

## **RESULTS**

The results of this study are presented in (1-18) tables and (1-9) figures. They include the following:

**Part (I):** Socio – demographic characteristics (table 1-2) of:

1-Children: which includes age and sex.

2-Mothers: which includes age, level of education, working status and residence.

**Part (II):** Mothers' knowledge regarding weaning (table 3-7), it includes concept of weaning, time of start weaning, technique of weaning, causes of early weaning and sources of mothers' information about weaning.

**Part (III):** Mothers' practice (table 8-11) regarding patterns of infant's feeding, weaning foods, substances used by mother to stop breast-feeding and weaning problems that face the infant during this period.

**Part (IV):** Relations between mothers' practice and their socio-demographic characteristics (table 12-18), which include: patterns of infant's feeding, methods of weaning, time of weaning, technique of weaning, types of food at start weaning, substances which used to stop breast-feeding occurrence of gastroenteritis during weaning.

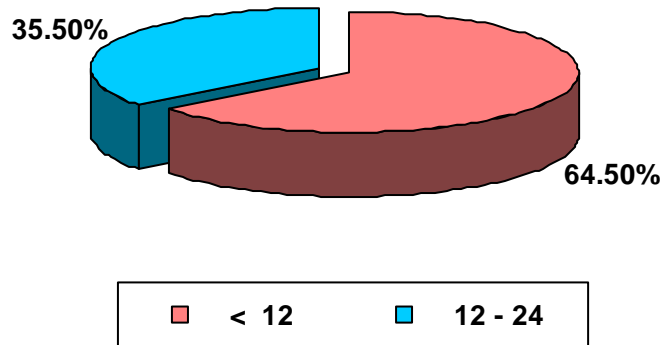
## **PART (I) : Socio-Demographic Characteristics of Children and their Mothers**

**Table(1):**Number and Percentage Distribution of Children According to their Socio-Demographic Characteristics

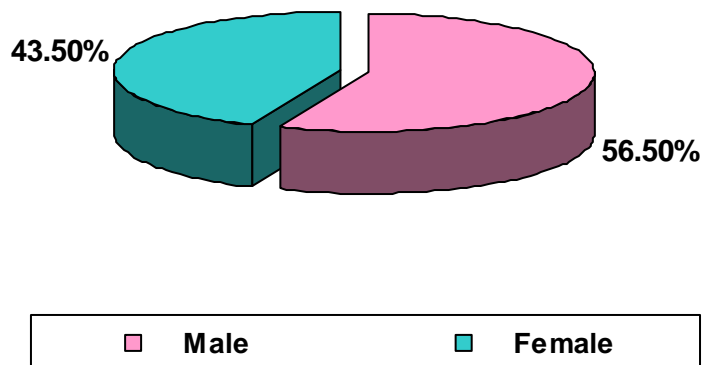
Characteristics of children	Children (N=200)	%
<b>- Age (in months):</b>		
< 12	129	64.5
12 – 24	71	35.5
$\bar{x} \pm SD$	$10.3 \pm 5.7$ months	
<b>- Sex:</b>		
Male	113	56.5
Female	87	43.5

This table shows that the mean age of children is  $10.3 \pm 5.7$  months. The highest percentage of children (64.5%) is in children younger than 12 months. Regarding to gender 56.5% of children are males ,while 43.5 % of them are females .

