

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

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## ABSTRACT

**Background:** Many kids in rural communities of developing countries die of malnutrition because of lack of knowledge, resources and sure misconceptions regarding weaning in mothers that result in low quality weaning foods and improper feeding practices. Weaning is that the starting of solid food in infant's diet World Health Organization is consuming milk to satisfy his biological process needs. Breast milk could be a sensible supply of nutrition for the first six months of child's life, but then again weaning is additionally essential because the kid is within the growing stage. **Objectives:** Current study elaborate the Knowledge, Attitude, Perception and Practices of mothers about weaning foods. **Methodology:** Cross-sectional Study was conducted among the mothers of infants aging from six months to twelve months at Pediatric Outpatient Department, Jinnah Hospital Lahore from January-2017 to March-2017. 100 mothers were surveyed for their Knowledge, Attitude and Practices about weaning. 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 100 surveyed mothers, 93 mothers knew about weaning and 7 mothers did not. 68 (68%) mothers were from rural areas, out of which 22 (32%) had good, 21 (29%) had average and 25 (37%) had poor knowledge about weaning foods, and 32 (32%) mothers were from urban area, out of which 19 (60.5%) had good, 10 (32.5%) had average and 3 (7%) had poor knowledge about weaning foods. From urban background 13 (41%) mothers used to feed their child less than 4-6 times a day, 18 (57%) mothers used to feed their child 4-6 times a day, 1 (2.5%) 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.

## INTRODUCTION

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> WHO and UNICEF have recommend that an infant should be given adequate weaning for the first 2 years of life as an appropriate and safe means of protecting children from infection and become a source of providing them the essential nutrients that are needed for their growing bodies (Imdad, Yahoo, & Bhutto, 2011). Mother's knowledge about the nutritional requirements of the child places an important part in the way food is given to the child. Research shows that mothers education regarding the

ideal child feeding practices which include absolute breastfeeding for six months and the proper transition to s (Michelle, health Unit, & Robert, 2013).<sup>[2,3]</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. Pakistan is one of those countries in which more than 50% under five children are suffering from some degree of mal-nutrition.<sup>[4]</sup>

Nutrition makes the foundation for healthy development from the start of life.<sup>[5]</sup> Poor nutrition results in poor nutritional status.<sup>[8,9]</sup> The effects of poor nutrition appear readily in young infants as this is the period of rapid growth which demands more nutrients. Infants are on high risk for increased mortality and morbidity due to poor nutrition.<sup>[10]</sup> 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. Weaning is easier if a child has taken milk from some other source besides mother’s breast before that time. So it’s a good idea to give an occasional bottle of breast milk to the child around 4 to 7 months (or sooner if you decide to wean earlier) - even if one plans to continue breastfeeding, this can facilitate the weaning process in the future.<sup>[12]</sup> Natural weaning occurs as the infant begins to accept increasing amounts and types of complementary feedings while still breastfeeding on demand. When natural weaning is practiced, complete weaning usually takes place between two and four years of age. 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 Jinnah Hospital Lahore. Our study will help in highlighting the demographic variation in child weaning practices and also in the improving the quality of life.

## MATERIALS & METHODOLOGY

### Study Design

Cross-Sectional, Descriptive Study

### Duration of Study

January-2017 to March-2017

### Study Population

Mothers of children at Pediatric Out Patient Department, Jinnah Hospital Lahore.

### Study Area

Pediatric Out Patient Department, Jinnah Hospital Lahore.

### 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

100 mothers 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 Jinnah Hospital Lahore

To determine attitude of mothers regarding weaning of their children from rural and urban areas at Outpatient

Department Jinnah Hospital Lahore.

