CHAPTER IV

ANALYSIS AND INTERPRETATION

This chapter presents the analysis and interpretation of the data obtained from 200 mothers of Kohima district for assessing the knowledge, attitude and practice of mothers regarding complementary feeding of 6-24 months old babies. The collected data were assembled, analyzed and tested for their significance. The data are tabulated, analyzed and interpreted using descriptive and inferential statistics.

Organization of Study Findings:

Analysis of the study findings were categorized organized and presented under the following sections.

SECTION I: Demographic data of mothers in term of frequency and percentage.

SECTION II: Determine existing knowledge, practice and attitude regarding complementary feeding among mothers.

SECTION III: Association of demographic variable with pre test knowledge score.

SECTION I: Demographic data of mothers in term of frequency and percentage.

This section deals with the analysis of the demographic variable according to babies' age, mothers' age, education, occupation, family income, types of family, number of children and source of information on complementary feeding. The description of demographic variable of sample has been presented in the form of frequency and percentage and interpreted with the diagrams. In this section demographic profile of the respondents have been displaced to show the frequency distribution of the various attributes of demographic variable with the help of SPSS version 16.0; frequency, percent and cumulative percent have been calculated and the outcomes are as follows:

TABLE I: Frequency and Percentage distribution of sample according to Baby's age group.

N=200

Demographic Variables		N	%	Valid Percent	Cumulative Percent
Baby Age	6 - 10 months	96	48.0	48.0	48.0
	11- 15 months	49	24.5	24.5	72.5
	16- 20 months	30	15.0	15.0	87.5
	21- 24 months	25	12.5	12.5	100.0
Total		**200**	**100**	**100**	
Mother Age	18-24 years	45	22.5	22.5	22.5
	25-31 years	96	48.0	48.0	70.5
	32-38 years	53	26.5	26.5	97.0
	39-45 years	6	3.0	3.0	100.0
Total		**200**	**100**	**100**	
Education	Primary	29	14.5	14.5	14.5
	Matriculate	63	31.5	31.5	46.0
	Secondary	62	31.0	31.0	77.0
	Graduate &above	46	23.0	23.0	100.0
Total		**200**	**100**	**100**	
Occupation	Housewife	108	54.0	54.0	54.0
	Self employed	41	20.5	20.5	74.5
	Government employed	49	24.5	24.5	99.0
	Any other	2	1.0	1.0	100.0
Total		**200**	**100**	**100**	
Family Income	< 3000	6	3.0	3.0	3.0
	3000 – 6000	22	11.0	11.0	14.0
	7000 – 10000	59	29.5	29.5	43.5
	> 10000	113	56.5	56.5	100.0
Total		**200**	**100**	**100**	
Family Type	Nuclear	46	23.0	23.0	23.0
	Joint	154	77.0	77.0	100.0
Total		**200**	**100**	**100**	

|					
No.of children	One	89	44.5	44.5	44.5
	Two	74	37.0	37.0	81.5
	Three	28	14.0	14.0	95.5
	Above Three	9	4.5	4.5	100.0
Total		**200**	**100**	**100**	
Source of information	Radio	11	5.5	5.5	5.5
	TV	91	45.5	45.5	51.0
	Newspaper	40	20.0	20.0	71.0
	Peer group	58	29.0	29.0	100.0
Total		**200**	**100**	**100**	

The table 1 depicts, the majority 48.0% respondent's baby belong to the age group of 6-10 months, while 24.5 % of babies are in the age group of 11-15 months. Another 15 % of respondent's babies are in the age group of 16-20 months whereas 12.5 % are in the age group of 21-24 months. The percentage of babies' age is shown in fig. 3. Majority 48% of the respondents belongs to the age group of 25-31 years while 26.5% of age participant respondents in the age group of 32-38 years while 22.5% of age participant respondents in the age group of 18-24 years and 3 % in 39-45 years. The percentage of mothers' age is shown in fig 4.

Table 1 shows the educational status of mother. 31.5% of mothers' are matriculate whereas 31.0% were in secondary level. 23% of mothers' were graduate and above while 14.5% of mothers' were educated up to primary level. The education levels in percentage of mothers' are shown in fig 5.The percentage distribution of occupation of the mother that shows 54% of mothers were housewife while 24.5% were government employed whereas 20.5% were self employed and 1% was in other occupation. The occupation percentages of sample respondents are shown in fig 6.
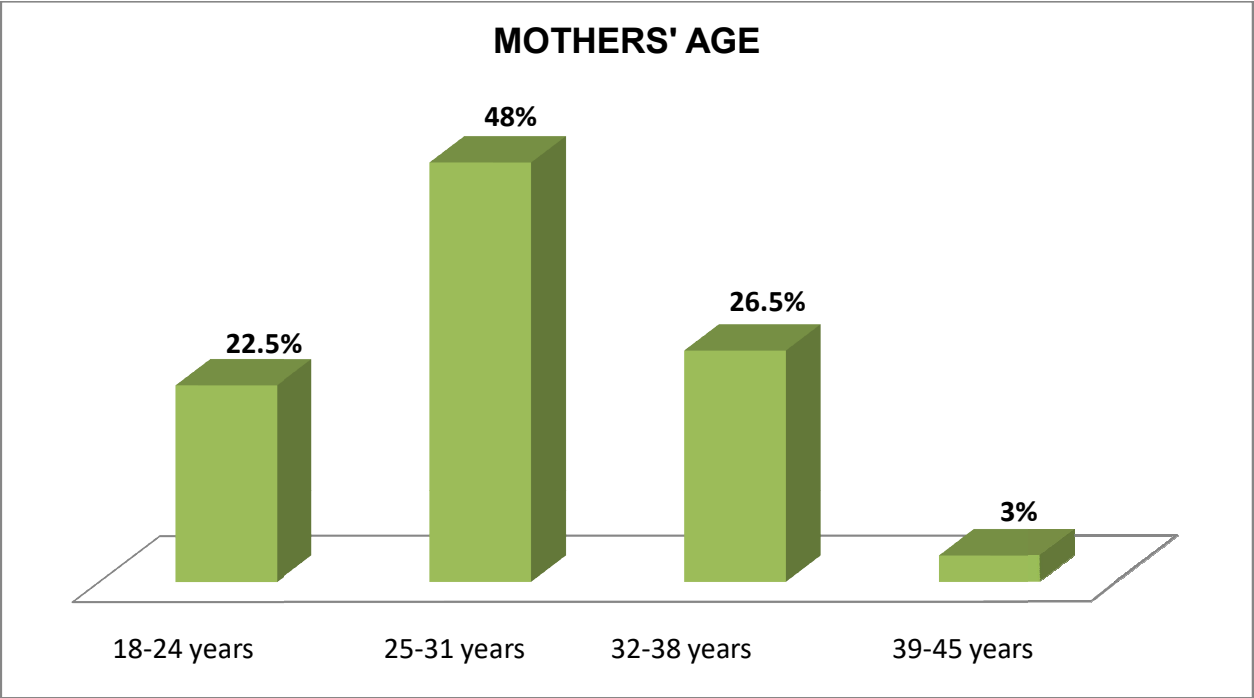
In table I, the percentage distribution of mother shows 3% of mothers belong to the socio-economic condition of rupees below 3000/- family income per monthand 11% participants belongs between Rs. 3000 – 6000/- whereas 29.5% of participants

