



THE PERCEPTION AND PRACTICE OF WEANING AMONG MOTHERS OF CENTRAL INDIA

Community Medicine

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ABSTRACT

Background - During the growth phase of a child the first two years of life is a critical window period under which a child not receiving adequate food is vulnerable to become under nourished. The under nutrition in children and under five mortality can be prevented by giving breast milk and weaning food as per the recommended guidelines. According to NFHS 4 report 7.7% infants below 2 months of age, 8.1% infants of age 2-3 months and 14.1% infants of age 4-5 months were already given complementary food even before achieving the age of six months. Hence this study was conducted to assess perception and practice of weaning.

Method: A cross-sectional research design was used to assess the perception and practice of weaning among 500 mothers of infants up to 12 months of age. The study was conducted from July 2015 to August 2016 at Department of Pediatrics of NSBC Medical College, Jabalpur. The sample of the study was randomly selected mothers having child age up to 12 months of age who were visiting OPD of Pediatric department.

Results: 465 (93%) of participating mothers were aware about weaning. Majority (40.43%) of mothers got information about weaning from their family members and relatives. A significant association between education status of mothers and awareness about weaning was found. The education status and socioeconomic status of mothers was significantly associated with mother's perception about age of initiating weaning. Mother's perception about age of initiating weaning was significantly associated with mother's family type.

Conclusion: In present study a higher percentage of mothers were aware about weaning. The family members and relatives of mothers seem to play an important role in making a mother aware about weaning practice. Education of mother and joint families seems to play an important role in making a mother aware about proper age of initiating weaning.

KEYWORDS

Weaning, awareness, perception, central India

INTRODUCTION

The condition of malnutrition is defined as a state that results from either deficiency or excess of one or more essential nutrients in diet. It continues to be a public health problem in developing nations like India.¹ According to an estimate almost 90% of all stunted children population lives in developing countries of Africa and Asia.² According to WHO report on global burden of disease thirty five percent of under-five deaths worldwide are due to the presence of undernutrition.³ During the growth phase of a child the first two years of life is a critical window period under which a child not receiving adequate food is vulnerable to become under nourished. The condition of under nutrition in children and under five mortality can be prevented by giving breast milk and weaning food as per the recommended guidelines. WHO has recommended exclusive breast feeding for the first six month of life, with the addition of complementary feeds at the age six months with continued breast feeds until at least the age of two years.⁴ WHO has defined complementary feeding period as the period during which other foods or liquids are provided along with breast milk and any nutrient containing foods or liquids given to young children.⁵

It has been observed in many studies that awareness of initiating complementary food, education status of mothers, age of mothers, socio economic status and sex of child are some of the factors which can lead to either too early or too late initiation of weaning.^{6,7,8} According to NFHS 4 report 7.7% infants below 2 months of age, 8.1% infants of age 2-3 months and 14.1% infants of age 4-5 months were already given complementary food even before achieving the age of six months. The survey also reports that the median duration of exclusive breastfeeding in India and in Madhya Pradesh 2.9 and 3.3 months respectively.⁹ Hence this study was conducted to assess perception and practice of weaning among mothers living in or around Jabalpur districts of Madhya Pradesh.

MATERIALS AND METHODS

A cross sectional research design was used to assess the perception and practice of weaning among 500 mothers of infants up to 12 months of age. After obtaining ethical clearance the study was conducted at Department of Pediatrics of NSBC Medical College, Jabalpur from July 2015 to August 2016. The sample of the study was randomly mothers of age who were visiting OPD of Pediatric department.

Inclusion criteria –

The mothers included in the study were of the age between 18 to 35 years. Randomly selected mothers having child age up to 12 months, who were visiting the OPD of Pediatrics department for treatment of their child and were ready to give required information (as per questionnaire) after giving informed consent were included in the study.

Exclusion criteria –

The mothers who were not willing after informed consent, who were more worried for the health condition of their child and were unable to spare time give information and those children who need hospitalization were also excluded from the study. Some of the children who were brought by the relatives of mother or father for treatment were also excluded.

Data was collected in a pretested questionnaire which consisted of sections to include demographic information, knowledge of weaning practices, food items used by mothers in weaning process. The mothers were asked whether she knows about weaning or not. The responses were recorded in the form of YES or NO. Those responded yes were asked about the source from which they came to know about weaning. The mothers were asked to tell about the age of child at which they started weaning or they are going to start the weaning. Socioeconomic classification was done according to Kuppuswamy classification. The collected data was analyzed by SPSS software version 20.