**Fig. (1a): Percentage Distribution of Children According to their Age by Months**



**Fig. (1b): Percentage Distribution of Children According to their Sex**

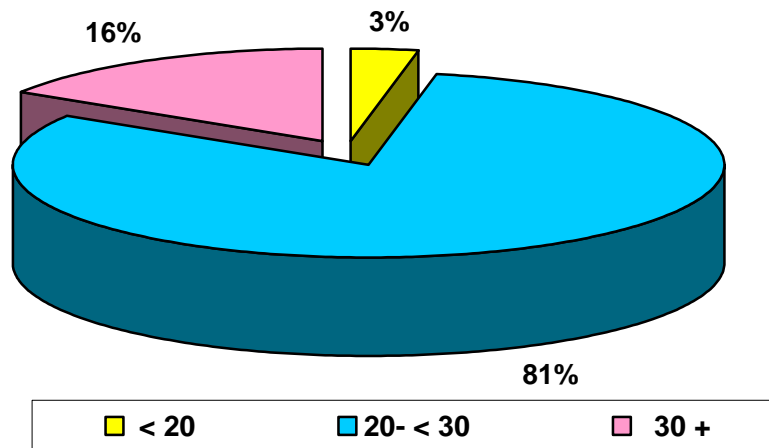


**Table(2):** Number and Percentage Distribution of Mothers by their Socio-Demographic Characteristics

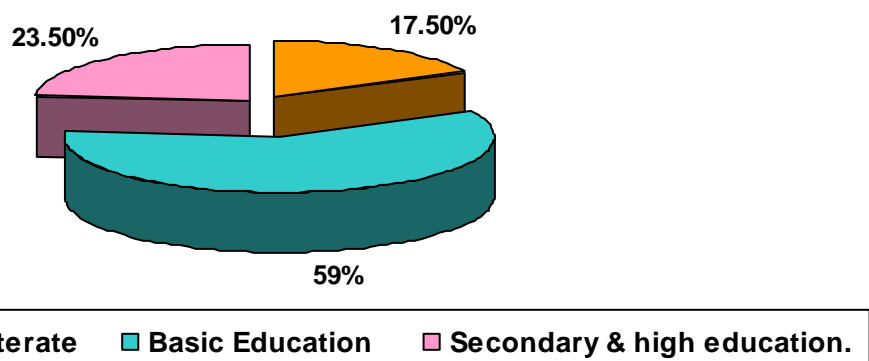
Characteristics of mothers	Mothers (N=200)	%
<b>- Age in years:</b>		
< 20	6	3.0
20 - < 30	162	81.0
30 +	32	16.0
$\bar{x} \pm SD$	29.3 $\pm$ 6.9 years	
<b>- Level of education :</b>		
Illiterate	35	17.5
Basic education	118	59.0
Secondary & high education	47	23.5
<b>- Working status :</b>		
Not working	143	71.5
Working	57	28.5
<b>- Residence :</b>		
Rural	114	57.0
Urban	86	43.0

As shown in table (2), the mean age of the mothers is 29.3 $\pm$ 6.9 years, and the highest percentage(81%) belongs to age from 20 to 30 years. Regarding the level of education, more than half (59%)of mothers reached to basic education. While 17.5% of them are illiterate, only 23.5% of them are secondary and high education respectively. Regarding to mother's working status, 71.5% of them are working, while 28.5% are not working. Also this table shows that 57%of mothers are from rural areas, while 43% of them are from urban areas .

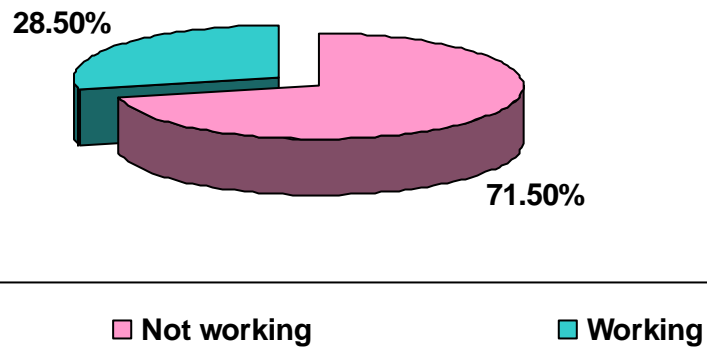
**Fig.(2a): Percentage Distribution of Mothers by their Age in Years**



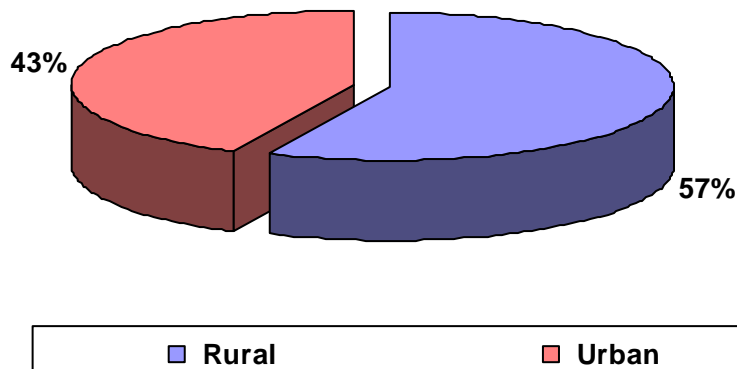
**Fig.(2b): Percentage Distribution of Mothers by their Level of Education**