were in Rs. 7000 – 10000/- per month and 56.5% of respondents belong above Rs. 10000 per month family income. The percentage of socio-economic condition of participants is shown in fig 7.77% were from joint family whereas 23% from nuclear family. The family type of respondents is shown in fig 8.
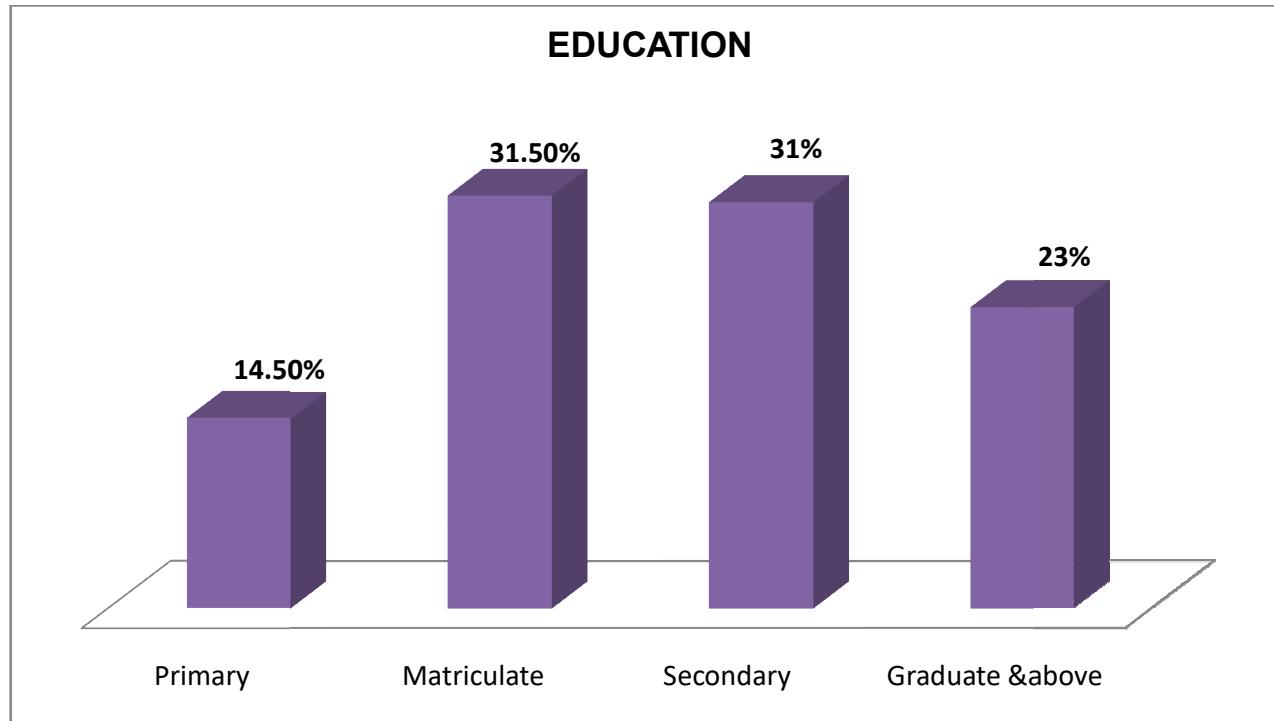
In table I show that 44.5% of mothers have one child, 37.0% of mothers' have two children and 14% of mothers have three children while 4.5% of mothers have more than 3 children. The percentage distribution of number of children is shown in fig 9.45.5% of mother gets information of complementary feeding from TV and 29% from peer group whereas 20% from Newspaper and 5.5% from radio. The percentage is shown in fig 10.
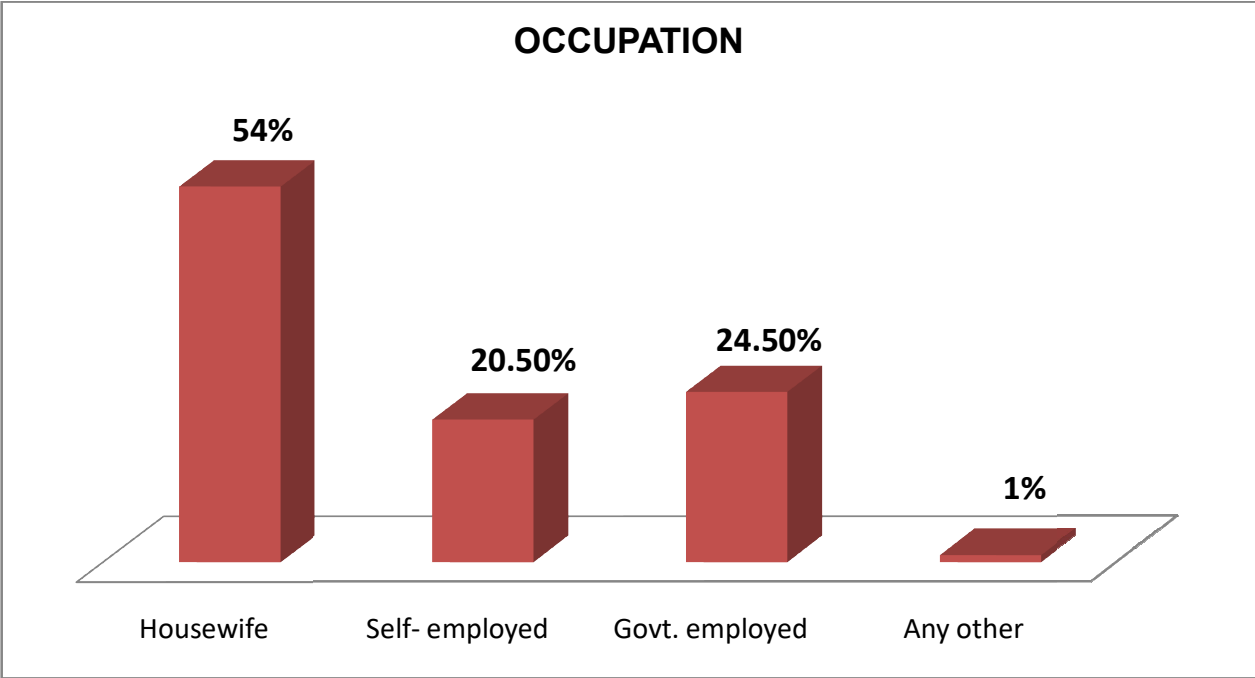
BABIES' AGE

- 48% — 6 - 10 months
- 24.5% — 11- 15 months
- 15.0% — 16- 20 months
- 12.5% — 21- 24 months
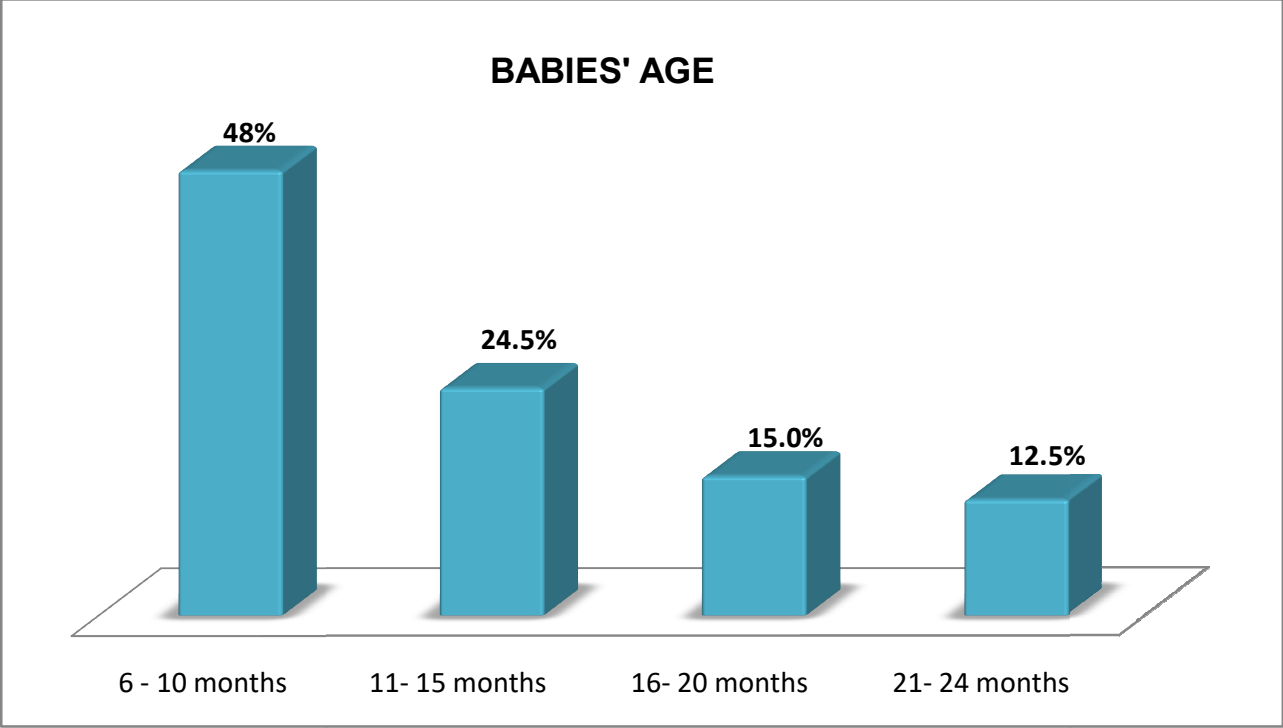
Fig 3: Percentage distribution of mothers according to babies' age.

