



Research Paper

## A study to assess the effectiveness of video assisted teaching on knowledge and practice regarding optimal feeding practice among mothers of low birth weight babies admitted in selected hospitals, U.P.

Miss PRIYA GUPTA<sup>1</sup>

*II yr. MSc(N) Student, Faculty of Nursing, Rama University*

Mrs. Minu S.R<sup>2</sup>

*Associate Professor, Faculty of Nursing, Rama University*

**ABSTRACT:** A quantitative research approach with one group pre- test post- test only design used for the study to assess the knowledge and practice on optimal feeding practice. 30 mothers of low birth weight babies were considered as a sample after fulfillment of inclusive criteria. Purposive sampling technique was used to select the samples. The data was analyzed by using both descriptive and inferential statistics on the basis of the objectives and hypothesis of the study. The findings of the study revealed that the maximum percentage was in the age groups of 25 - 29 years of age, Most of mothers (36.6%) Education status was intermediate, on the basis of occupation of mothers showed that most of mothers(53%) was housewife, most of mothers monthly family income (33.3%) was >Rs .15000.

The distribution of mothers of low birth weight babies on the basis of type of family showed that majority of mothers (70%) were belongs to extended family. Majority of mothers (85%) were belongs to Hindu religion. Most of the mode of delivery (44%) was urgent cesarean. Majority of mothers revealed that the source of information regarding optimal feeding practice (20%) was obtained from health care worker. The mean score of post-test knowledge 23.00 (67.64%) was apparently higher than the mean score of pre-test knowledge 14.90 (43.82%), and mean score of post-test practice 10.03(50.15%) was apparently higher than the mean score of pre-test practice 8.23(41.15%) suggesting that the Video assisted teaching was effective in increasing the knowledge and practice of the mothers of low birth weight babies regarding Optimal feeding practice. The mean difference -8.1 between pre-test and post-test knowledge score and mean difference -1.8 between pre-test and post-test practice score of the mothers of low birth weight babies was found to be significant and there was no association between pre-test knowledge and practice score and demographic variables as age, education, occupation, monthly family income, type of family, religion, any illness during pregnancy, mode of delivery, previous knowledge regarding optimal feeding practice and source of health information. It can be concluded that video assisted teaching has found to be effective in significance gain in the knowledge and practice among mothers of low birth weight babies regarding optimal feeding practice.

**KEYWORDS:** Optimal feeding practice, Mother, Low birth weight babies.

Received 16 Feb, 2021; Revised: 28 Feb, 2021; Accepted 02 Mar © The author(s) 2021.

Published with open access at [www.questjournals.org](http://www.questjournals.org)

### I. INTRODUCTION

The First year of life is crucial in laying the foundation of good health. At this time certain specific biological and psychological needs must be met to ensure the survival and healthy development of the child into a future adult. Breastfeeding is the ideal method suited for the psychological and physiological needs of children. Breastfeeding is the feeding of an infant or young child with breast milk directly from female human breasts (i.e., via lactation) rather than from a baby bottle or other container. Babies have a sucking reflex that enables them to suck and swallow milk. It is recommended that mothers exclusively breastfeed for six months or more, without the addition of infant formula or solid food. After the addition of solid food, mothers are advised to continue breastfeeding for at least a year. The World Health Organization recommends nursing for at least two years or more. Human breast milk is the healthiest form of milk for babies<sup>1</sup>.

**Breastfeeding**, also known as **nursing**, is the feeding of babies and young children with milk from a woman's breast. Health professionals recommend that breastfeeding begin within the first hour of a baby's life and continue as often and as much as the baby wants. During the first few weeks of life babies may nurse roughly every two to three hours, and the duration of a feeding is usually ten to fifteen minutes on each breast. Older children feed less often. Mothers may pump milk so that it can be used later when breastfeeding is not possible. Breastfeeding has a number of benefits to both mother and baby, which infant formula lacks<sup>1</sup>.

## **II. OBJECTIVES OF THE STUDY**

- To assess the knowledge and practice regarding optimal feeding practice among mothers of low birth weight babies admitted in selected hospitals, U.P.
- To evaluate the effectiveness of video assisted teaching on optimal feeding practice among mothers of low birth babies admitted in selected hospitals, U.P.
- To find association between pre- test knowledge regarding optimal feeding practice among mothers of low birth weight babies with their selected demographic variables.
- To find association between pre-test practice regarding optimal feeding practice among mothers of low birth weight babies with their selected demographic variables.
- To find out the correlation between knowledge and practice regarding optimal feeding practice among mothers of low birth weight babies admitted in selected hospitals, U.P.

## **III. RESEARCH HYPOTHESIS**

**H<sub>01</sub>**- There is no significant difference between pre- test and post- test knowledge level of Mothers of low birth weight babies regarding optimal feeding practice.

