

Infant and Young Child Feeding Practices Among Lactating Mother in Rural Odisha

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ABSTRACT

Introduction: The World Health Organization (WHO) defines “Nutrition” as the intake of food considered in relation to the baby’s dietary needs. Children are the chief victim of interchange of the nutrition, socioeconomic and health factors that cause malnutrition. Adequate nutrition during infancy and early childhood is essential to ensure proper growth and development. Research scientific evidence reveals that malnutrition has been responsible directly or indirectly for 60% of mortality among children under five years annually. Over more than half of these deaths is often associated with wrong feeding practices. The Infant and Young child feeding practices during the first 2 years of life is overriding importance as this period is the “critical window” for the promotion of good health, growth, behavioral, and intellectual development. A study was conducted to assess the knowledge, attitude and practices of the lactating mothers regarding IYCF (Infant and Young Child Feeding Practices) in the district of Kendrapara, Odisha.

Keywords: Breast feeding, Complementary feeding, IYCF, Malnutrition

Objective of IYCF:

To introduce, improve, strengthen, evaluate, and sustain the key Infant and young child feeding practices at the households and community level through:

- Survival growth and development of children.
- Early initiation of breast feeding till six months of age.
- Complementary feeding practices from the 7th month
- Breast feeding till 2 years of age.

The target group were all pregnant lady, lactating mother and adolescent girls need to counsel and made aware of the IYCF practices which is much needed for strengthening the program.

1. Introduction of complementary foods. (Solid and semisolid foods) after 6 months.
2. Continue breast feeding up to 2 years of age.
3. Complementary feed for children 6 months to 2 years while doing breast feeding. Children should receive food from 4 or more food groups including macro and micro nutrients.

Government initiatives for the improvement of IYCF Practices

The Govt. of Odisha has launched an IYCF initiative in the state as project **SURAKHYA**. This initiative looks at strengthening interpersonal communication of frontline functionaries for counselling mothers and care givers on IYCF practices, also ensuring compliance the Infant Milk Substitute. It focuses breast-

feeding strengthening program to initiate MAA-Mother's absolute affection program. For which Village health nutrition day has special session for counselling the mothers and pregnant women regarding breast feeding and timely initiation of complementary feeding.

To correction of the malnutrition cases proper nutrition to be given to the child under National nutritional rehabilitation center for prevention of malnutrition in children for their optimum growth and development. These initiation by Govt. of Odisha strengthen the IYCF practices.

1. **Maternal care Practices** includes institutional delivery and post-natal care in the hospital which has effects on breastfeeding practices.
2. **Professional Support** includes counselling by professionals in the hospital after delivery how to breast feed the baby and make them understand the benefits of breast feeding for the baby as well as for the mother.
3. Community based breastfeeding promotion and support to achieve effectiveness of breastfeeding with the help of frontline health worker (A.N.M, ASHA).

To improve Complementary Feeding

1. Nutrition education improves caregiver Practices which teach them regarding safe and hygienic feeding practices which may cause severe illness in children.
2. Use of high quality locally available foods improve complementary feeding without create financial hardship for poor people and irrespective of economic condition of the family.
3. Use of supplements improves nutrient quality of complementary foods which is essential for the child growth and development.
4. Use of fortified complementary foods to improve complementary feeding through ensuring the quality of food

Kendrapara district is situated at the central coastal plain zone of Odisha. Area of the district is 2644 sq.km and total population of the district is 14.4 lakh (Census 2011), village is 1592 and total male is 717814 where female is 722547. There is total 9 Tehsil and only 2 Municipality is there so, there are more rural areas in the district. There is total 9 blocks. Agriculture is the prime source of income. More than 70% people depend on agriculture for their livelihood. Among all 9 blocks of the district Mahakalapada block is a Tehsil/Block. Total area of Mahakalapada block is 351km² Total population is 124417. There are 28,211 houses and 154 villages in the block. There is total 315 Anganwadi centers in Mahakalapada block.

Materials & Method: A descriptive cross-sectional study was conducted among 200 lactating mothers from 10 Anganwadi centers in the Mahakalapada block of Kendrapara district. Semi-structured interview scheduled was designed, pretested and used for collection of data from the respondents. Data were collected through household visits. Data was entered and analyzed in SPSS V 2.0.

Descriptive statistics was calculated.

Study Objectives include:

1. To assess the knowledge, attitude, and practices on Infant and Young Child Feeding among lactating mothers.
2. To identify the supportive factors and barriers for Infant and Young Child Feeding practice among the mothers.