MOTHERS' AGE

48%

26.5%

22.5%

3%

18-24 years   25-31 years   32-38 years   39-45 years

Fig 4: Percentage distribution of mothers' age group.

EDUCATION

- 14.50% — Primary
- 31.50% — Matriculate
- 31% — Secondary
- 23% — Graduate &above

Fig 5: Percentage distribution of mothers' educational status.

OCCUPATION

54%

20.50%

24.50%

1%

Housewife   Self- employed   Govt. employed   Any other

Fig 6:Percentage distribution of mothers' occupational status.

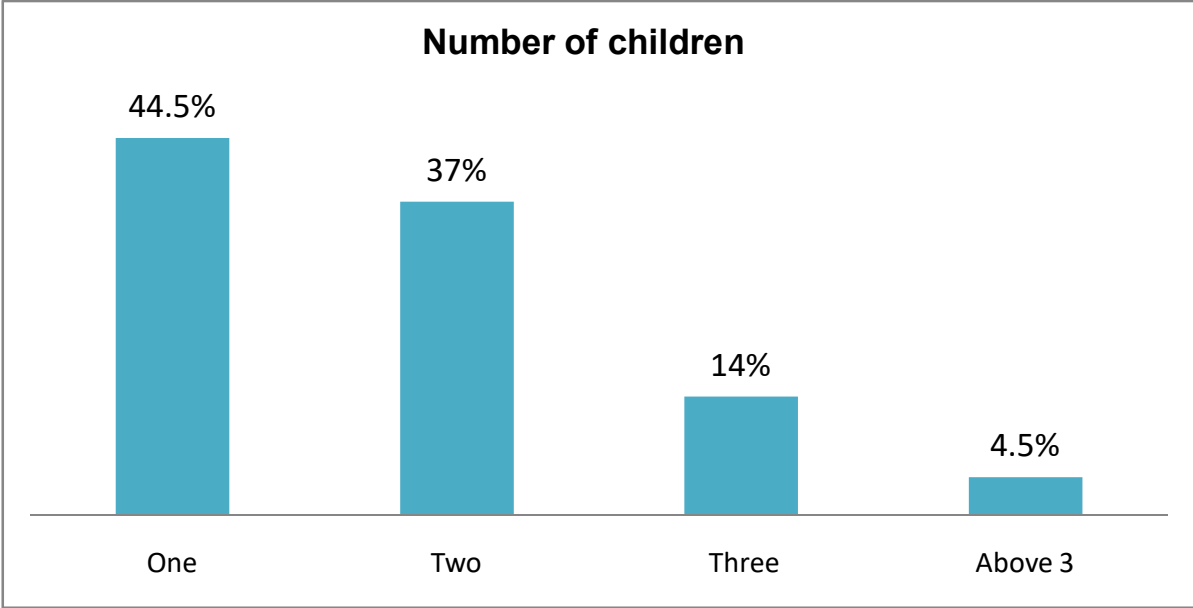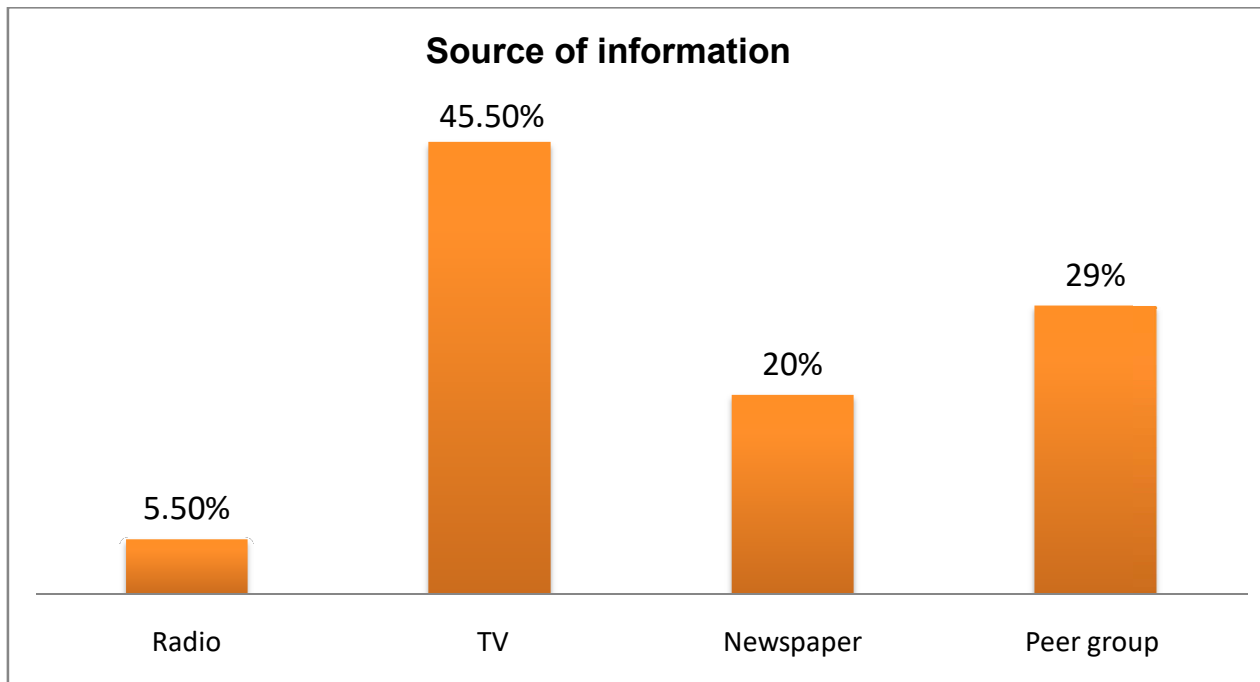**FAMILY INCOME**