**H<sub>02</sub>**- There is no significant difference between pre- test and post- test practice of Mothers of low birth weight babies regarding optimal feeding practice.

**H<sub>03</sub>**- There is no significant association between pre- test and post- test knowledge and practice of Mothers of low birth weight babies regarding optimal feeding practice in relation to socio demographic variables.

**H<sub>04</sub>**-- There is no significant correlation between pre -test knowledge and practice of Mothers of low birth weight babies regarding optimal feeding practice in relation to socio demographic variables.

**H<sub>1</sub>**- There is significant difference between pre- test and post- test knowledge level of Mothers of low birth weight babies regarding optimal feeding practice.

**H<sub>2</sub>** - There is significant difference between pre- test and post- test practice of Mothers of low birth weight babies regarding optimal feeding practice.

**H<sub>3</sub>**- There is significant association between pre- test and post- test knowledge and practice of Mothers of low birth weight babies regarding optimal feeding practice in relation to socio demographic variables.

**H<sub>4</sub>**- There is significant correlation between pre -test knowledge and practice of Mothers of low birth weight babies regarding optimal feeding practice in relation to socio demographic variables.

## **IV. METHODOLOGY**

### **Research Approach**

Quantitative Evaluative research approach

### **Research Design**

Pre experimental one group pre- test post-test only

### **Sample**

Mothers of low birth weight babies

### **Sample Size**

30 Mothers

### **Sampling Technique**

Purposive Sampling Technique

## **V. DESCRIPTION OF THE TOOL**

The researcher develops the tools are structured knowledge questionnaire and checklist. It consists of part I, part II and part III.

### **Part -I: Socio demographic Performa**

### **Part -II: Structured knowledge questionnaire.**

### **Part-III: Checklist**

**Part-I:** Part -I dealt with demographic data which was used to collect the characteristics of the samples with an instruction to participants. It contained 10 items such as age, gender, occupation, monthly income, type of family, religion, any illness, mode of child birth, previous knowledge and previous knowledge.

**Part -II:** Part -II dealt with structured knowledge questionnaire. It contained 34 items.

**Part-III:** Part-III dealt with checklist. It contains 20 items.

## VI. TOOLS AND TECHNIQUES OF DATA COLLECTION

The tool developed for the study is, Structured knowledge questionnaire and checklist to assess the level of knowledge and practice of optimal feeding practice among mothers of low birth weight babies. Firstly pre-test was conducted through structured knowledge questionnaire for knowledge and checklist for practice, was administered to collect the data, to assess the level of knowledge and practice among mothers of Low birth weight babies in selected hospitals. The doubts of the participants were clarified. The researcher then administered Video assisted teaching, as intervention, then post-test was done by using same structured knowledge questionnaire and checklist after 7 days to assess the post-test knowledge and practice of mothers of low birth weight babies. Termination of data collection procedure was done by thanking each subject for their kind participation and co-operation.

### SCORING OF TOOL:

#### Grading of structured knowledge questionnaire score

S.No.	Knowledge Score range	Category
1.	0 - 17	Inadequate
2.	18 -26	Moderate
3.	27 - 34	Adequate

#### Grading of practice score

S.No	Practice Score range	Category
1.	0 - 10	Inadequate
2.	11 - 15	Moderate
3.	16 - 20	Adequate

## VII. RESULT:

**Section A** -Assessment of knowledge and practice regarding optimal feeding practice among mothers of low birth weight babies in selected hospitals U.P.

**Section B** -Effectiveness of video assisted teaching on optimal feeding practice among mothers of low birth weight babies in selected hospitals U.P.

**Section C**- Association of the pre-test level of knowledge and practice regarding optimal feeding practice among mothers of low birth weight babies with their selected demographic variables.

**Section D**- Correlation between knowledge and practice regarding optimal feeding practice.

**SECTION A**-Assessment of knowledge and practice regarding optimal feeding practice among mothers of low birth weight babies in selected hospitals U.P.