**Fig. (2c): Percentage Distribution of Mothers by their Working Status**



**Fig. (2d): Percentage Distribution of Mothers by their Residence**



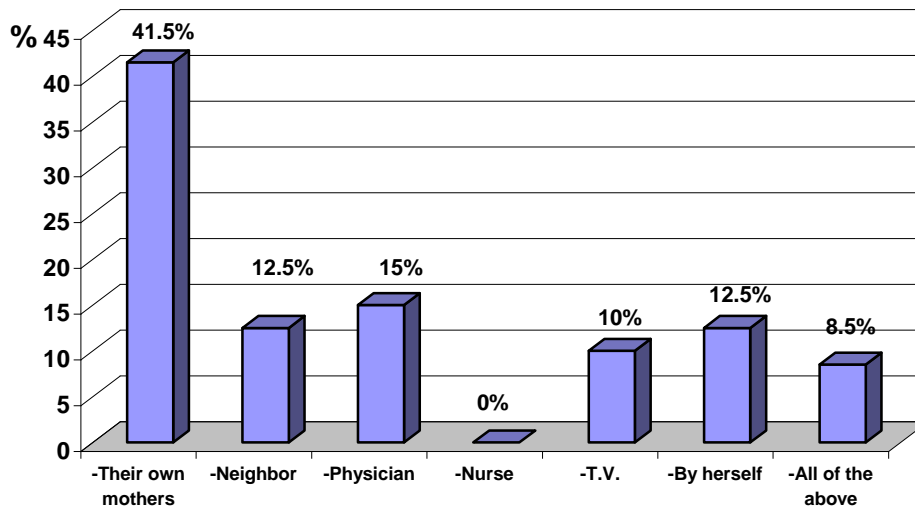
## **PART (II) : Mothers' Needs Regarding Weaning of their Children**

**Table (3):** Distribution of the Studied Mothers According to their Sources of Information about Weaning

Sources of mothers information	Total N.= 200 (100.0)	
	No.	%
-Their own mothers	83	41.5
-Neighbor	25	12.5
-Physician	30	15.0
-Nurse	0	0.0
-T.V.	20	10.0
-By herself	25	12.5
-All of the above	17	8.5

Regarding to source of mothers' information about weaning, this table shows that, 41.5% of them obtain their information from their own mothers, 12.5% of them depend on their neighbor to obtain their information. This table also illustrates that nurses (0%) have no role for giving information about weaning for those mothers.

**Fig. (3): Percentage Distribution of Mothers According to their Sources of Information about Weaning**





**Table (4):** Distribution of Mothers' Knowledge about Concept of Weaning

<b>Concept of weaning</b>	<b>No.</b>	<b>%</b>
-Accustom infant new food	15	7.5
-Gradually adding of extra food with gradually diminish breast –feeding	75	37.5
-Stop breast –feeding and give new food	105	52.5
-Don't Know	5	2.5
<b>Total</b>	<b>200</b>	<b>100.0</b>

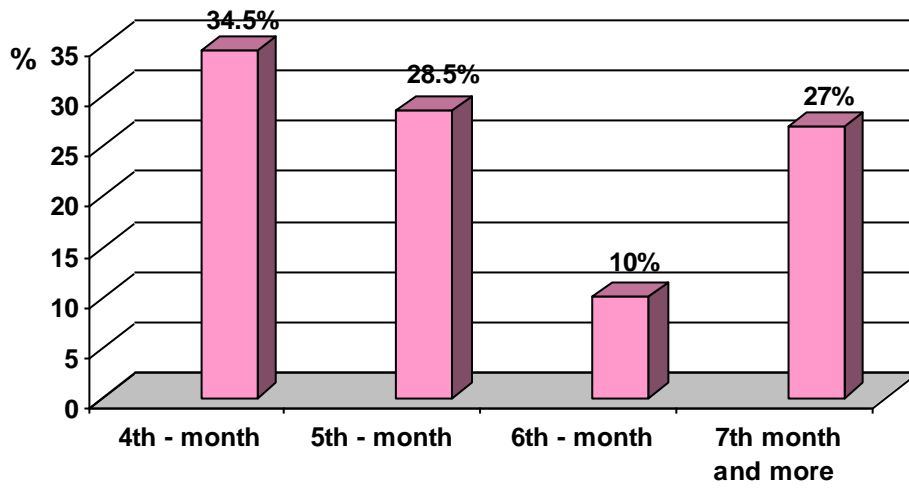
Regarding mothers' knowledge about their concept of weaning, this table shows that 52.5% of mothers define weaning as stoppage of breast-feeding and giving new food. While 2.5% of them don't know the meaning of weaning. On the other hand, 37.5% of mothers consider weaning as a gradual adding of extra-food with gradually diminish breast-feeding and this is considered the right concept of weaning.