56.5%

29.5%

11%

3%

< 3000   3000 – 6000   7000 – 10000   > 10000
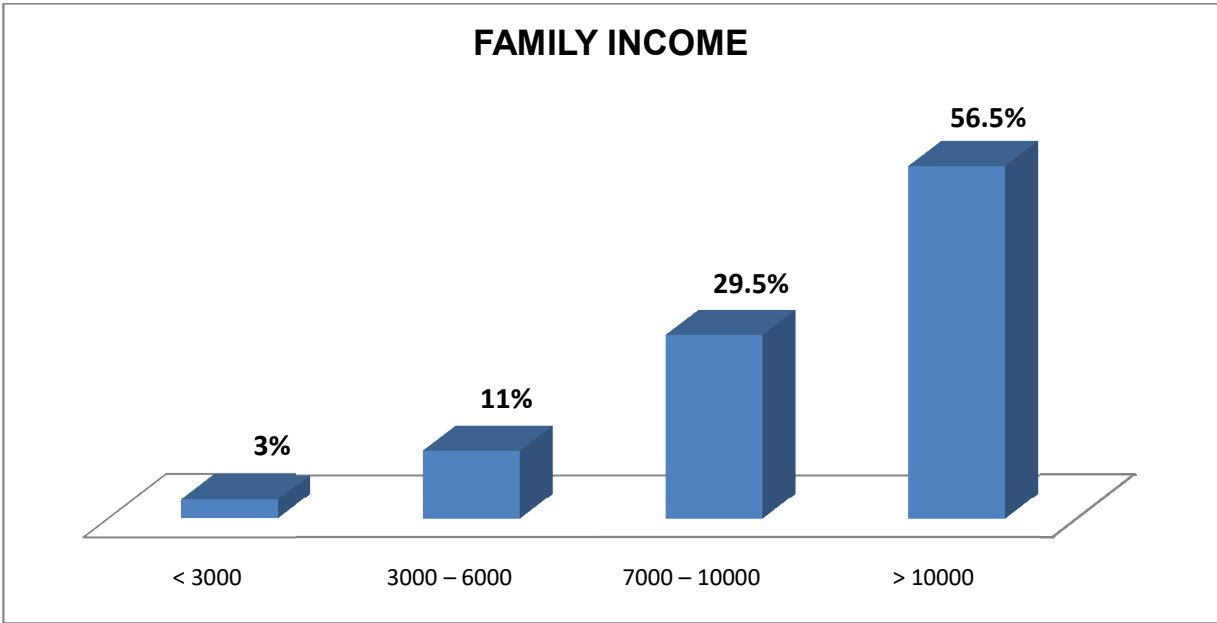
Fig 7: Percentage distribution of family income.
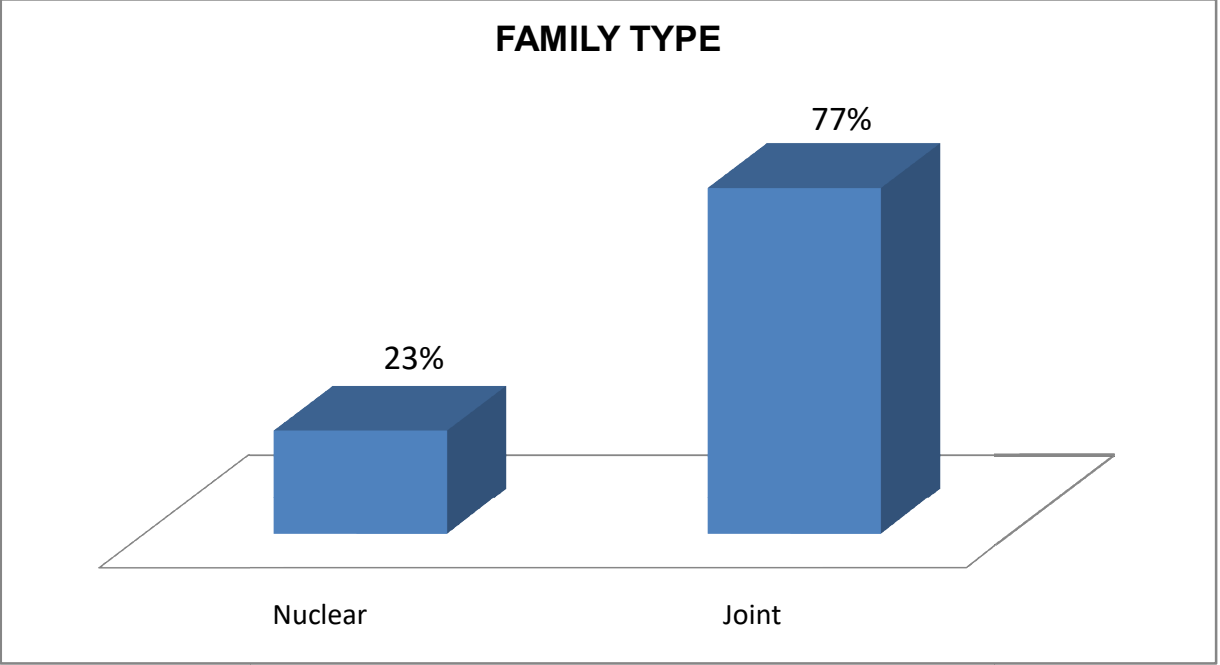
Fig 8: Percentage distribution of family type.

Number of children

44.5%

37%

14%

4.5%

One   Two   Three   Above 3

Fig 9: Percentage distribution of mothers' according to number of children.

Fig 10: Percentage distribution of mothers' according to source of information.

**SECTION II: Determine Existing Knowledge and Attitude regarding Complementary Feeding among Mothers.**

In this effectiveness of structure teaching program has been analyzed with the help of SPSS version 16.0 differential score between pre and post study have been calculated to check the impact of the study to assess the effectiveness of structured teaching program on knowledge, practice and attitude on complementary feeding among mothers. The outcomes of the study are as follows:

TABLE II: Frequency and Percentage distribution of score according to level of knowledge pre-test and post-test.

N=200

Level of knowledge	Pre-test		Post-test	
	Frequency	Percent	Frequency	Percent
Poor	35	17.5	00	00
Average	79	39.5	27	13.5
Good	86	43.0	173	86.5

Table II depicts the percentage of distribution of participants that shows about 43 % were good, 39.5 % Average and 17.5% were poor in pre-test level of knowledge while in post test 86.5% good, 13.5% were in average whereas no respondents were calculated in poor level. The variation between pre-test and post-test level are shown in fig 11.

Level of knowledge

■ Pre-test   ■ Post-test

Poor	Average	Good
17.50%	39.50%	43%
0%	13.50%	86.50%
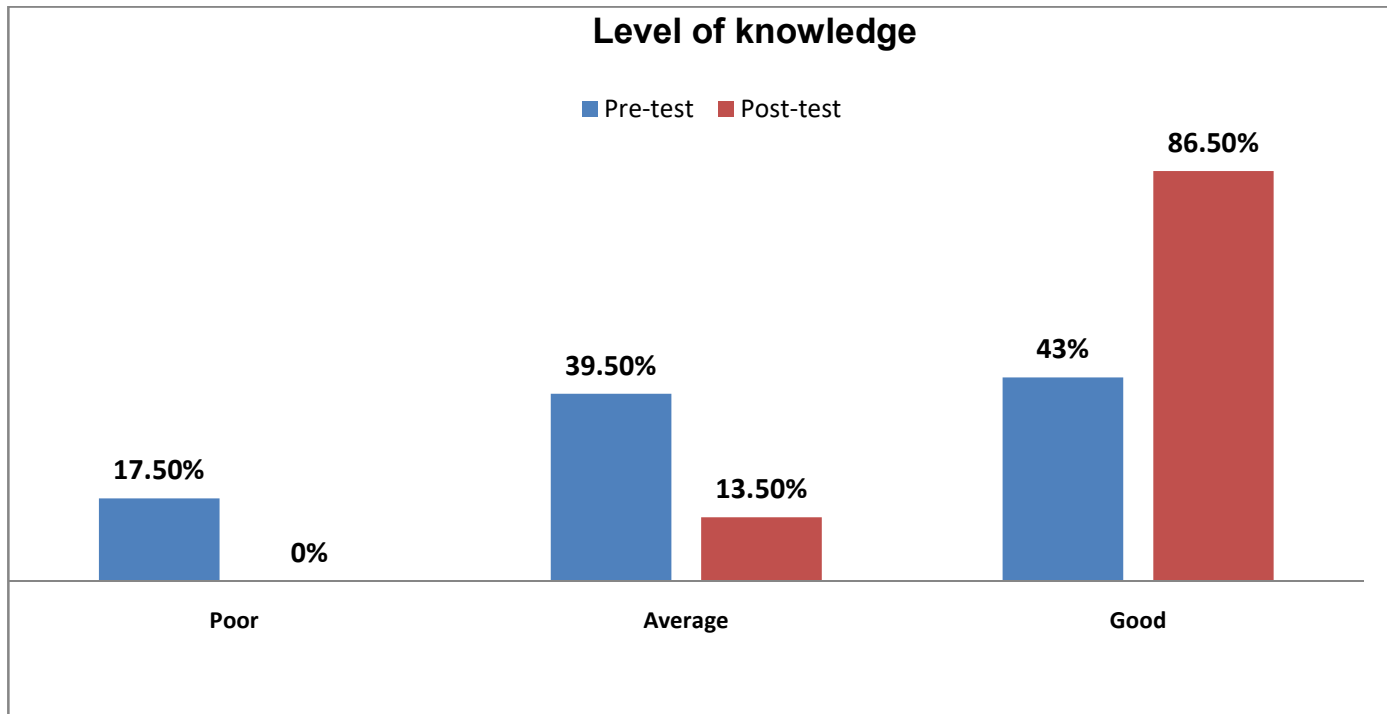
Fig 11: Distribution of percentage according to pretest and posttest level of knowledge

TABLE III:Comparison between difference of pre-test and post-test knowledge score regarding complementary feeding among mothers.