Statistical Analysis

All the data that were collected using pretested pre-designed semi-structure questionnaire were compiled together in Excel and analyzed using Statistical software SPSS, Descriptive analysis was used to document the socio demographic characteristics, Basic information about Pregnancy and Childbirth, mother’s diet.

Study design, and setting

A community based cross-sectional study was conducted among the lactating mothers of rural area of kendrapara district from January 2021 to June 2021 by selecting a block considering highest number of lactating mothers i.e Mahakalapada block.

Study population

The study was comprised of lactating mothers those were having children up to 2 years of age and gave concerned for participating in the study.

Sample size calculation

Total population of Kendrapara district 14.4 lakh (As per Census 2011). Prevalence for children aged 6-8 months receiving solid or semi solid food and breast milk is 47.2% (As per NFHS-4 data) precision has taken 10% (Dut to limitation of time) and Design effect is 2. Then by taking 90% confidence interval calculating sample size by open epi sample size calculator the sample size is 192. To enhance the strength of the study the rounded figure of sample size was 200.

Sampling Technique

Out of 9 blocks from Kendrapara district one block named Mahakalpada block was selected best on the highest number of lactating mothers. Total number of AWCs in that block is 315 then by segregating the block using clustering sampling the total block was divided into 5 zone as north, south, east, west, and central and two AWCs were randomly chosen from each zone. Hence, total 10 AWCs were included in the study. 20 samples were selected from each AWC. List of lactating mothers were taken from AWW (Angan Wardi Worker) and from each AWC number of lactating mothers selected randomly through house visit.

Expected outcome.

The contextual results of knowledge of the mother regarding Infant and Young Child Feeding and Practices will be assessed and shared with the beneficiaries for appropriate action.

Discussion:

Table-1 Association between total knowledge and total practice

	PRACTICE			TEST OF SIGNIFICANCE
Knowledge	Poor	Average	Good	
Poor	13 (4.7)	21 (22.1)	1 (8.2)	0.00
Good	14 (22.3)	105 (104.0)	46 (38.8)	

The above table describes about the association between the knowledge and practice of the lactating mother regarding Infant and Young child feeding practices. Chi sq. test was used to analyze the

significance of knowledge and practice. There was statistically significant association was seen among knowledge of the respondents and the practices. p value (0.00) which is less than 0.05 that is statistically significant. The table shows that people having poor knowledge does not having good practice where people having good knowledge about IYCF having average practice.

Table-2 Association between occupation and knowledge.

OCCUPATION	TEST OF KNOWLEDGE SIGNIFICANCE		
	Poor	Good	
Employed	24 (27.4)	7 (3.6)	0.003
Home maker	131 (123.9)	9 (16.1)	
Small business	22 (25.7)	7 (3.3)	

The above-mentioned table explain about the association between occupation and knowledge of the respondents. Chi sq. Test was used to analyze the significance of occupation and knowledge level of the respondents. There was statistically significant association was seen among occupation of the mother and knowledge level regarding IYCF where p value is 0.003 which is statistically significant. The table describes that most of the respondents those were housewives have poor knowledge regarding IYCF.

Table-3 Association between education of mother and mode of delivery.

TEST OF SIGNIFICANCE			
MODE OF DELIVERY			
EDUCATION	Normal	LSCS	0.006
Illiterate	20 (16.9)	4 (7.1)	
Primary	2 (1.4)	0 (0.6)	
Middle school	22 (19.7)	6 (8.3)	
Secondary	29 (22.6)	3 (9.4)	
Higher secondary	43 (50.1)	28 (20.9)	
Graduation and above	25 (30.3)	18 (12.7)	

The table explain about the association between education and mode of delivery. Chi sq. Test was used to analyze the significance of education of mothers and the mode of delivery. There was statistically significant association was seen among the education of mother and mode of delivery where p value is 0.006 which is less than 0.05 and statistically significant. Respondents those were having educational level higher secondary they were prefer normal delivery and all the respondents prefer institutional delivery where home delivery is nil.

Table-4 Association between annual income and mode of delivery

ANNUAL INCOME	MODE OF DELIVERY		TEST OF SIGNIFICANCE
	Normal	LSCS	
20500-49999	100 (76.8)	9 (32.2)	0.00
50000-99999	18 (14.8)	3 (6.2)	
100000-600000	23 (49.4)	47 (20.7)	

The table depicts about the association between annual income and mode of delivery. Chi sq. Test was used to analyze the significance of annual income and the mode of delivery. There was statistically significant association was found among the annual income of the respondents and mode of delivery where p value is 0.00 which is statistically significant. High income category group of people more prefer LSCS (especially at Nursing home and private hospital) where low-income group of people normal delivery (at Govt. hospital) as compared.

