

An Exploratory Study to Assess Knowledge Regarding Complementary Feeding among Postnatal Mothers

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Abstract

The self structured questionnaire was prepared to assess the knowledge of postnatal mothers regarding complementary feeding. The study was conducted on 60 postnatal mothers in civil hospital and Gurcharan Kanwal hospital, district Hoshiarpur Punjab. Purposive sampling technique was used to select the sample. The results of present study concluded that as per the knowledge majority of postnatal mothers i.e. 53.33% of postnatal mothers had average knowledge regarding complementary feeding followed by 30% subjects had poor knowledge and only 16.67% of subjects had good knowledge regarding complementary feeding. While analyzing, As per the findings related to the association of knowledge regarding complementary feeding among postnatal mothers with demographic variables, there was statically significant relationship between the education, type of family, place of residence, parity and knowledge regarding complementary feeding among postnatal mothers where as there was statically non significant relationship between age, occupation, religion, family income, source of information, number of children and level of knowledge regarding complementary feeding. Guidelines were distributed regarding complementary feeding to study subjects that are postnatal mothers in civil hospital and Gurcharan Kanwal hospital, district Hoshiarpur Punjab.

Keywords: *Complementary feeding, postnatal mothers.*

Introduction

Complementary foods are specially formulated for infants aged between 6-9 months for transition between breast or bottle feeding and normal intake of solid foods. Before six months, the baby's gut is still developing and they need only breast or formula milk. Weaning too soon may increase the risk of infections, allergies.¹

Solid food is needed to provide baby with enough important nutrients like iron. Also giving solid food from around six month is important for learning to chew and accept different tastes and textures. Introduce small amount of pureed fruits and vegetables and gradually build upto larger amount of more solid food.²

Start complementary feeding with cereals such as baby rice mixed with milk, mashed cooked vegetables such as potato, yam, sweet potato or carrot, mashed banana, avocado, cooked apple or pear, pieces of soft fruit or vegetables small enough for your baby to pick up. Gradually move to rice(mashed), dhal or pulses, noodles, pasta, full-fat dairy products such as yoghurt or custard(choose lower sugar varieties).³

Complementary food should be well balanced nutritionally and at least 8-10% of energy should be obtained from the protein of good quality. Essential amino acids like lysine is deficient in wheat, so wheat should be consumed simultaneously along with legumes. Infants also require iron supplements to prevent iron deficiency anaemia⁴. Generally infants complementary feeding is started with mashed banana, as it is easily digestible, within a week or to the infant put on the suji cooked in milk. Both of these provide adequate calories to the infant. Shortly thereafter well cooked and mashed lentils or peas, followed by khichri are added. By the 8 or 9 months of age, the child should be taking most

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of foods cooked in house for adults. If done “gradually and with love” complementary feeding can be a positive experience for both mother and baby⁵.

The weaning period is very crucial period in the child development. Complimentary feeding, if not done properly is often followed by diarrhoea and growth failure leading to kwashiorkor, marasmus and immunodeficiency marked by recurrent and persistent infections which may be fatal for the child’s survival. Knowledge of complementary foods and practices is an important aspect of preventive and social paediatrics. There is enough evidence to show that children can be properly weaned by local foods, a kind usually consumed by the older children and adults in their families. At the age of one year, the child should receive solid food consisting of cereals, pulses, vegetables and fruits. Efforts should therefore be made to design and promote the use of homemade complementary foods⁶.

To support the growth and development of the infant, weaning is very essential to meet their energy requirement. Infants stomach is around ten times smaller than an adult. So they need small frequent meals rather than few large meals.⁷

Problem Statement: An exploratory study to assess knowledge regarding complementary feeding among postnatal mothers in selected hospitals Hoshiarpur, Punjab.

Objectives:

- To assess knowledge regarding complementary feeding among postnatal mothers.
- To find out relationship of knowledge regarding complementary feeding among postnatal mothers with selected demographic variables like age, education, occupation, type of family, religion, family income, place of residence, parity, number of children and source of information.
- To prepare guidelines regarding complementary feeding for postnatal mother.

Assumptions: Women whose education and parity is more have more knowledge regarding complementary feeding.

Research Methodology

Research Approach: A Quantitative research approach (exploratory) was adopted to assess the

knowledge regarding complementary feeding among postnatal mothers.

Research design: Non-experimental exploratory research design was used.

Research setting: The present study was conducted in Gurcharan kanwal and civil hospital of Hoshiarpur, Punjab.

Target population: Postnatal Mothers admitted in maternity ward of Civil hospital and Gurcharan kanwal hospital Hoshiarpur.

Independent variables: The independent variable in this study were age, education, occupation, type of family, religion, family income, place of residence, parity, number of children and source of information.

Dependent variable: The dependent variable in this study was knowledge regarding complementary feeding among postnatal mothers.

Sample Size: Sample size of the study was 60 postnatal mothers who were admitted in civil Hospital and Gurcharan Kanwal Hospital, Hoshiarpur, Punjab were selected as a sample.

Sampling technique: Purposive sampling technique was used in this study to select sample who is representative of the population under study.

Description of tool:

Section-A: Demographic data-demographic data which include 10 variables such as age, education, occupation, type of family, religion, family income, place of residence, parity, number of children and source of information.

Section-B: It contained self-structured questionnaire for the assessment of knowledge regarding complementary feeding among postnatal mothers. This part consisted of 36 multiple choice questions having one best answer among four options to assess the knowledge regarding complementary feeding among postnatal mothers.