N= 200

Variable	Tests	Mean	SD	t-value	Tabulated value	df	p value	Significance
Knowledge	Pre-test	2.26	.737	-11.223	1.972	199	.000	Highly significant
	Post-test	2.86	.343					

Table III shows the difference between pretest and posttest mean, the pretest knowledge shows2.26 and 2.86 in posttest. The calculated't'value (11.223) was much higher than the tabulated't' value (1.972) at the 0.05 level of significance. Thus it was statistically interpreted that the planned teaching programme among mothers improves the knowledge on complementary feeding.

TABLE IV: Frequency and Percentage distribution of score according to level of practice pre-test post-test.
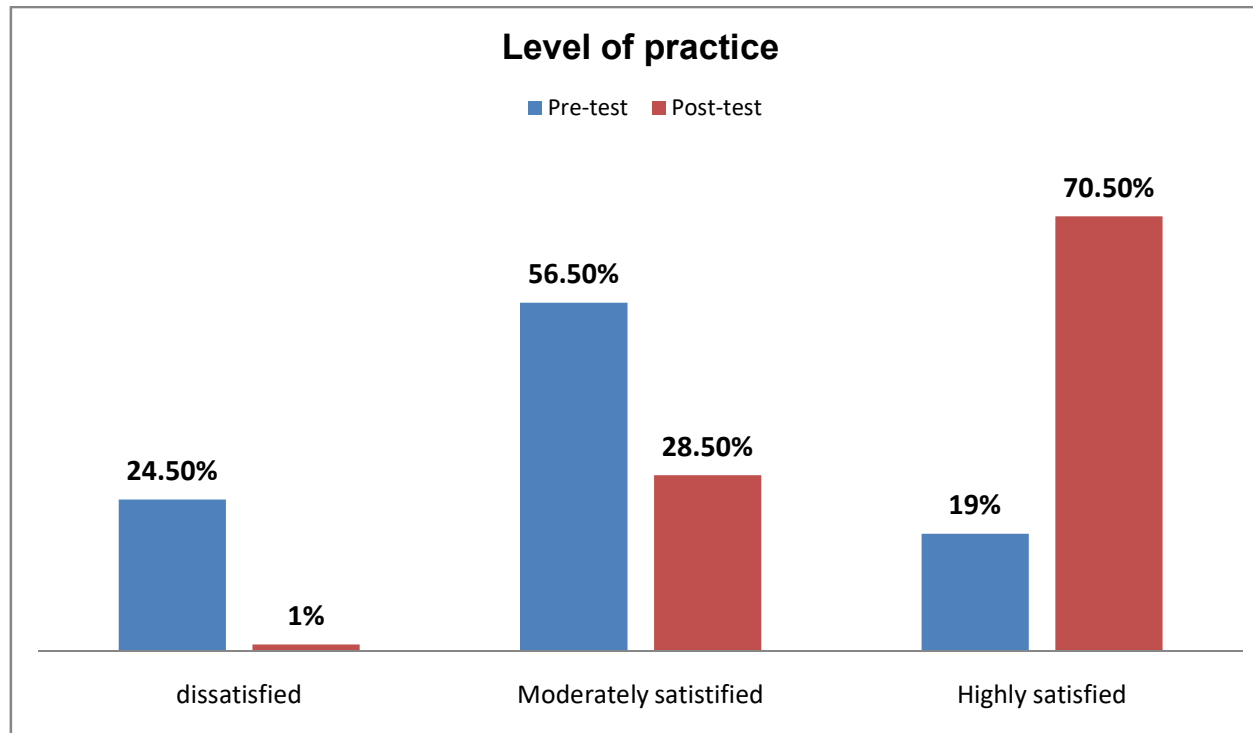
N=200

Level of practice	Pre-test		Post-test	
	Frequency	Percent	Frequency	Percent
Dissatisfied	49	24.5	2	1.0
Moderately satisfied	113	56.5	57	28.5
Highly satisfied	38	19.0	141	70.5

The above table depicts the percentage of distribution of participants level of practice, it shows 24.5% were dissatisfied, 56.5% shows moderately satisfied and

19.0% poor in pre-test level of practice while in post test 70.5% highly satisfied, 28.5% shows moderately satisfied and 1.0% were dissatisfied. The variation between pre-test and post-test level are shown in fig 12.

Fig 12: Distribution of percentage according to pre-test and post-test levelofpractice.

TABLE V: Comparison between difference of pre-test and post-test practice score regarding complementary feeding among mothers.

N= 200

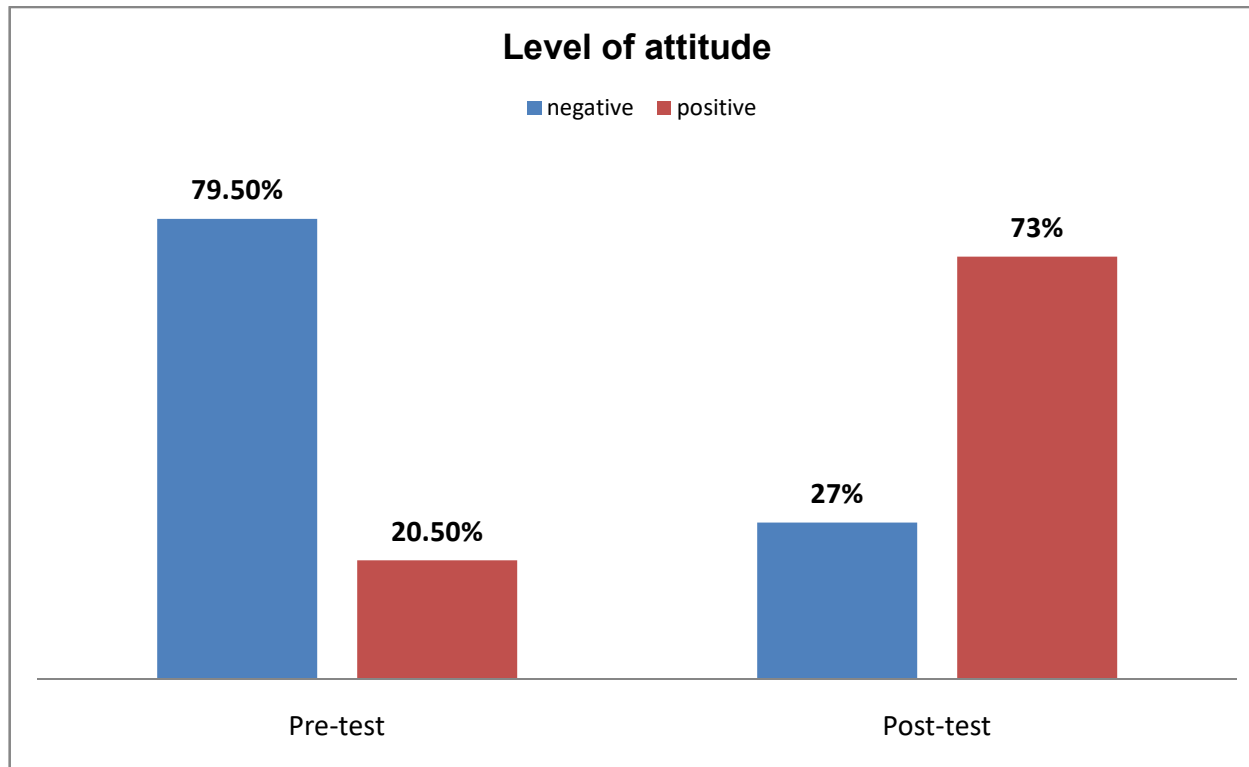| Variable	Tests	Mean	SD	t-value	Tabulated value	df	p value	Sig.
Practice	Pre-test	1.94	.659	-13.922	1.972	199	.000	Highly sig.
	Post-test	2.70	.483					