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 = 100.**

	Frequency	Percent
Yes	93	93%
No	7	7%
Total	100	100.0%

**Table 2(a): Frequency Distribution Table of Literacy Status of Mothers from Rural Background n = 68.**

Literacy Status	Frequency	Percent
Illiterate	31	45.5
School Education	36	52.9
Graduate	1	1.6
Total	68	100.0

**Table 3: Frequency Distribution Table of Literacy Status of Mothers from Urban Background n = 32.**

Literacy Status	Frequency	Percent
Illiterate	7	21.8
School Education	22	68.7
Graduate	3	9.3
Total	32	100.0

**Table 4: Frequency distribution table showing Practice Status of Mothers about weaning on the basis of their address N = 100.**

Address	Feeding Practices	Frequency	Percent
Rural	Less Than 4-6 Times	39	58
	4-6 Times	25	37
	More Than 4-6 Times	4	5
	Total	68	100.0
Urban	Less Than 4-6 Times	13	41.5
	4-6 Times	18	57
	More Than 4-6 Times	1	2.5
	Total	32	100.0

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

Address	Feel Difficulty	Frequency	Percent
Rural	Yes	18	26
	No	50	74
	Total	68	100.0
Urban	Yes	5	18
	No	27	82
	Total	32	100.0

**Table 5(b): Frequency Distribution Table Showing Age at which Weaning was started N = 169.**

Address	Start of weaning	Frequency	Percent
Rural	Before 6 Months	15	22
	At 6 Months	29	43
	After 6 Months	24	35
	Total	68	100.0
Urban	Before 6 Months	2	5.5
	At 6 Months	27	86
	After 6 Months	3	8.5
	Total	32	100.0

**Table 6: Frequency Distribution Table showing Number of times Mothers Feed Their Child N = 169.**

Address	Number of feedings per day	Frequency	Percent
Rural	Less Than 4-6 Times	41	60
	4-6 Times	23	34
	More Than 4-6 Times	4	6
	Total	68	100.0
Urban	Less Than 4-6 Times	13	41
	4-6 Times	18	56
	More Than 4-6 Times	1	3
	Total	32	100.0

**Table 7 Knowledge of mothers regarding weaning: N 100.**

Address	Knowledge of mothers about weaning	Frequency	Percent
Rural	Good	19	28
	Average	23	34
	Poor	25	38
	Total	68	100.0
Urban	Good	19	60
	Average	10	32
	Poor	3	8
	Total	32	100.0

## RESULTS

Among 100 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 100 mothers only 7 mothers did not know about weaning while remaining 93 mothers knew about weaning. TABLE # 2(a) shows that 31 mothers from rural background were illiterate, 36 had completed their school education and only 1 mother have completed her graduation. TABLE # 3 shows that from urban areas 7 mothers were illiterate, 22 had completed their school education and 3 mothers were graduates. According to table # 7, out of 100, (68) mothers were from rural areas, out of which 19 mothers had good; 23 had average and 25 had poor knowledge about weaning foods, and 32 mothers were from urban area, out of which 19 mothers had good; 10 had average and 3 had poor knowledge about weaning foods.

## DISCUSSION

Our study was compared with many studies which were conducted worldwide. In our study 100 mothers (93) knew about weaning and 7 mothers 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.<sup>[4]</sup> 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. Significant association was observed between early weaning and educational status of the mothers. Literate, under secondary and higher secondary educated mothers started weaning at an appropriate age while mothers with lower levels of education and illiterate mothers, sometimes delayed it till the end of one year. Delay in weaning is a risk factor for nutritional rickets,<sup>[14]</sup> and other micronutrients deficiency<sup>15</sup>. In our study 68% of the mothers were used to feed the infants more than 3 times / day. In a study, among 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<sup>5,6</sup>. 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 5 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. This research was limited to Pediatrics OPD, Jinnah Hospital Lahore. There was language barrier among doctors and patient. Some mothers were uncooperative and they did not give answers to questions. Time period of the study was short.

## CONCLUSION

Most of the mothers from urban background have sensible knowledge concerning weaning and weaning foods, begin weaning at proper counseled time, and feed their kid adequately as per daily feeding recommendation. Their knowledge, attitude and practice concerning weaning is healthier than the mothers from urban background. Education status contend a serious role in knowledge, attitude and prospective, regarding weaning. Educated mothers that were high in proportion in urban areas as compared to rural areas, were having good a knowledge, a better perspective and satisfactory practices relating to weaning as compared to mothers living in rural areas. It is recommended that adequate health education should be provided through National level campaigns, Health Seminars, Newspapers, Radio channels, etc.

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