**Table (5):** Distribution of the Studied Mothers According to their Knowledge about Time of Start Weaning

Time of start weaning	No.	%
4 <sup>th</sup> – month	69	34.5
5 <sup>th</sup> – month	57	28.5
6 <sup>th</sup> – month	20	10.0
7 <sup>th</sup> month and more	54	27.0
<b>Total</b>	<b>200</b>	<b>100.0</b>

According to time of start weaning, this table illustrates that 34.5% of mothers consider that the 4<sup>th</sup> month is suitable to wean their infants, while 28.5% of them say that the 5<sup>th</sup> month is more suitable. Also, this table shows that 27% of mothers wean their infants at the 7<sup>th</sup> months and more, while only 10% of them wean their infants at 6<sup>th</sup> month.

**Fig. (4): Percentage of Mothers According to Time of Start Weaning**



**Table(6):**Distribution of the Studied Mothers According to their Knowledge about Technique of Weaning

<b>Technique of weaning</b>	<b>No.</b>	<b>%</b>
- Weaning should be gradually	30	15.0
- Introduce one type of food in each time for a week	23	11.5
- Start with small amount then gradually increase	50	25.0
- Delay weaning when the baby is diseases	18	9.0
- All of the above	49	24.5
-Don't know	30	15.0
<b>Total</b>	<b>200</b>	<b>100.0</b>

Table (6) reveals that 25% of mothers state that weaning should start with small amount of food then gradually increased, while 24.5% of them illustrate all steps that introduce about weaning technique is correct. Meanwhile 15% of mothers state that they don't know the correct answer. Only 9% of them state that weaning is delayed when the baby is diseased.

**Table (7):** Distribution of the Studied Mothers According to their Knowledge about Causes that Lead to Early Weaning

<b>Causes of early weaning</b>	<b>No.</b>	<b>%</b>
Lack of knowledge about importance of breast-feeding	36	18.0
Working	57	28.5
Thinking that early weaning is useful for baby	7	3.5
All of the above	100	50.0
<b>Total</b>	<b>200</b>	<b>100.0</b>

According to causes that lead to early weaning , this table shows that 50% of mothers say that lack of knowledge about importance of breast-feeding, working and thinking that early weaning is useful for the baby. While 18% and 28.5% of mothers say that lack of knowledge about importance of breast-feeding and working respectively are causes of early weaning. Only 3.5% of them say that thinking that early weaning is useful for the infant is the cause.

## **PART (III): Mothers' Practice Regarding Patterns of Infants Feeding**

**Table (8):** Distribution of the Studied Mothers According to their Infant Patterns of Feeding

Patterns of feeding	N.= 200(100.0)	
	No.	%
<b>1-Infant feeding immediately after delivery:</b>		
Breast- feeding	159	79.5
Sweaty water	41	20.5
<b>2-Feeding during first six months :</b>		
Breast - feeding	135	67.5
Artificial feeding	22	11.0
Mixed feeding	43	21.5
<b>3- Types of breast-feeding :</b>		
Exclusive breast-feeding	101	50.5
Almost exclusive breast-feeding	99	49.5

Regarding to infant's feeding patterns immediately after delivery, this table shows that 79.5% of mothers started to feed their infants by their own breast-milk. While 20.5% of them started with sweetened water. During the first six months 67.5% of mothers are breast-feed, around half (50.5%) of them continued exclusive breast-feeding, while 49.5% give almost exclusive breast-feeding.