Table V shows the difference between pretest and posttest mean, the pretest practice shows 1.94and 2.70 in posttest. The calculated't' value (13.922) was much higher than the tabulated 't' value (1.972) at the 0.05 level of significance. Thus it was statistically interpreted that the planned teaching programme among mothers improves the practice on complementary feeding.

TABLE VI: Frequency and Percentage distribution of score according to pre-test post-test level of attitude.

N=200

Level of attitude	Pre-test		Post-test	
	Frequency	Percent	Frequency	Percent
Negative	159	79.5	54	27.0
Positive	41	20.5	146	73.0

The table above depicts the percentage of distribution of participant's level of attitude, it shows 79.5% negative in pretest and 27.0% negative in posttestwhereas 20.5% positive in pretest and 73.0% positive in posttest after the intervention of teachingprogramme. The variation between pre-test and post-test level are shown in fig 13.

Level of attitude

■ negative ■ positive

79.50%

73%

20.50%

27%

Pre-test   Post-test

Fig 13: Distribution of percentage of pre-test and post-test level of attitude.

TABLE VII: Comparison between difference of pre-test and post-test attitude score regarding complementary feeding among mothers.

N= 200

Variable	Tests	Mean	SD	t-value	Tabulated value	df	p value	Sig.
Attitude	Pre-test	1.20	.405	-12.713	1.972	199	.000	Highly sig.
	Post-test	1.73	.445					

Table VII shows the difference between pretest and posttest mean, the pretest attitude shows 1.20 and 1.73 in posttest. The calculated 't' value (12.713) was much higher than the tabulated 't' value (1.972) at the 0.05 level of significance. Thus it was statistically interpreted that the planned teaching programme among mothers was effective in changing the attitude of mothers on complementary feeding.

SECTION III: Association of Demographic Variable with Pre Test Knowledge Score.
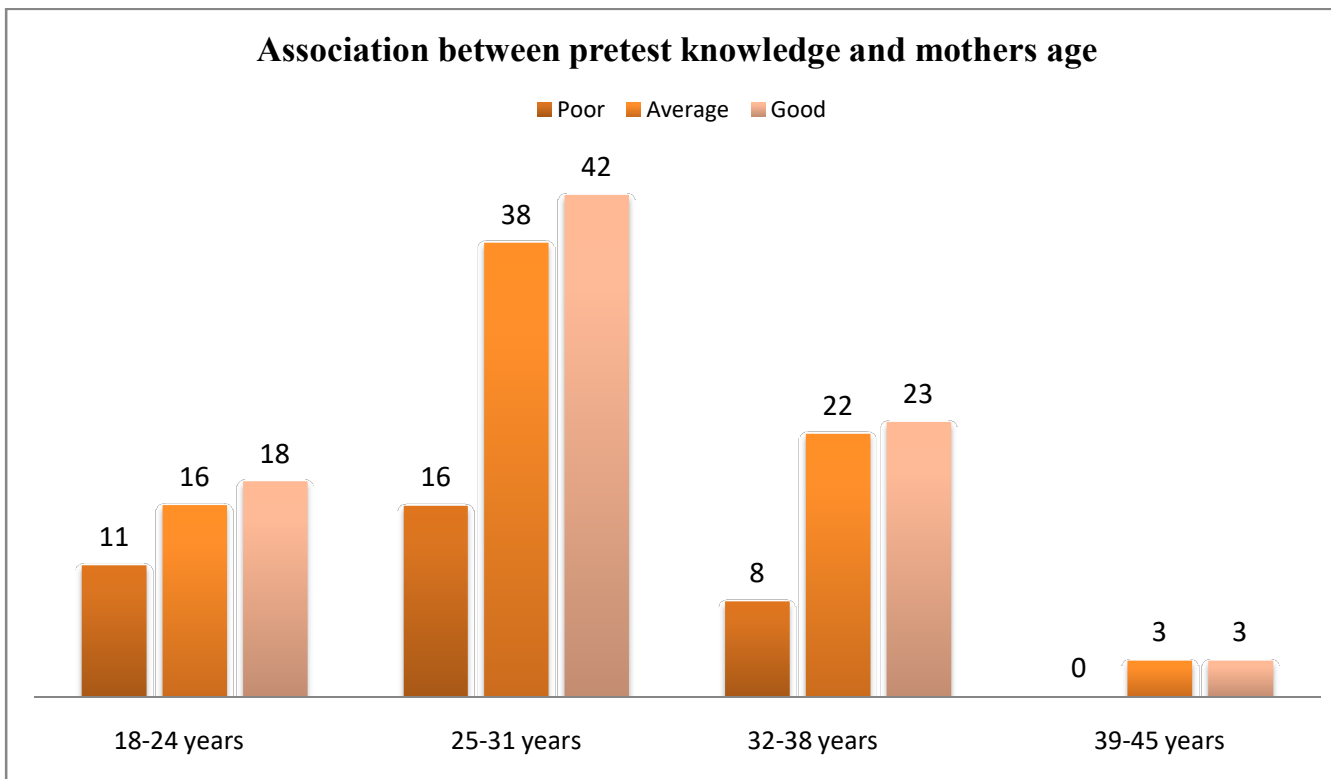
This section deals with the association between pre test knowledge score and selected demographic variables. Chi-square was used to determine the association between the pre-test knowledge score and selected demographic variable.

TABLE VIII: Association between Levels of Knowledge in Pre-Test with Demographic Variables Score of Respondents.
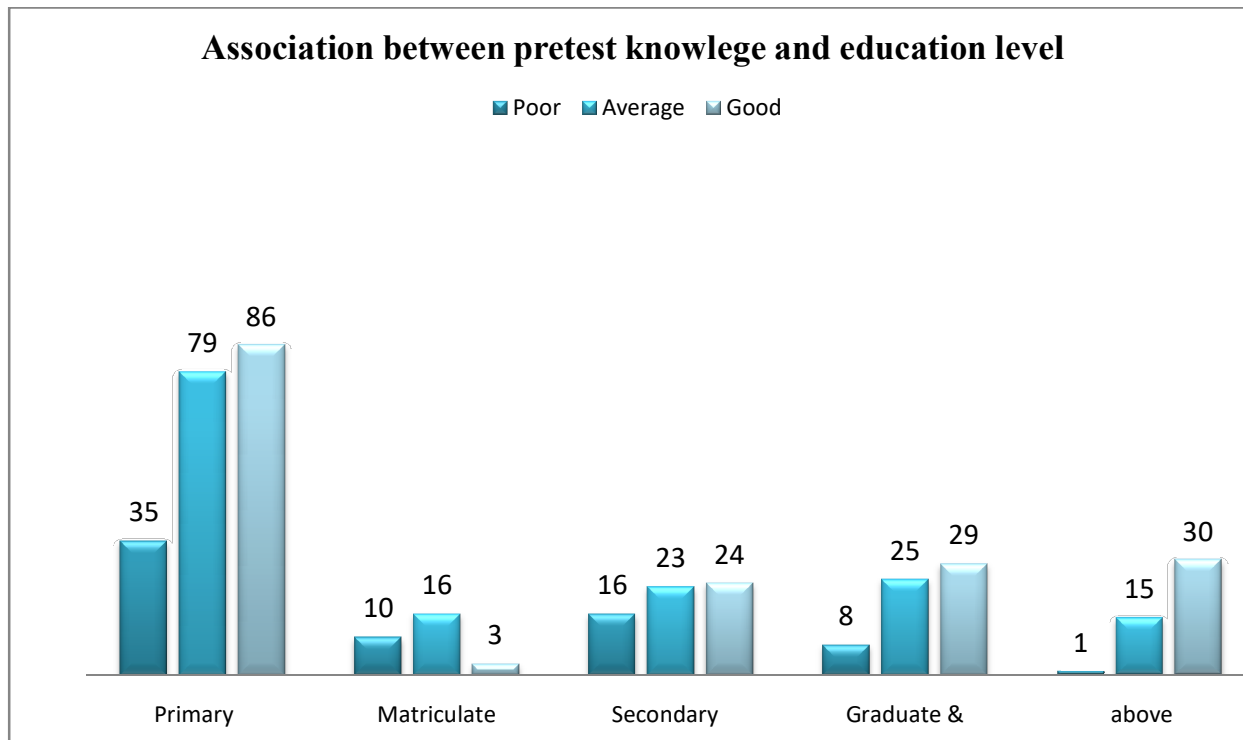
N- 200