RESULTS

Table 01 - Socio demographic profile

Characteristics	Category	N = 500	%
Age of children in months	<06	224	44.8
	6-12	276	55.2
Family type	Joint	326	65.2
	Nuclear	174	34.8
Level of education	Illiterate	52	10.4
	Primary	118	23.6
	Junior secondary	129	25.8

	Senior secondary	98	19.6
	Bachelor	79	15.8
	Post graduate	24	4.8
Occupational status	Employed	83	16.6
	Unemployed	417	83.4
Socio-economic classification*	Upper middle class	117	23.4
	Lower middle class	169	33.8
	Upper lower class	202	40.4
	Lower class	12	2.4

*Socioeconomic status according to Kuppuswamy classification

As shown in table 01, number of mothers whose child was younger than six and older than six months was 224 (44.8%) and 276 (55.2%) respectively. The number of mothers belonging to joint family and nuclear family was 326 (65.2%) and 174(34.8%) respectively. Out of 500 mothers only 52 (10.4%) mothers were illiterate. The number of mothers belonging to upper middle class lower middle class upper lower class and lower class was 117(23.4%), 169(33.8%), 202(40.4%) and 12(2.4%) respectively.

In our study 465 (93%) of participating mothers were aware about weaning. As shown in table 02, 40.43% mothers got information about

weaning from her family members and relatives and 21.72% from doctors and health worker, while 17.42% and 20.43% from media and other source respectively. The association between mother's education status, her family type with mother's awareness regarding weaning is shown in table 03.

Table 02 – Distribution of mother's awareness regarding weaning and source of information about weaning among mothers who were aware about weaning

S.No	Mothers	Number	Percentage
1.	Know about weaning (Yes)	465	93%
2.	Don't know about weaning (No)	35	07%
	Total	500	100
S.No	Source of Information About Weaning	Number of Mothers Know About Weaning	Percentage
01	Doctor/Health worker	101	21.72%
02	Family/Relatives	188	40.43%
03	Media	81	17.42%
04	Other	95	20.43%
	Total	465	100%

Table 03 - Association between mother's education status, family type with mother's awareness regarding weaning

S.No	Education Status of Mothers	Number of mother who		Total	χ ² test
		Know about weaning	Don't know about weaning		
1.	Illiterate	45 86.5%	7 13.5%	52	p<0.001.
2.	Primary	101 85.6%	17 14.4%	118	
3.	Junior secondary	123 95.3%	6 4.7%	129	
4.	Senior secondary	93 94.9%	5 5.1%	98	
5.	Graduate/ Bachelor	79 100%	0 0.00%	79	
6.	Post graduate	24 100%	0 0.00%	24	
	Total	465 93%	35 7.00%	500 100%	
S.No	Mother's Family Type			Total	p>0.05
1.	Joint Family	299 64.3%	27 77.1%	326 65.2%	
2.	Nuclear Family	166 35.7%	8 22.8%	174 34.8%	
	Total	465 100%	35 100%	500 100%	

The association between mother's education status, socio economic status with mother's perception about age of initiating weaning is shown in table 04. The association between gender of child, mother's family type with mother's perception about age of initiating weaning is shown in table 05.

Table 04 - Association between mother's education status, socio economic status with mother's perception about age of initiating weaning

S.No	Education Status of Mothers	Mother's perception about age of initiating weaning				Total	χ ² test sig
		04 Months	Before Completion of 06 Months	At 6 Months	Delayed weaning(Beyond 07 Months)		
1.	Illiterate	5 9.60%	13 25.0%	30 57.7%	4 7.70%	52	P<0.001
2.	Primary	8 6.80%	29 24.60%	76 64.4%	5 4.2%	118	
3.	Junior secondary	2 1.60%	32 24.8%	90 69.8%	5 3.9%	129	
4.	Senior secondary	2 2.0%	42 42.9%	49 50.0%	5 5.10%	98	
5.	Graduate/ Bachelor	0 0%	18 22.8%	59 74.70%	2 2.5%	79	
6.	Post graduate	0 0%	2 8.3%	22 91.7%	0 0%	24	
	Total	17 3.40%	136 27.2%	326 65.2%	21 4.20%	500 100%	
S.No	Socio economic status					Total	