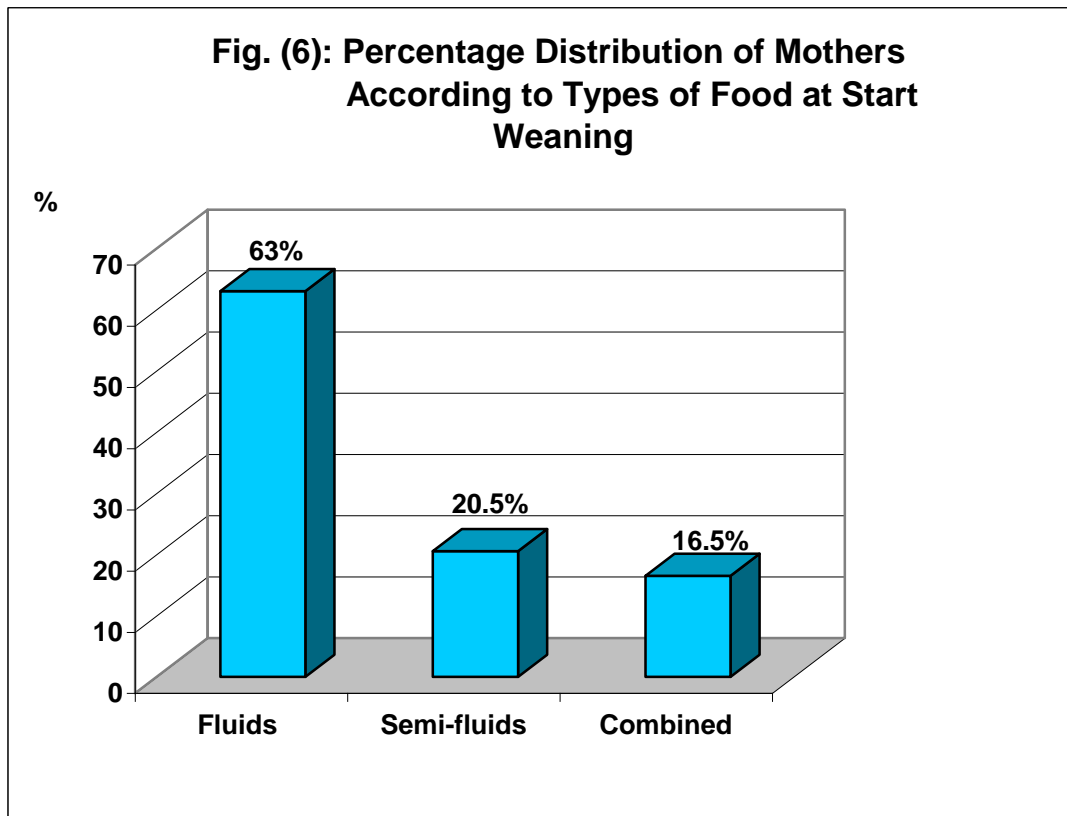
**Table (9) :** Distribution of the Studied Mothers According to Types of Food at Start Weaning

<b>Weaning foods</b>	<b>No.</b>	<b>%</b>
- Fluids	126	63.0
- Semi-fluids	41	20.5
- Combined	33	16.5
<b>Total</b>	<b>200</b>	<b>100.0</b>

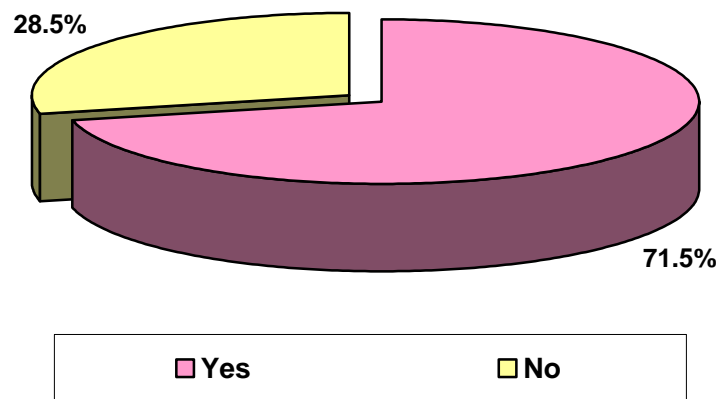
Table (9): reveals that 63% of mothers begin weaning to their infants by using fluids, while 20.5% of them start by semi-solids and 16.5% of mothers give their infants mixed food.



**Fig. (6): Percentage Distribution of Mothers According to Types of Food at Start Weaning**



**Fig. (7): Percentage Distribution of Problems that Face Mothers during Weaning Practice**



This figure shows that 71.5% of mothers face problems during weaning period.