Demographic variables		Pre-test Knowledge				Chi-square test		Degree of freedom
		Poor	Average	Good	Total	Calculated	Tabulated	
Mother Age	18-24 years	11	16	18	45	.799	12.592	6
	25-31 years	16	38	42	96			
	32-38 years	8	22	23	53			
	39-45 years	0	3	3	6			
Total		35	79	86	200			
Education	Primary	10	16	3	29	.000	12.592	6
	Matriculate	16	23	24	63			
	Secondary	8	25	29	62			
	Graduate & above	1	15	30	46			
Total		35	79	86	200			
Occupation	Housewife	26	44	38	108	.031	12.592	6
	Self employed	7	17	17	41			
	Government employed	2	17	30	49			
	Any other	0	1	1	2			
Total		35	79	86	200			
Family Income	< 3000	1	3	2	6	.644	12.592	6
	3000 – 6000	6	9	7	22			
	7000 – 10000	9	27	23	59			
	> 10000	19	40	54	113			
Total		35	79	86	200			
No.of children	One	12	40	37	89	.058	12.592	6
	Two	13	24	37	74			
	Three	8	14	6	28			
	Above Three	2	1	6	9			
Total		35	79	86	200			
Source of information	Radio	3	2	6	11	.085	12.592	6
	TV	12	43	36	91			
	Newspaper	12	10	18	40			
	Peer group	8	24	26	58			
Total		35	79	86	200			

The above table reveals that the variable age, education, occupation, family income, number of children and source of information status of mother are independent of each other. The chi-square calculated value is less than chi-square table value. The counts of association between pre-test knowledge and mother age are shown in fig 14, 15, 16, 17, 18 and 19.

Association between pretest knowledge and mothers age

■ Poor ■ Average ■ Good

	18-24 years	25-31 years	32-38 years	39-45 years
Poor	11	16	8	0
Average	16	38	22	3
Good	18	42	23	3

Fig 14: Counts of association between pre-test knowledge and mother age.

Association between pretest knowlege and education level

■ Poor ■ Average ■ Good

	Primary	Matriculate	Secondary	Graduate &	above
Poor	35	10	16	8	1
Average	79	16	23	25	15
Good	86	3	24	29	30

Fig 15: Counts of association between pre-test knowledge and education level.

Association between pretest knowledge and occupation status

Poor   Average   Good

Housewife: 26, 44, 38
Self employed: 7, 17, 17
Government employed: 2, 17, 30
Any other: 0, 1, 1

