

## KAP STUDY REGARDING WEANING IN MOTHERS AT A TERTIARY CARE UNIT

Dr. Faisal Qayum\*<sup>1</sup>, Dr. Muhammad Mujtaba<sup>2</sup> and Dr. Ali Shan<sup>3</sup><sup>1</sup>(PMDC # 4543-Ajk) Nishtar Medical College, Multan.<sup>2</sup>(PMDC # 91183-p) Nishtar Hospital, Multan.<sup>3</sup>(PMDC # 4379-Ajk) Mohi-Ud-Din Islamic Medical College Mirpur.

\*Corresponding Author: Dr. Faisal Qayum

(PMDC # 4543-Ajk) Nishtar Medical College, Multan.

Article Received on 05/09/2018

Article Revised on 26/09/2018

Article Accepted on 17/10/2018

## ABSTRACT

**Background:** Many children in rural communities of developing countries die of malnutrition due to lack of knowledge, resources and certain misconceptions about weaning in mothers which result in low quality weaning foods and improper feeding practices. **Objectives:** To evaluate the Knowledge, Attitude and Practices of mothers about weaning foods and their impact on child feeding practices. **Methodology:** Cross-sectional Study was conducted among the mothers of infants aging from six months to twelve months at Pediatric Outpatient Department, Nishtar Hospital, Multan from 10-03-2017 to 29-03-2017. 169 mothers were surveyed for their Knowledge, Attitude and Practices about weaning and weaning foods. Informed consent was taken and required information was collected by developing a structural questionnaire. Data was analyzed using SPSS Version 23.0. **Results:** Out of 169 surveyed mothers, 163 mothers knew about weaning and 6 mothers did not. 116 (68.64%) mothers were from rural areas, out of which 40 (30.5%) had good, 33 (28.4%) had average and 43 (37.1%) had poor knowledge about weaning foods, and 53 (31.36%) mothers were from urban area, out of which 32 (60.4%) had good, 17 (32.1%) had average and 4 (7.5%) had poor knowledge about weaning foods. From urban background 22 (41.5%) mothers used to feed their child less than 4-6 times a day, 30 (56.6%) mothers used to feed their child 4-6 times a day, 1 (1.9%) mother used to feed her child more than 4-6 times a day. 86.6% of mothers from urban areas started weaning their child at 6 months of age while 43.1% mothers started weaning at this age from rural areas. **Conclusion:** In our study, we found that knowledge, attitude and practices of weaning in mothers from urban areas are better than mothers from rural areas owing to low literacy and low socioeconomic status of mothers from rural background. Lack of resources and higher number of children at young age are also contributing factors in poor knowledge and practices of weaning in mothers living in rural areas.

**KEYWORDS:** Weaning, Semisolid, Knowledge, Feeding.

The term "Weaning" describes the process by which baby gradually moves or shifts from breast milk to semi solid or solid food consumption with a gradual reduction in the intake of breast milk. Weaning is the gradual process of introduction of food other than breast milk, starting around the age of 6 months, because the mother's milk alone is not sufficient to sustain growth beyond 6 months<sup>1</sup>. In 2001 the World Health Organization (WHO) issued a revised global recommendation that mothers should breast feed exclusively for six months<sup>2</sup>. These new guidelines promote exclusive breastfeeding for the first 6 months of life, early initiation of breastfeeding (less than 1 hour after birth), and continued breastfeeding with the gradual introduction of appropriate complementary foods (timely, adequate, safe, and properly fed) thereafter<sup>3</sup>. The right practice of weaning is necessary to prevent from various health related complications like allergy, diarrhea and choking. Maternal physiology, infant

nutritional status, nutritional needs, infant development, especially the development of biting and chewing and the cultural issues, all play a role in the timing of weaning. Important determinant of the appropriate age for weaning is the physiological maturity of gastrointestinal and renal function of baby. There are concerns, firstly, that the high permeability of the young infant's digestive tract may permit large foreign proteins to penetrate and provoke immune sensitization; and secondly, that foods with a high solute load may result in the need to concentrate urine to a degree that exceeds the capacity of the young infant's kidneys. This second concern would of course be especially relevant in the presence of diarrhea. Weaning too early may put the baby at higher risk of developing digestive disorders and adverse reactions and allergies to certain foods, on the other hand, weaning too late may deprive the baby of adequate nutrition and can lead to protein energy malnutrition, childhood illness and developmental delay.