**Table (10) : Distribution of the Studied Mothers According to Problems Facing them During Weaning Practice**

Problems during weaning	Total (n.= 143) 100%	
	No.	%
Crying, difficulty of feeding	15	7.5
Crying, gastro- enteritis	28	14.0
Crying, colic	30	15.0
Vomiting, crying	5	2.5
Difficulty of feeding, colic	6	3.0
Gastroenteritis, loss of weight	42	21.0
Gastroenteritis, colic	27	13.5
Loss of appetite, loss of weight	9	4.5
Gastroenteritis, crying, colic	23	11.5
Gastroenteritis, vomiting, colic	21	10.5
Gastroenteritis	79	39.5

Number is not exclusive

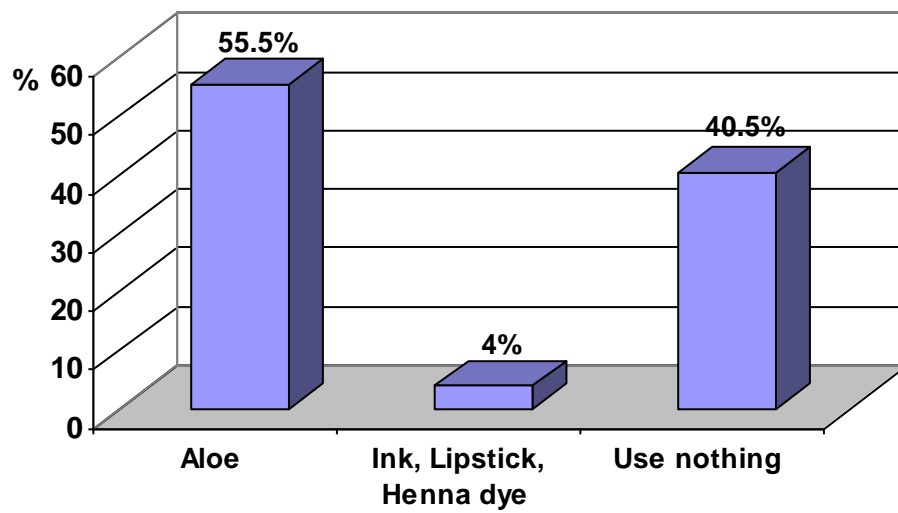
Table (10) shows the problems that face mothers due to weaning practice faults, that 21% , 15% and 14% of children suffer from gastroenteritis and colic, crying and colic, and crying and gastroenteritis respectively .This table also shows that only 2.5% and 3% of children have crying and vomiting, and difficulty of feeding and colic respectively during weaning period .

**Table (11):** Distribution of the Studied Mothers According to Folk Substances Used to Stop Breast-Feeding

<b>Substances used by mother to stop breast-feeding</b>	<b>No.</b>	<b>%</b>
- Aloe	111	55.5
- Ink ,Lipstick , Henna dye	8	4.0
- Use nothing	81	40.5
<b>Total</b>	<b>200</b>	<b>100.0</b>

Regarding to folk substances used by mothers to stop breast-feeding, this table reveals that 55.5% of mothers use aloe to apply it on their breasts to stop breast-feeding , and 40.5% of them use nothing, while 4% of them use ink, lipstick and henna dye to stop breast-feeding .

**Fig.(8): Percentage Distribution of Mothers According to Folk Substances Used to Stop Breast-Feeding**



## **PART (IV):Relations Between Mothers' Weaning Practice and their Socio-Demographic Characteristics**

**Table (12):**Distribution of the Studied Mothers by their Residence and Patterns of Feeding

Patterns of feeding	Residence				Total		X <sup>2</sup>	P
	Rural		Urban		No.	%		
	No.	%	No.	%				
<b>1-Infant feeding immediately after delivery:</b>								
Breast-feeding	82	71.9	77	89.5	159	79.5	23.34	<0.001
Sweaty water	32	28.1	9	10.5	41	20.5		
<b>2-Feeding during first six months:</b>								
Breast-feeding	91	79.8	44	51.2	135	67.5	9.32	<0.001
Artificial feeding	12	10.5	10	11.6	22	11.0		
Mixed feeding	11	9.7	32	37.2	43	21.5		
<b>3-Types of breast-feeding:</b>								
Exclusive breast-feeding	69	60.5	32	37.2	101	50.5	10.66	<0.001
Almost exclusive breast – feeding	45	39.5	54	62.8	99	49.5		
<b>Total</b>	<b>114</b>	<b>100.0</b>	<b>86</b>	<b>100.0</b>	<b>200</b>	<b>100.0</b>		