1.	Upper middle	0 0%	36 30.8%	79 67.5%	2 1.7%	117	P<0.001
2.	Lower middle	1 0.6%	50 29.6%	115 68.0%	3 1.8%	169	
3.	Upper lower	14 6.9%	48 23.8%	124 61.4%	16 7.9%	202	
4.	Lower	2 16.7%	2 16.7%	8 66.7%	0 0%	12	
5.	Total	17 3.4%	136 27.2%	326 65.2%	21 4.2%	500 100%	

Table 05 - Association between gender of child, mother's family type with mother's perception about age of initiating weaning

S.No	Gender of child	Mother's perception about age of initiating weaning				Total	χ^2 test
		04 Months	Before Completion of 06 Months	At 6 Months	Delayed weaning(Beyond 07 Months)		
1.	Female	12 5.0%	58 24.3%	158 66.1%	11 4.6%	239	P>0.05
2.	Male	5 1.9%	78 29.9%	168 64.4%	10 3.8%	261	
	Total	17 3.4%	136 27.2%	326 65.2%	21 4.2%	500 100%	
S.No	Mother's Family Type					Total	χ^2 test
1.	Joint Family	14 82.40%	74 54.40%	220 67.50%	18 85.70%	326 65.20%	P<0.01
2.	Nuclear Family	3 17.60%	62 45.60%	106 32.50%	3 14.30%	174 34.80%	
	Total	17 100%	136 100%	326 100%	21 100%	500 100%	

DISCUSSION -

Weaning is an important process which is supposed to be initiated as per recommendations by WHO by all mothers to fulfill the demands of growing children. The weaning practice is influenced by many factors. Awareness about weaning is one such factor. In our study 93% mothers were aware about weaning. The higher prevalence of awareness was also observed in a study by Dipty Subba et al 2014 from Nepal.¹⁰ Similarly a study by Deepali Ambike et al 2017 from Maharashtra also reported that 21.1% respondents in their study were totally unaware about the weaning practices.¹¹ According to our results, family and relatives of mothers had an important role in mother's awareness about weaning as 40.43% mothers responded that they came to know about weaning from their family members and relatives. Deepali Ambike et al reported in their study that family members were the source of information regarding weaning for 30.3% mothers.¹¹ The study by Agarwal N, Bezboruah G 2017 and Dhanasekaran N 2015 observed in their study that early initiation and timely weaning was significantly associated with level of education of the mothers.^{12,13} In our study also we observed a significant ($p<0.001$) association between education status of mothers and awareness about weaning. (Table 03) In our study out of 465 mothers who knew about weaning 299 (64.3%) were from joint family. The family type of mother was not associated with mother's awareness about weaning. Our results regarding mother's family type are in contradiction with the study by N. Dhanasekaran 2015 who reported that knowledge about weaning was significantly associated with mother's family type.¹³

In our study out of 500 participants regardless of education status or socioeconomic status of mothers, 326(65.2%) mothers responded that the correct age of initiating weaning is 06 months (Table 04). The education status and socioeconomic status of mothers was significantly ($P<0.001$) associated with mother's perception about age of initiating weaning. We observed that 57.7% illiterate were aware about correct age of initiating weaning. More than 60% mothers in different classes of socioeconomic status answered correct age of initiating weaning. Our observation regarding association of education status and socioeconomic status of mothers with mother's perception about age of initiating weaning are in accordance with the findings of S Rao et al 2011 and Agarwal N, Bezboruah G 2017.^{7,12}

It is commonly observed in Indian families that a male child is given more importance than a female child. This inclination of parents towards a male child in practicing weaning has been observed in various studies. In a study by S Vyas et al 2014 observed that majority of boys were weaned earlier than girls irrespective of the age of the weaning.¹⁴ In our study we did not observed such discrimination as almost equal percentage of mothers of male and female infants in responded proper age of weaning (Table 05). Our study did not find any association between gender of child and mother's perception about age of initiating weaning. The study by S Rao et al 2011 also did not

observed any association between gender of child and mother's perception about age of initiating weaning.⁷ In our study mother's perception about age of initiating weaning was significantly ($P<0.01$) associated with mother's family type. 67.5% mothers belonging to joint family were aware about the correct age of initiating weaning. In this regard our results are contradictory to results obtained by S Rao et al 2011.⁷ In their study the age of initiating weaning was not significantly associated with mother's family type.

CONCLUSION -

In present study a higher percentage of mothers were aware about weaning. The family members and relatives of mothers seem to play an important role in making a mother aware about weaning practice. Education of mother and joint families seems to play an important role in making a mother aware about proper age of initiating weaning.

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