

# Knowledge & Practice of Mothers of Children under 5 Years Regarding Weaning Practices in District Charsadda

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## Abstract

**Introduction:** Globally, malnutrition is still considered the main determinant affecting early childhood growth and development. The aim of this research was to assess the knowledge, and practice of under-five-years children mothers regarding weaning practices in District Charsadda.

**Methods:** A cross-sectional descriptive study was conducted by the Department of Community Medicine, Jinnah Medical College, Peshawar at District Head Quarter Hospital, Charsadda, from April to September 2018. A total of 139 mothers were included to assess the knowledge, and weaning practices. Due to patient compliance, a convenience sampling technique was used. The data was collected through structured questionnaire and results were analyzed and presented in form of tables.

**Results:** Among the study participants (n=139); 59% were in age range of 25-35 years, 57% were house-wives; 62% were illiterate, and 60% belonged to rural setup. Approximately, 78% were practicing weaning, 86% started weaning at 4 to 6 months, 42% continued weaning for 2 years, 50% gave mixed weaning food, 73% and 58% of mothers know the importance and correct timings for starting weaning, 32% know the correct duration of weaning, and 78% were practicing weaning.

**Conclusion:** It was concluded that most of the mothers had satisfactory knowledge, and were following weaning practices. Moreover, it was revealed that mother's age, education status, and rural-urban setup has strongly influenced the knowledge, and weaning practices of mothers; and thus comprehensive interventions are needed from the relevant sectors to increase the knowledge of mothers regarding weaning practices and to reduce morbidity and mortality among children less than five years.

**Keywords:** Knowledge, Practice, Mother, Rural, Weaning

## Introduction

Weaning has been one of the most wrongly practiced processes in the early years of life<sup>1</sup>. Initiating complementary feeds too early or too late can lead to malnutrition<sup>2,3</sup>. Many studies also found that introduction of weaning after 8 months was associated with high risk of allergic sensitization and can result in improper growth and development<sup>4</sup>.

According to the World Health Organization (WHO), complementary feeding should be timely, adequate, appropriate, and given in sufficient quantity<sup>5, 6</sup>. The World Health Organization and United Kingdom Department of Health recommended that supplementary semi-solid food items were added into infant diet at six months of age along with breast feeding for the first two years of life<sup>7-11</sup>.

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In a study published in American Journal of Public Health Research in 2015, it was found that 38.6% of mothers started weaning below 4 months and was supported by the findings of a similar study of Sharma M and Sharma S, who reported that approximately 75% of mothers initiated weaning below 6 months of age<sup>12,13</sup>. Research found that babies in Ireland are given solid foods before four months and revealed a strong relationship of early weaning and its impacts like food intolerance, excess weight gain and Diabetes. Moreover, delayed weaning can lead to serious health complications for the infants<sup>1</sup>.

The most vulnerable period for developing malnutrition remains the weaning period<sup>14</sup>. Adequate nutrition during infancy and early childhood is essential for growth, health and

development of children<sup>15</sup>. Thus proper weaning plays a vital role in child development whereas poor weaning practices showed significant association with infant's morbidity and mortality rates<sup>16, 17, 18</sup>. Poor quality of weaning foods and improper weaning practices predispose infants to malnutrition, growth retardation, infectious diseases and thus resulting in high mortality and morbidity<sup>16</sup>.

A study conducted by Aina Folasade et al, in 2017, showed moderate knowledge of mothers regarding weaning practices and also revealed a significant relationship between participants' occupation, educational level, and infant weaning practices<sup>17</sup>.

The complementary feedings, mostly started late in the developing countries. In Pakistan many complementary foods are only a slight modification of adult foods, without consideration of nutritional requirements of children<sup>10, 19</sup>.

An international study conducted by Yadav et al, in 2004, found that only 55% mothers introduced weaning foods at first 5 to 8 months of life, and similar results were also found by Mehdi & Mahanta, in 2004<sup>20, 21</sup>. Moreover, in a study conducted internationally it was found that 43% of mothers with under five years children started weaning foods at 6 months of infants age<sup>12</sup>.

Pakistan being a developing country, with high rates of communicable diseases among children of under five years age, and the nutrition problems along with malnutrition causing high mortality and morbidity especially under five year's children. Moreover, the weaning practices were not according to standards; and thus this cross sectional study was conducted to assess the knowledge and practice of mothers regarding weaning practices; and to identify the important factors affecting weaning, among the mothers of

under-five year's children, visiting District Head Quarter Hospital, Charsadda, Pakistan.

## MATERIAL AND METHODS

After taking ethical approval from the Ethical Review Committee, a cross-sectional descriptive study was conducted by the Department Of Community Medicine, Jinnah Medical College, Peshawar at District Head Quarter (DHQ) Hospital, Charsadda. The total duration for data collection was six months i.e. from April 2018 to September 2018. A sample size of one hundred and thirty nine (139) mothers was selected based on the 95% confidence interval, with 5% absolute precision, and 10% prevalence of knowledge. After informed consent from mothers, a total of 139 mothers with children under five years age were selected to assess the knowledge and practice regarding weaning practices. The knowledge was categorized as good, satisfactory and poor, by correctly answering 7 or more questions, 4 to 6 questions, and 1 to 3 questions respectively. Moreover, the practice was categorized as practicing weaning or not practicing. Furthermore, a convenience sampling technique was used to select mothers visiting OPD with children of less than five years age. All the married women visiting health facility with/ having at least one child were included while mothers not permanent resident of district Charsadda were excluded. The data were collected through a structured questionnaire and SPSS 23.0 was used for data analysis. Finally results were presented in form of tables.

## RESULTS

The demographic characteristics of under five years children mothers (n=139) are shown in Table No 1.