Table-5 Association between Education and Knowledge

EDUCATION	KNOWLEDGE (How long should a baby receive nothing more than breast milk?)		TEST OF SIGNIFICANCE
	Poor	Good	
Illiterate	21 (4.4)	3 (19.6)	0.00
Primary	0 (0.4)	2 (1.6)	
Middle school	12 (5.2)	16 (22.8)	
Secondary	1 (5.9)	31 (26.1)	
Higher secondary	2 (13.1)	69 (57.9)	
Graduation and above	1 (8.0)	42 (35.0)	

The above table explains about association between education and knowledge (regarding Exclusive Breastfeeding duration). To test the significance Chi sq. Test was used to identify the significance association between education and knowledge though p value is 0.00 which satisfies the statistical significance. The table shows that people those were well educated were having good knowledge regarding breast feeding whereas illiterate people were having poor knowledge regarding breast feeding.

Table-6 Association between Attitude and Practice

ATTITUDE	PRACTICE			TEST OF SIGNIFICANCE
	Poor	Average	Good	
Disagree	9 (3.2)	10 (15.1)	5 (5.6)	0.001
Agree	18 (23.8)	116 (110.9)	42 (41.4)	

The table explain about the association between attitude and practice. Chi sq. Test was used to test the significant association between attitude and practice of IYCF where p value is 0.001 which is statistically

significant. Majority of the respondents those were having good perception regarding IYCF having average practice where those were having poor perception were having poor practice of IYCF (Brest feeding as well as complimentary feeding).

Table-7 Association between Education and Practice

TEST OF SIGNIFICANCE PRACTICE				
EDUCATION	Poor	Average	Good	
Illiterate	9 (3.2)	15 (15.1)	0 (5.6)	0.00
Primary	1(0.3)	0 (1.3)	1 (0.5)	
Middle school	7 (3.8)	17 (17.6)	4 (6.6)	
Secondary	2 (4.3)	20 (20.2)	10 (7.5)	
Higher secondary	6 (9.6)	43 (44.7)	22 (16.7)	
Graduation and above	2 (5.8)	31 (27.1)	10 (10.1)	

The table explains about the association between education and practice. To test the significance association Chi sq. Test was used where p value was 0.00 which is statistically significant. So, it has significant association between education and practice. The illiterate people were having poor practice whereas people having highersecondary level of education or graduation level of education were having average practice.

Result:

Out of 200 sample, 71 individual were having education level higher secondary and most of them 70% were housewives. Only 23% lactating mothers had gone through 4 ANC visit and 77% respondents had undergone less than 4 ANC visit. There was 100% institutional delivery, 70% of people (141) had gone through normal vaginal delivery.87% individual was having bottle feeding practice. Consumption of colostrum is 86.5%. 83% lactating mothers having knowledge regarding breast feeding till completion 6 months of age. The individuals those are continuing breastfeeding during sickness is 100%. lactating mothers about IYCF is 82.5%, whereas 88% respondents were agreed that exclusive breast feeding up to 6 months to complementary feeding 2 years is important for the growth and development of the children. Only 23.5% individuals follow good hygiene practice while feeding the baby up to 2 years of age.

Conclusion:

The study concludes that the respondents were having good knowledge and attitude towards benefits of exclusive breast feeding and complementary feeding. The study depicts that feeding practices is average so there is a need for monitoring and effective implementation of different programs by the Government. More sessions required for the demonstration of feeding practices as well as the awareness and education for the lactating mothers and their family members.

REFERENCE

1. Gopalan C, Rama Sastri BV, Balasubramanian SC (1989) Nutritive value of Indian foods. National Institute of Nutrition, Indian Council of Medical Research, Cornell University, pp. 156.(1)

2. Patel A, Badhoniya N, Khadse S, Senarath U, Agho KE, et al. Bull 31: 314-333.(Ianscent)
3. <http://unicef.org/globalstrategy>
4. <http://wcdodisha.gov.in/content/2/60>
5. https://www.who.int/nutrition/publications/IYCF_Participants_Manual.pdf
6. <https://kendrapara.nic.in/>
7. <https://www.orfonline.org/research/odishas-strides-in-nutrition-57926/>
8. Meshram II, Laxmaiah A, Venkaiah K, Brahmam GN. Impact of feeding and breastfeeding practices of infants in a district of Andhra Pradesh, India. National Medical Journal of India. 2012 Jul 1;25(4):201.