Fig 16: Counts of association between pre-test knowledge and occupational status

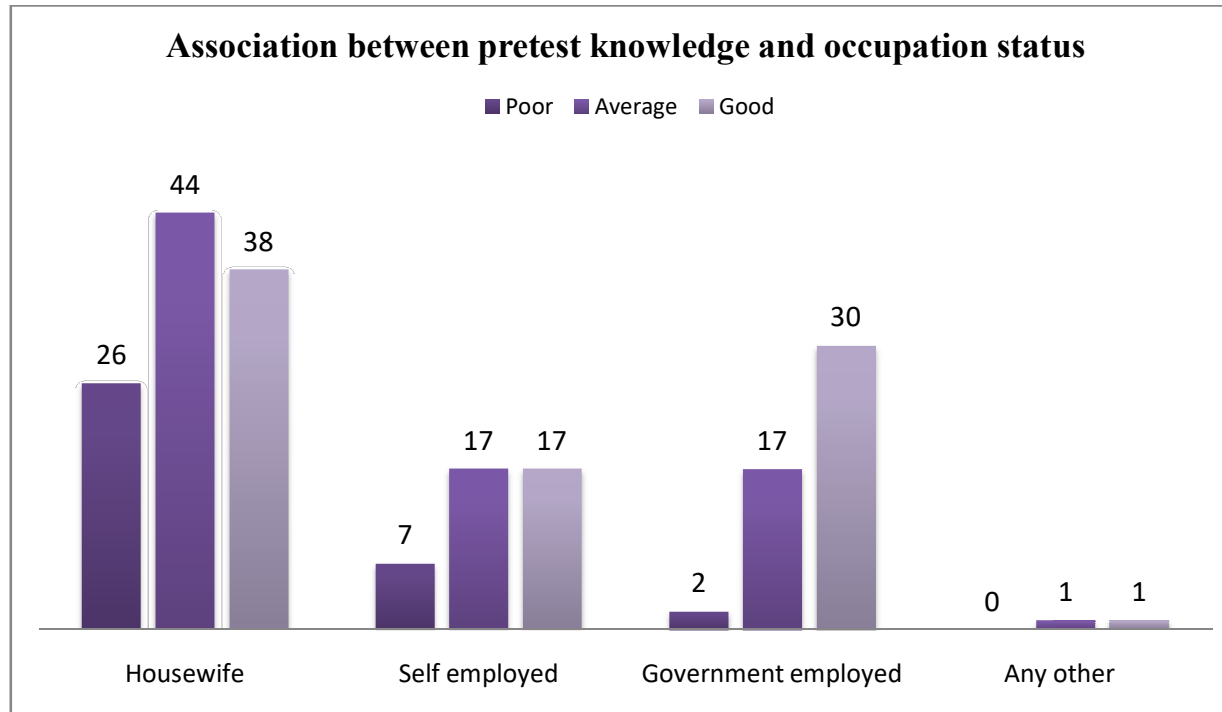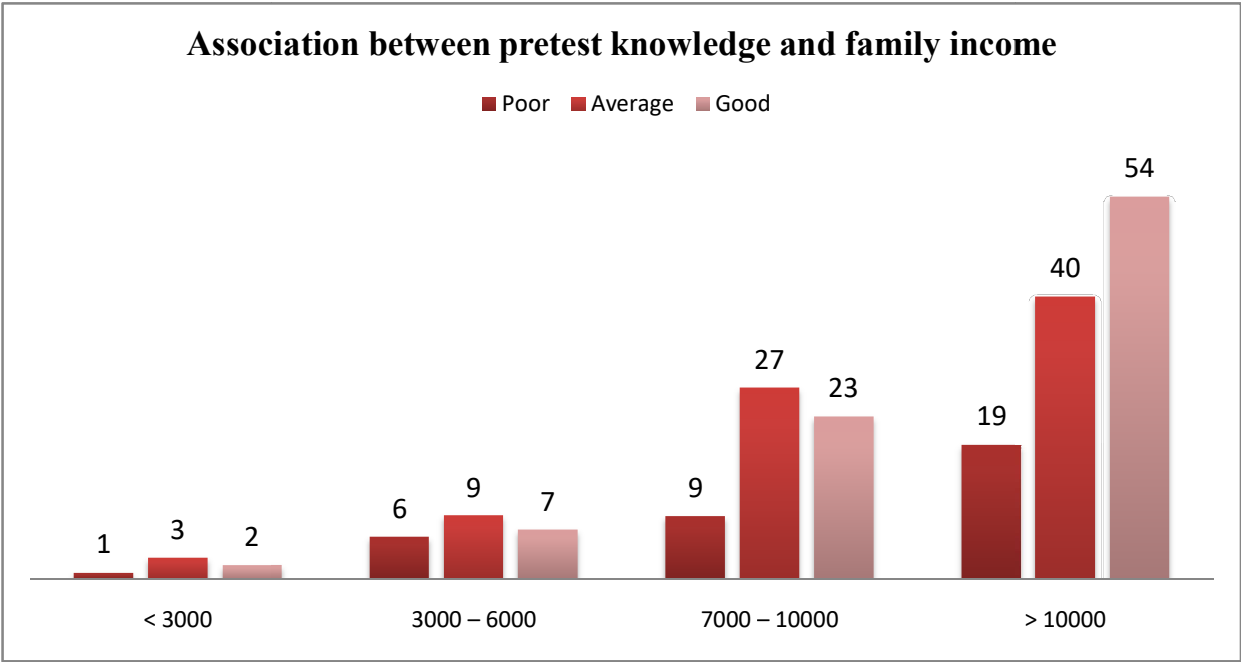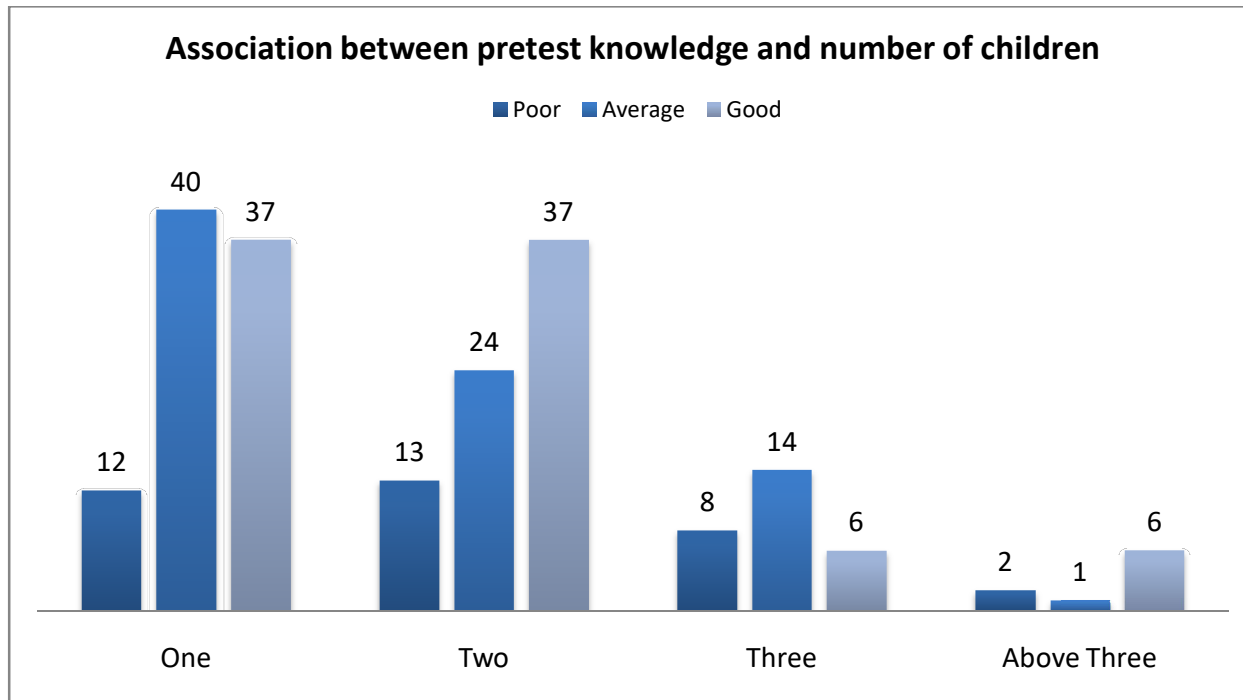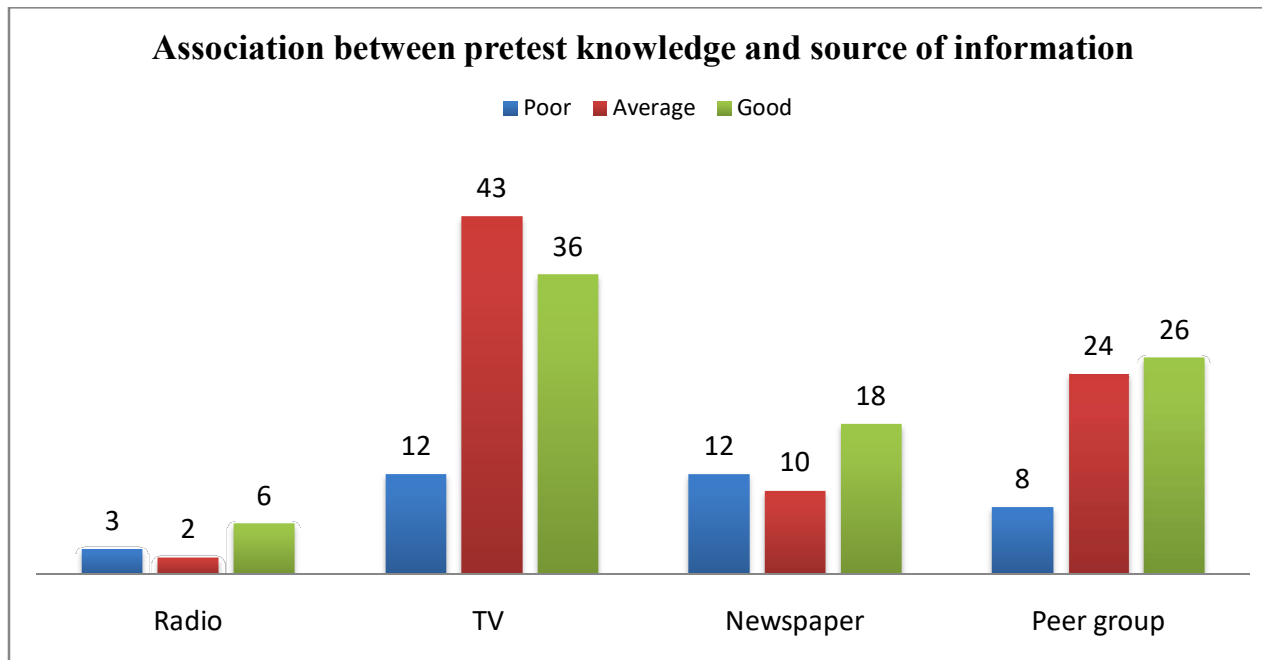**Association between pretest knowledge and family income**

■ Poor ■ Average ■ Good

Fig 17: Counts of association between pre-test knowledge and family income

Fig 18: Counts of association between pre-test knowledge and number children.

Association between pretest knowledge and source of information

■ Poor ■ Average ■ Good

	Radio	TV	Newspaper	Peer group
Poor	3	12	12	8
Average	2	43	10	24
Good	6	36	18	26

Fig 19: Counts of association between pre-test knowledge and source of information.

Summary:

This chapter dealt with the analysis and interpretation of findings of the study. The data gathered were summarized and used descriptive and inferential statistics for analysis. The analysis has been organized and presented under various sections like demographic variables, findings related to knowledge and attitude of complementary feeding among mothers having 6-24 months old baby. The result showed that the mothers have more knowledge on complementary feeding which correlated with the attitude and practice of complementary feeding.