The knowledge, and practice of under five years children mothers (n=139) regarding weaning practices is shown in Table No 2.

**Table No 1. Showing the demographic characteristics of under five year children mothers (n=139) in District Charsadda**

Demographics	Variables	Frequency	Percentage
Age Groups	< 25 years	40	28.78
	25 - 35 years	82	58.99
	> 35 years	17	12.23
Monthly Income	< 30000	74	53.24

	30 - 45000	45	32.37
	> 45000	20	14.39
Occupations	Housewife	79	56.83
	Job	37	26.62
	Student etc.	23	16.55
Educational Status	Literate	53	38.13
	Illiterate	86	61.87
Social Setup	Rural	84	60.43
	Urban	55	39.57
No of Children	One	41	29.50
	Two to three	69	49.64
	> 3	29	20.86

**Table No 2. Showing the Knowledge & Practice of under five year children mothers (n=139) regarding weaning practices in District Charsadda**

Variables	Response	n=139	
		f	(%age)
Gave weaning food to your child	Yes	109	78.42
	No	30	21.58
Any importance of weaning	Yes	101	72.66
	No	23	16.55
	no idea	15	10.79
Weaning started at which age	1 month	12	8.63
	4 months	81	58.27
	6 months	39	28.06
	12 months	7	5.04
Common weaning food	Mixed	69	49.64
	Vegetables	16	11.51
	Banana	29	20.86
	Kitchree/ Rice	25	17.99
Frequency of weaning food per day	1- 2 times	48	34.53
	3-4 times	49	35.25
	More than 4 times	42	30.22
Duration of weaning	5-12 months	81	58.27
	5-24 Months	45	32.37

Source of weaning education	12 - 24 Months	13	9.35
	Parents	62	44.60
	Media	37	26.62
	Health Personnel	18	12.95
	Any other	22	15.83

## DISCUSSION

According to our study results, among the study population (no=139), 78.42% of mothers had satisfactory knowledge regarding weaning practices whereas in a study conducted in 2016, also found that under five years mothers had average knowledge regarding weaning practices among rural and urban setups<sup>1</sup>.

A national study conducted by Asif Khalil et al, 2017, in Karachi, Pakistan; revealed that 77% of working mothers had good and satisfactory knowledge regarding weaning practices, and 23.6% among house wives<sup>22</sup>, and thus our study results supported and confirmed the findings of previous studies by observing 78.42% of mothers having satisfactory knowledge regarding weaning practices. Moreover, in a study conducted by Aina Folasade et al, 2017, in Nigeria revealed average knowledge (50%) among the mothers regarding weaning practices<sup>1</sup>. In a study conducted in Ethiopia in 2013 found that 92.4% of mothers had adequate and satisfactory knowledge regarding the weaning practices<sup>23</sup>. Thus our study findings had good knowledge as compared to international studies conducted by Aina Folasade et al, 2017 and Minakshi Johnet al, 2016<sup>1, 3</sup>; and less level as compared to a study conducted by Wondu Garoma Berra, of 2013<sup>23</sup>. Furthermore, the mother's knowledge level showed strong relationship with weaning practices as revealed by a study published in the Journal of Medical Research in 2015, which showed that rural and urban women had 44% and 64% of knowledge regarding weaning practices<sup>11</sup>. Thus mother's knowledge and rural and urban residence has strong relationship with weaning practices of mothers of under five years children.

In our study, 78.42% of mothers were following weaning practicing, and most of these weaning practices are not according to the standard protocols. Moreover, in a study published in International Journal of Contemporary Pediatrics in 2017, showed that

the rural mothers visiting the health care facilities has improper weaning practices and techniques<sup>2</sup>. Moreover, in another study, similar low practice level was observed among the mothers regarding weaning practices. Thus in our study the weaning practice showed satisfactory level among the rural communities as compared to international studies which were also conducted in rural communities and thus showed strong relationship of education status and socio-economic status on the weaning practices of under five year children mothers<sup>6, 13</sup>.

In an international study conducted in Ethiopia<sup>23, 24</sup>, showed that 2.1% of mothers showed improper time for initiation of weaning practices and the similar results were found and supported by our study, 8.63% of under five year children mothers had incorrect time for starting of weaning foods.

In ours study, only 32.37% of mothers had followed proper duration for weaning practice as revealed by an international study which found that the duration of weaning be continued for the first two years of life with food diversity and frequency<sup>10, 25</sup>. Moreover, in our study, the correct time for weaning was observed among 58.27% of mothers whereas in a study conducted in Nigeria in 2013, showed that 67.8% of mothers were found to have correct total duration of weaning, and thus our study revealed similar results as compared to international study<sup>24</sup>.

In our study, the most common weaning food found were kitchree, rice, vegetables, bananas and mixed variety of home based weaning food items, whereas similar findings were revealed by different international studies conducted on different communities<sup>22, 25</sup>. In our study, 39.47% of mothers had information regarding proper weaning practices from health and related responsible sectors, whereas in a study conducted in Saudi Arabia in 2007, revealed that 62% of mothers with children of less than five years age had proper information regarding the weaning practices

and thus supported our study findings by showing strong relationship of knowledge and information with weaning practices<sup>26</sup>.

## CONCLUSION

From our results, it was concluded that the mothers of under-five year children had satisfactory knowledge, and were following proper protocols regarding weaning practices. Moreover, mother's educational status and level, monthly income of family, and rural and urban residence strongly influenced the weaning knowledge and practices of mothers with children less than five years. Furthermore, adequate measures and interventions from the health sector, population department, community organizations and educational sector with an aim to increase the knowledge of mothers regarding weaning practices are needed to improve the health status of infants and children.

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