Many mothers as a result of economic challenges may resort to improper feeding practices as they may not have the money to buy nutritional foods for the baby. The Barker hypothesis seeks to explain the mechanism whereby early nutritional exposure influences later health by a process of “programming”<sup>7</sup>. There are variations in different areas of world regarding weaning practices. Different cultures provide a variety of concepts about weaning, and religion, socioeconomic status and literacy status play a pivotal role in this variation of weaning practices. There are Various Health related problems associated with improper weaning practices and on the top of them is Malnutrition. In this study, we attempted to assess the knowledge, practice, and attitude and identify the factors, especially the social and demographic factors which affects weaning practice among mothers coming to Out Patient Department of Nishtar Hospital Multan. Our study will help in highlighting the demographic variation in child weaning practices and also in the improving the quality of life.

## MATERIALS AND METHODOLOGY

### Study Design

Cross-Sectional, Descriptive Study.

### Duration of Study

20 Days (10 March, 2017 to 29 March, 2017).

### Study Population

Mothers of children at Pediatric Out Patient Department, Nishtar Hospital Multan.

### Study Area

Pediatric Out Patient Department, Nishtar Hospital Multan.

### Sampling Technique

Non-Probability Convenient Sampling.

### Inclusion Criteria

Mothers of children with 6 to 12 months of age.

### Exclusion Criteria

Mothers of children below 6 months of age and above 12 months of age.

### Sample Size

One hundred and sixty nine mothers (169) were included in our study.

### Data Collection Procedure

A self-designed Questionnaire was used to carry out the survey after proper informed consent. Data was collected and was analyzed in the Department of Community Medicine, using SPSS Version 23.0.

## OBJECTIVES

To assess knowledge of mothers about weaning and weaning foods at Outpatient Department Nishtar Hospital Multan.

To determine attitude of mothers regarding weaning of their children from rural and urban areas at Outpatient Department Nishtar Hospital Multan.

To determine weaning practices among mothers from rural and urban areas.

## RESULTS

**Table 1: Frequency Distribution table showing percentage of mothers who know about weaning N = 169.**

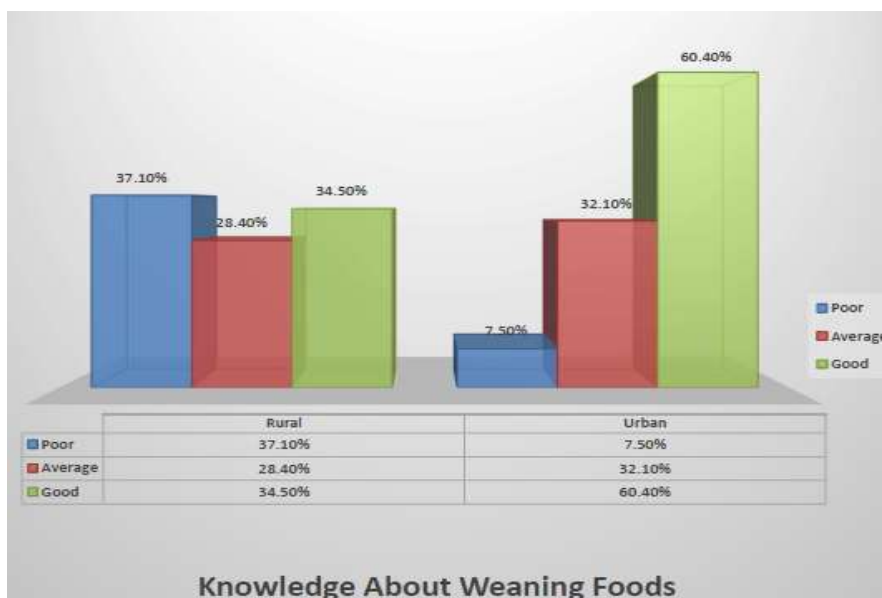
	Frequency	Percent
Yes	163	96.4
No	6	3.6
Total	169	100.0

**Table 2(a): Frequency Distribution Table of Literacy Status of Mothers from Rural Background n = 116.**

Literacy Status	Frequency	Percent
Illiterate	56	48.3
School Education	59	50.9
Graduate	1	0.9
Total	116	100.0

**Table 2 (b): Frequency Distribution Table of Literacy Status of Mothers from Urban Background n = 53.**

Literacy Status	Frequency	Percent
Illiterate	10	18.9
School Education	38	71.7
Graduate	5	9.4
Total	53	100.0



Graph # 1: Knowledge status of mothers about weaning foods on the basis of their address n = 169.

Table # 4: Frequency distribution table showing Practice Status of Mothers about weaning on the basis of their address.

Address	Feeding Practices	Frequency	Percent
Rural	Less Than 4-6 Times	70	60.3
	4-6 Times	40	34.5
	More Than 4-6 Times	6	5.2
	Total	116	100.0
Urban	Less Than 4-6 Times	22	41.5
	4-6 Times	30	56.6
	More Than 4-6 Times	1	1.9
	Total	53	100.0

N = 169

Table # 5 (a): Frequency Distribution Table of mothers who feel discomfort in preparing separate weaning food for their child. N = 169.