Regarding to mothers residence, this table shows that there is highly statistical significant ( $X^2= 23.34$ ,  $P < 0.001$ ) difference between mothers' residence and their patterns of feeding . Where 89.5% of urban mothers give breast-feeding immediately after delivery. Also this table reveals that there is statistical significant ( $X^2 = 9.3$ ,  $10.6$ ,  $P < 0.001$ ) differences between mothers' residence and their feeding during 6 months and types of breast- feeding. Where, 79.8% and 60.5% of rural mothers continue breast-feeding and give exclusive breast- feeding respectively.



According to time of start weaning, table (13) shows that there is a non significant statistical ( $X^2 = 6.83, P > 0.05$ ) differences between mothers' age and time of start weaning. Meanwhile, there is a highly statistical significant in relation to time of start weaning and mothers' education, working status and residence ( $X^2 = 39.84, P < 0.001, X^2 = 22.6, P < 0.001, X^2 = 28.69, P < 0.001$ ) respectively. Where 40% and 45.6% of illiterate and rural mothers start weaning at the fifth month respectively, while 39.5% of urban ones start at the seventh month and more.

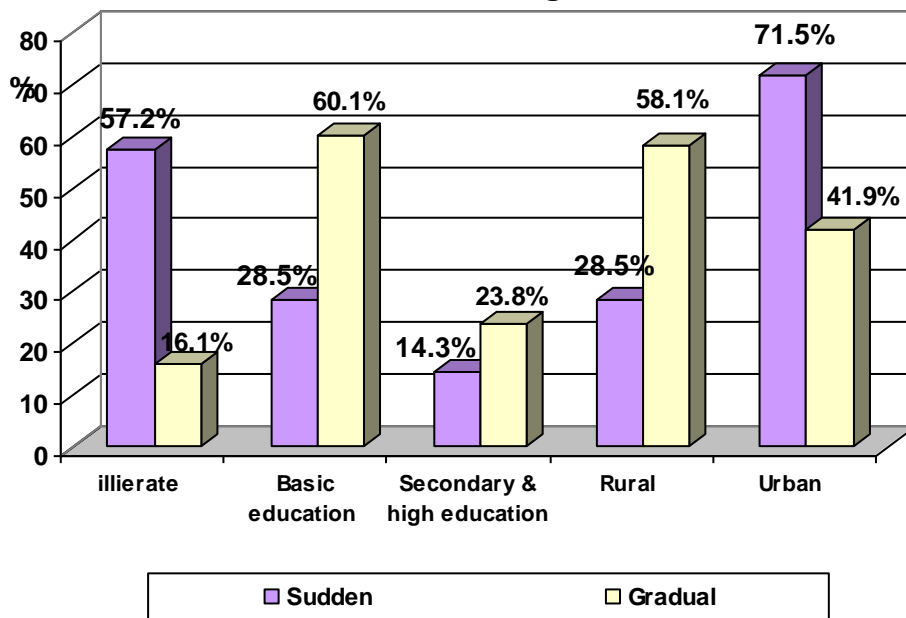


**Table (14):** Distribution of the Studied Mothers According to their Socio-Demographic Characteristics and Methods of Weaning

Socio-demographic characteristics of mothers	Methods of weaning				Total		X <sup>2</sup>	P
	Sudden		Gradual		No.	%		
	No.	%	No.	%				
<b>- Age in years:</b>								
< 20	3	42.8	3	1.6	6	3.0	41.59	< 0.001
20-< 30	2	28.6	160	82.9	162	81.0		
30 +	2	28.6	30	15.5	32	16.0		
<b>-level of education:</b>								
Illiterate	4	57.2	31	16.1	35	17.5	7.92	<0.001
Basic education	2	28.5	116	60.1	118	59.0		
Secondary & high Education	1	14.3	46	23.8	47	23.5		
<b>-Working status:</b>								
Not working	6	85.7	137	70.9	143	71.5	26.33	<0.001
Working	1	14.3	56	29.1	57	28.5		
<b>- Residence:</b>								
Rural	2	28.5	112	58.1	114	57.0	12.39	<0.001
Urban	5	71.5	81	41.9	86	43.0		
<b>Total</b>	<b>7</b>	<b>100.0</b>	<b>193</b>	<b>100.0</b>	<b>200</b>	<b>100.0</b>		

