastfeeding, colostrum, and health indicators, mothers need to be encouraged to visits Anganwadi sectors and collect the required supplements which are been provided by the government. Need to be educated on how to minimize the feeding problems faced during the first few days of feeding the infant.

### **References:**

1. Asha K, Salil S: Nutrient Intake of Lactating Mothers from Rural areas and urban areas. *Indian J Soc Res.* 1998, 39: 2-
2. Bergmann RL, Bergmann KE, von Weizsacker K, Berns M, Henrich W, Dudenhausen JW. Breastfeeding is natural but not always easy: intervention for common medical problems of breastfeeding mothers—a review of the scientific evidence. *J Perinat Med.* 2014;42(1):9–18. doi: 10.1515/jpm-2013-0095
3. Das Graças Tavares Do Carmo M, Granhen Tavares Colares L, Sandre-Pereira G, De Abreu Soares E. Nutritional Status Of Brazilian Lactating Women. *Nutrition & Food Science.* 2001;31:194–200.
4. Department of Health Directorate Nutrition: Guidelines on Maternal Nutrition. 2008, South Africa: A manual for Health Care Personnel
5. Feenstra MM, Jorgine Kirkeby M, Thygesen M, Danbjorg DB, Kronborg H. Early breastfeeding problems: A mixed method study of mothers' experiences. *Sex Reprod Healthc.* 2018;16:167–74. doi:10.1016/j.srhc.2018.04.003
6. Gay J. *The Health Of Women: A Global Perspective.* New York (Us): Routledge; 2018. [https://www.who.int/health-topics/breastfeeding#tab=tab\\_1](https://www.who.int/health-topics/breastfeeding#tab=tab_1)
7. Motee A, Ramasawmy D, Pugo-Gunsam P, Jeewon R. An Assessment of the Breastfeeding Practices and Infant Feeding Pattern among Mothers in Mauritius. *J Nutr Metab.* 2013;2013:243852. doi: 10.1155/2013/243852. Epub 2013 Jun 24. PMID: 23864943; PMCID: PMC3707234.
8. Nakhaie Mr, Palizvan Mr. The Evaluation Of The Relationship Between Dietary Fat Intake And Colostrum Beta-Carotene Of Lactating Mothers Referring To Hospitals In Tabriz. *Scientific Journal Of Kurdistan University Of Medical Sciences.* 2012;17:15–20.
9. Ronsmans, C., S. Collin, and V. Filippi. "Maternal mortality in developing countries: Nutrition and health in developing countries. 999 Riverview Drive." (2008).

10. Savino F, Cresi F, Maccario S, et al. 'Minor' feeding problems during the first months of life: effect of a partially hydrolysed milk formula containing fructo- and galacto-oligosaccharides. *Acta Paediatrica*. 2003;91(441):86–90.
  11. Semenic S, Loisel C, Gottlieb L. Predictors of the duration of exclusive breastfeeding among first-time mothers. *Res Nurs Health*. 2008;31(5):428–41. doi: 10.1002/nur.20275
  12. Shams S. Breast feeding and motherhood. *Pakistan Journal of Nutrition*. 2011;10(6):599–601.
  13. Sharma PV (translator). Charak Samhita. Chaukhamba Orientalia, Varanasi, India, 1981.  
2. Bhishagrata KL (translator). Sushruta Samhita. Chaukhamba Orientalia, Varanasi, India, 1991.
  14. Sylvia B, Mary Dowd S: The Nursing Mother's Diet. The art of Successful Breastfeeding: A Mother's Guide. 2002, <http://www.writtenvoices.com/titlepage.asp?ISBN=0312316267>
  15. United Nations Children's Fund. Progress for children. UNICEF, 2012, [http://www.childinfo.org/files/PFC4\\_EN\\_8X11.pdf](http://www.childinfo.org/files/PFC4_EN_8X11.pdf).
  16. Valentine CJ, Wagner CL. Nutritional Management of the Breastfeeding Dyad. *Pediatric Clinics of North America*. 2013;60:261–74.
  17. Velusamy V, Premkumar PS, Kang G. Exclusive breastfeeding practices among mothers in urban slum settlements: pooled analysis from three prospective birth cohort studies in South India. *Int Breastfeed J*. 2017;12:35
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