Address	Feel Difficulty	Frequency	Percent
Rural	Yes	31	26.7
	No	85	73.3
	Total	116	100.0
Urban	Yes	10	18.9
	No	43	81.1
	Total	53	100.0

Table # 5 (b): Frequency Distribution Table Showing Age at which Weaning was started.

Address	Start of weaning	Frequency	Percent
Rural	Before 6 Months	26	22.4
	At 6 Months	50	43.1
	After 6 Months	40	34.5
	Total	116	100.0
Urban	Before 6 Months	3	5.7
	At 6 Months	46	86.8
	After 6 Months	4	7.5
	Total	53	100.0

N = 169

**Table 6: Frequency Distribution Table showing Number of times Mothers Feed Their Child.**

Address	Number of feedings per day	Frequency	Percent
Rural	Less Than 4-6 Times	70	60.3
	4-6 Times	40	34.5
	More Than 4-6 Times	6	5.2
	Total	116	100.0
Urban	Less Than 4-6 Times	22	41.5
	4-6 Times	30	56.6
	More Than 4-6 Times	1	1.9
	Total	53	100.0

N = 169

Among one hundred and sixty nine mothers of children aging from 6 months to twelve months, the results were evaluated on the basis of answers to the questionnaire. TABLE # 1 shows that out of 169 mothers only 6 (3.6%) mothers did not know about weaning while remaining 163 (96.4%) mothers knew about weaning. TABLE # 2(a) shows that 48.3% mothers from rural background were illiterate, 50.9% had completed their school education and only 0.9% had completed their graduation. TABLE # 2 (b) shows that from urban areas 18.9% mothers were illiterate, 71.1% had completed their school education and 9.4% mothers were graduates. According to GRAPH # 1, 116 (68.64%) mothers were from rural areas, out of which 40 (30.5%) mothers had good; 33 (28.4%) had average and 43 (37.1%) had poor knowledge about weaning foods, and 53 (31.36%) mothers were from urban area, out of which 32 (60.4%) mothers had good; 17 (32.1%) had average and 4 (7.5%) had poor knowledge about weaning foods. TABLE #4 shows that from rural background 70 (60.3%) mothers used to feed their child less than 4-6 times a day, 40 (34.5%) mothers used to feed their child 4-6 times a day, 6 (5.2%) mothers used to feed their child more than 4-6 times a day. From urban background 22.

(41.5%) mothers used to feed their child less than 4-6 times a day, 30 (56.6%) mothers used to feed their child 4-6 times a day, 1 (1.9%) mother used to feed her child more than 4-6 times a day. TABLE # 5(a) shows that 31 (26.7%) mothers from rural background felt discomfort in preparing separate weaning food for their child while 85 (73.3%) mothers did not, 10 (18.9%) mothers from urban background felt discomfort in preparing separate weaning food for their child and 43 (81.1%) mothers did not feel any discomfort in preparing separate weaning food. According to TABLE # 5 (b) shows that 22.4% mothers from rural background started weaning their child before 6 months of age, 43.1% mothers started weaning at 6 months and 34.5% mothers started weaning after 6 months. 5.7% mothers from urban background started weaning their child before 6 months of age, 86.8% mothers started weaning at 6 months and 7.5% mothers started weaning after 6 months.

## DISCUSSION

Our study was compared with many studies which were conducted worldwide. In our study 163 mothers (96.4%)

knew about weaning and 6 mothers (3.6%) did not know about weaning. A study was conducted to assess weaning practices in a representative sample of 127 mothers of infants from Glasgow to identify factors influencing timing of weaning. Questionnaires on feeding and weaning were completed during home visits. 85.6% mothers knew about weaning and 13.4% mothers didn't. Ninety eight mothers completed a further questionnaire on attitudes to weaning. Mean age at introduction of solid food was 11 weeks (range 4–35 weeks); while in our study the mean age at introduction of food was 21 weeks (Range 16 – 36 weeks). According to the study in Glasgow, only 7% of infants had not been weaned before age 4 months. The percentage of infants which were not weaned before 4 months of age in our study was 82.6%, which shows a high contrast in attitude and practices of mothers regarding weaning in two different regions. Younger mothers (< 20 years old) in Glasgow, those of lower socioeconomic status, and those who formula fed their infants tended to introduce solids earlier while the socioeconomic status of mothers in our study did not play an important role in introduction of solid foods earlier, rather in our study younger mothers tended to introduce solid foods later than older mothers. Infants who were heaviest before weaning were weaned earlier. Seventy three of 98 mothers reported that they weaned their babies because they felt that they required more food. Sources of information influencing time of weaning were previous experience (53/98), books and leaflets (43/98), advice from the health visitor (31/98), and family and friends (15/98), in our study nearly all mothers received knowledge from their mothers or mother in laws, sisters or sister in laws and friends. Sixty five of 98 mothers reported receiving formal information on weaning, in most cases (54) this was from the health visitor. Mothers who received formal information tended to wean their infants later<sup>4</sup>. A cross-sectional study was conducted at Immunization clinic of Hi-Tech Medical College & Hospital, Bhubaneswar, and Odisha, India for time period of 3 months. 286 mothers who visited the immunization clinic were interviewed during the study. Most (97.2%) of the mother's age ranged between 18-35 years. Majority of them (190 i.e. 66.4%) were between age group 21-30 years. In urban areas Weaning was started below 4 months of infants by 38.6% mothers, only 15.8% mothers had initiated weaning of infants above 6 months and while 45.6% mothers started