Criterion measure score for assessing knowledge was as follows:

Maximum score: 36

Minimum score: 0

On the basis of score subject were categorized as

Level 1: subjects having good knowledge

Score above: > 75% (>27)

Level 2: subjects having average knowledge

Score: 50-75% (18-27)

Level 3: subjects having poor knowledge

Score: < 50% (< 18)

Results

Table 1: Frequency and percentage distribution of postnatal mothers regarding complementary feeding according to level of knowledge N=60

Level of knowledge	Criterion measure	n	% age
Good	>27 (>75%)	10	16.67
Average	18-27 (50-75%)	32	53.33
Poor	<18 (<50%)	18	30

Maximum knowledge score = 36

Minimum knowledge score = 0

Table 2: Mean, mean percentage and rank order of sub-category of knowledge regarding complementary feeding among postnatal mothers

Items	Mean	Mean %	Rank order
Meaning and initiation of complementary feeding	7.95	66.72	1
Quantity, frequency & consistency of complementary feeding	8.13	54.22	3
Feeding children during illness and after illness	2.16	54.16	4
Care during feeding	3.33	66.66	2

Table 2 shows ranking order of knowledge of postnatal mothers regarding complementary feeding. In this meaning and initiation of complementary feeding rank 1 with mean % of 66.72, followed by care during feeding rank 2 with mean % of 66.66, followed by quantity, frequency and consistency of complementary feeding rank 3 with mean % of 54.22 and least by feeding children during illness and after illness rank 4 with mean % 54.16.

Table 3: Relationship of knowledge regarding complementary feeding among postnatal mothers with selected demographic variable. N= 60

Sample characteristics	n	Mean	SD	df	Test values
Age (in years)					
18-23	16	21.06	6.11	2,57	F=0.2783 ^{NS}
24 -29	31	21.16	6.18		
30 – 35	13	22.53	5.47		
Education					
Illiterate	2	19	9.89	4,55	F=6.136*
Primary	7	18.14	4.25		
Matric	23	19.26	5.69		
Senior Secondary	12	21.5	3.7		
Graduation and Above	16	26.25	5.48		
Occupation					
Working	15	23	7.92	58	F=1.183 ^{NS}
Non- working	45	20.91	5.13		
Type of family					
Nuclear	21	19.92	5.74	58	F=2.85*
Joint	31	24.23	5.28		

Sample characteristics	n	Mean	SD	df	Test values
Religion					
Hindu	28	21.6	5.58	2,57	F=0.3352 ^{NS}
Sikh	29	21.55	6.28		
Any other	3	18.67	7.63		
Family income (per month) Rs					
<5000	16	19.43	4.47	3,56	F=3.6945 ^{NS}
5001-10,000	22	19.32	6.1		
10, 001- 15000	11	20.91	5.73		
>15000	11	21.09	4.8		
Place of residence					
Urban	21	23.57	6.69	58	t=2.103*
Rural	39	20.28	5.24		
Parity					
Primi para	24	20.5	6.1	58	t=2.023*
Multi para	39	23.05	5.84		
Number of children					
1	20	20.8	6.24	2,57	F=0.6389 ^{NS}
2	36	22.05	5.84		
3	4	19	5.94		
Source of information					
Newspaper & magazines	10	23.4	5.92	5,54	F=2.778 ^{NS}
Television & Radio	19	22.42	4.5		
Internet	3	28	1.73		
Family	20	20.25	6.06		
Peer group	1	17	0		
Health personnel	7	14.14	7.51		

NS = non significant, * = significant at P<0.05 level

Discussions

The results shows that maximum numbers of postnatal mothers had average knowledge regarding complementary feeding which is consistent with the same study conducted by kumara S in Mangalore, of coastal south India regarding knowledge of mothers related to complementary feeding. The study reveals that 75.5% mothers had average knowledge regarding complementary feeding⁸. Findings of present study are comparable with study conducted by Kusloom U to assess the knowledge of multipara mothers regarding complementary feeding revealed that 58% multipara mothers had average knowledge regarding complementary feeding,32% of multipara mothers had

poor knowledge regarding complementary feeding and 10% of multipara mothers had good knowledge regarding complementary feeding.⁹ Present study is also comparable with study conducted by Halt C N in Holland to assess the knowledge and practice of parents regarding complementary feeding which showed that from 60 postnatal mothers, 85% mothers had knowledge regarding complementary feeding¹⁰. The finding of present study in relation with education revealed a significant relationship with knowledge regarding complementary feeding which is comparable with a study conducted by Brown A to assess maternal attitudes and trends in initiation of complementary feeding- in lady Hardinge Medical College, baltimore,study results

revealed that education had statistically significant relationship with knowledge. Hence mothers with higher education had more knowledge¹¹. This finding is similar to that in the study conducted by Zeilitin MF et al on knowledge, attitudes and practices of mothers regarding complementary feeding study results revealed that type of family had statistically significant relationship with knowledge. Mothers from joint family having more knowledge regarding complementary feeding.¹² Findings of present study showed that place of residence had significant relationship with knowledge of postnatal mothers regarding complementary feeding which is comparable with a study conducted by Jerome and Ostergren (2007) results revealed that there is statistically significant relationship of place of residence, type of family and age with knowledge of mothers.

Findings of present study showed that parity had significant relationship with knowledge of postnatal mothers regarding complementary feeding which is comparable with a study conducted by Cameron A rural revealed that there is statistically significant relationship of parity with knowledge. Multi para mothers had more knowledge regarding complementary feedings¹³.

Conflict of Interest: Nil

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Ethical Clearance: Taken from Institutional ethical committee.

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