Table (14) shows that there is a significant relation ( $X^2 = 41.59$ ,  $P < 0.001$ ) between mothers' age and methods of weaning, where 42.8% of mothers those ages are less than 20 years start weaning suddenly. While 82.9% of them between 20- < 30 years start weaning gradually. Meanwhile this table reveals that there is statistical significant ( $X^2 = 7.92, 26.33, 12.39$ ,  $p < 0.001$ ) differences between mothers' level of education, working status and residence in relation to methods of weaning.

**Fig. (9): Percentage Distribution of Mothers by their Level of Education and Residence Accroding to Methods of Weaning**





Regarding to weaning technique in relation to socio-demographic characteristics, this table shows that there is highly statistically significant ( $X^2= 48.85, P < 0.001$ ) difference in relation to mothers' age, as 94.9% of mothers whose ages less than 30 years follow all correct steps in weaning technique. Also, this table shows that there is highly statistical significant ( $X^2 = 44.08, P < 0.001, X^2 = 15.2, P < 0.001$ ) difference related to weaning technique and mothers working status and residence respectively. While there is a non significant relation between level of mothers' education and technique of weaning ( $X^2 = 17.18, P < 0.05$ ).



Table (16) reveals that, there is non significant difference as regards mothers' age and working status in relation to types of food at start weaning ( $X^2 = 5.85, 4.9, P > 0.05$ ) where 63.6% of mothers 20 < 30 years start by fluids and also 65.6% of mothers more than 30 years start by fluid. While 10.5% of working mothers start weaning by semi-solids. Moreover, this table shows that there is a highly statistical significant difference as regards level of mothers' education and residence in relation to types of food at start weaning ( $X^2 = 38.89, P < 0.001, X^2 = 9.7, P < 0.01$ ). Where 72.9% of basic educated mothers and 72.3% of secondary and high educated ones start with fluids. Meanwhile, only 9.3% of urban mothers start weaning with fluids and semi-solids.



According to substances used by mothers to stop breast feeding, this table shows that, there is highly significant relation ( $X^2 = 33.15, 53.67, P < 0.001$ ) as regards mothers' level of education and residence in relation to folk substances used to stop breast feeding. Where 80% and 76.3% of illiterate and rural mothers used aloe.



**Table (18) :** Distribution of the Studied Mothers According to their Socio-Demographic Characteristics in Relation to the Occurance of Gastroenteritis During Weaning

Some socio-demographic factors	Occurance of gastro-enteritis				Total		X <sup>2</sup>	P
	Yes		No		No.	%		
	No.	%	No.	%				
<b>-Age of mothers:</b>								
< 20	3	3.8	3	2.5	6	3.0	24.61	<0.001
20- < 30	51	64.6	111	91.7	162	81.0		
30 +	25	31.6	7	5.8	32	16.0		
<b>-Level of education:</b>								
Illiterate	28	35.4	7	5.8	35	17.5	29.41	<0.001
Basic education	38	48.1	80	66.1	118	59.0		
Secondary & high education	13	16.5	34	28.1	47	23.5		
<b>-Working status :</b>								
Not working	73	92.4	70	57.8	143	71.5	26.33	<0.001
Working	6	7.6	51	42.2	57	28.5		
<b>-Residence:</b>								
Rural	69	87.4	45	37.2	114	57.0	49.05	<0.001
Urban	10	12.6	76	62.8	86	43.0		
<b>Total</b>	<b>79</b>	<b>100.0</b>	<b>121</b>	<b>100.0</b>	<b>200</b>	<b>100.0</b>		

According to occurrence of gastro-enteritis during weaning this table shows that, there is a highly statistical significant ( $P < 0.001$ ) difference as regards mothers' socio-demographic characteristics. Where 91.7% of children whose mothers' age 20 to 30 years have no gastro-enteritis, while 92.4% and 87.4% of children whose mothers aren't work and from rural areas their children have gastro-enteritis during weaning.