weaning at six months of age. While in our study 17.2% mothers started weaning before 6 months of age, 26 % mothers started after 6 months and 56.8 % started weaning at age the of 6 months. From rural area, 75% of mothers initiated weaning in infants below 6 months of age<sup>5</sup> and according to our study 22.4 % mothers from rural areas started weaning before 6 months of age another cross-sectional study was carried out in rural area of Perambalur taluk in Tamil Nadu state, India from January to June.

2013. In a selected village, Siruvachur, mothers having children between 0-2 years of age were interviewed. The study was conducted on 250 mothers. Weaning was started below 6 months of infants by 21.6% mothers, which is pretty closer to the statistics found in our study (i.e.: 17.2%). 52.04% mothers had initiated weaning in infants above 6 months and our study showed this percentage to be 26%. Immediately after starting weaning, 42.4% mothers stopped giving breastfeeding<sup>6</sup>.

### CONCLUSION

Most of the mothers from urban background have good knowledge about weaning and weaning foods, start weaning at proper recommended time, and feed their child adequately as per daily feeding recommendation. Their knowledge, attitude and practice regarding weaning is better than the mothers from urban background. Literacy status played a major role in knowledge, attitude and practice about weaning. Literate mothers which were high in proportion in urban areas as compared to rural areas, were having good a knowledge, a better attitude and satisfactory practices regarding weaning as compared to mothers living in rural areas.

### LIMITATIONS

- Research was limited to Pediatrics Outpatient Department, Nishtar Hospital Multan.
- There was difficulty in conveying and getting required information due to difference in languages.
- Some mothers were uncooperative and they did not give answers to questions.
- Some mothers were in a hurry because of their appointment.
- Overcrowding in Outpatient Department of Hospital rendered to inefficient communication.
- Time period was limited for the study.

### RECOMMENDATIONS

- Adequate health education should be promoted via National level campaigns, Health Seminars, Newspapers, Radio channels, etc.
- Promotion of Outreach programs through LHWs and LHVs for early detection of improper weaning practices.
- Education of health team workers and mothers about the importance of weaning, proper time to start weaning, and appropriate weaning foods should be ensured.

- Funding programs should be promoted for provision of weaning foods for the mothers who cannot afford it.
- Establishment of day care centers for the children of working women.

### REFERENCES

1. K.Park, Park's Textbook of Preventive and Social Medicine, page 540, 23rd edition, 2015.
2. WHO. Fifty-fourth World Health Assembly. WHA54.2. Agenda item 13.1. Infant and young child nutrition.
3. Daelmans B, Mangasaryan N, Martines J, Saadeh R, Casanovas C, Arabi M. Strengthening actions to improve feeding of infants and young children 6 to 23 months of age: summary of a recent World Health Organization/UNICEF technical meeting, Geneva, 6e9 October 2008. Food Nutr Bull, 2009; 30: S236e8
4. Shirley-Anne H Savage, John J Reilly, Christine A Edwards, John V G A Durnin; Arch Dis Child, 1998; 79: 153–15. Weaning practice in the Glasgow longitudinal infant growth study.
5. Anindita Maiti, Lisa Sarangi, Saroj Kumar Sahu, Soumya Sucharita Mohanty; American Journal of Public Health Research, 2015; 3(4A): 49-52. doi: 10.12691/ajphr-3-4A-10. An Assessment on Breastfeeding and Weaning Practices in Odisha, India.
6. Rahul H Dandekar, Mohd. Shafee, Rakesh Kumar; The Health Agenda, Volume 2. Issue 1. January, 2014. Breastfeeding and weaning practices among literate mothers a community based study in rural area of Perambalur taluk, Tamil Nadu.
7. Barker DJP, ed. Fetal and infant origins of adult disease. London: BMJ, Books, 1992.