*Table No.1: Distribution of knowledge level of mothers according to pre- test.*

N=30			
Level of knowledge	Score	Frequency	Pre-test score
Inadequate	0 - 12	8	26.7%
Moderately adequate	13 - 24	22	73.3%
Adequate	25 - 34	0	0%
Total		30	100%

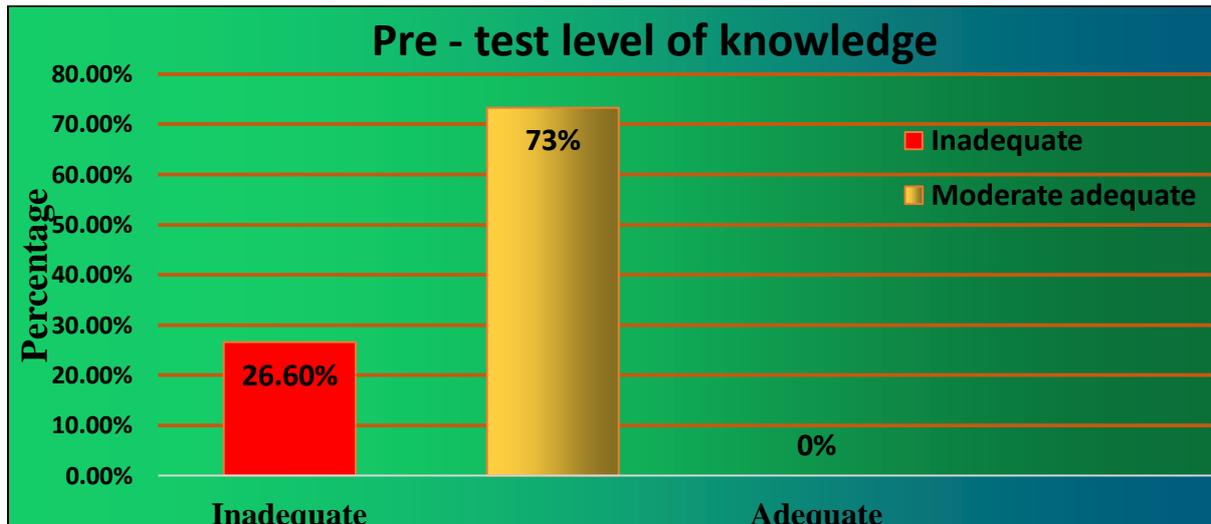


Figure no.1: Bar diagram showing distribution of knowledge level of mothers according to pre-test.

The above bar diagram indicates that in pre - test 26.6% of the mothers had inadequate knowledge, 73% of the mothers had moderate knowledge and none of the mothers had adequate knowledge.

Table No.2: Distribution of knowledge level of mothers according to post- test.  
N=30

Level of knowledge	Score	Frequency	Post - test score
Inadequate	0 - 12	01	3.3%
Moderately adequate	13 - 24	21	70%
Adequate	25 - 34	08	26.7%
Total		30	100%

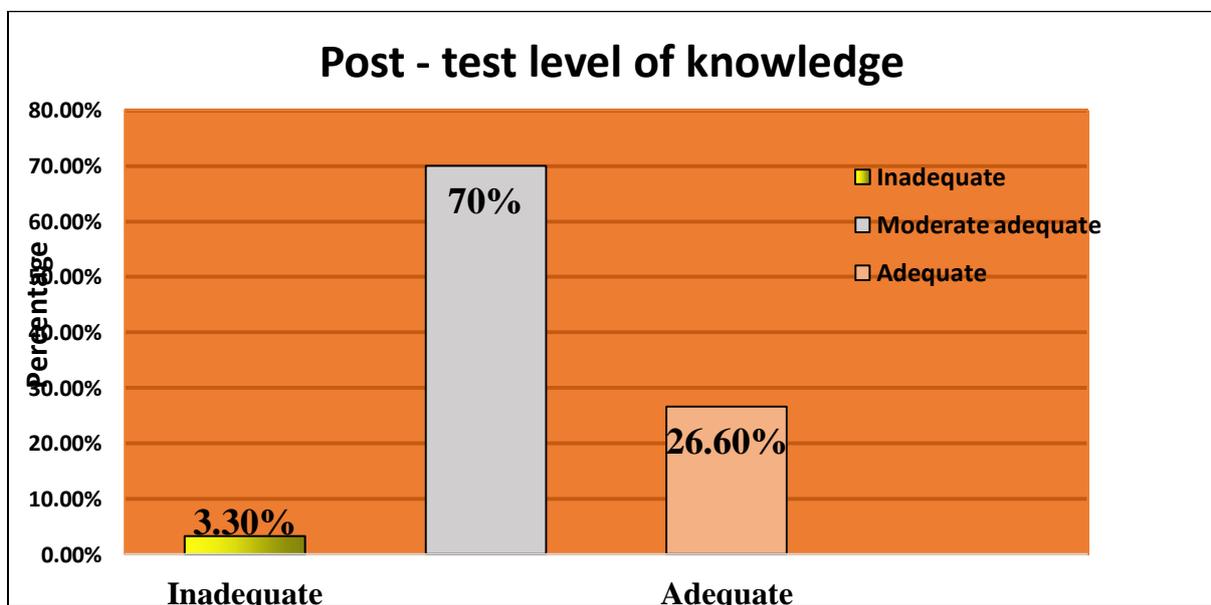
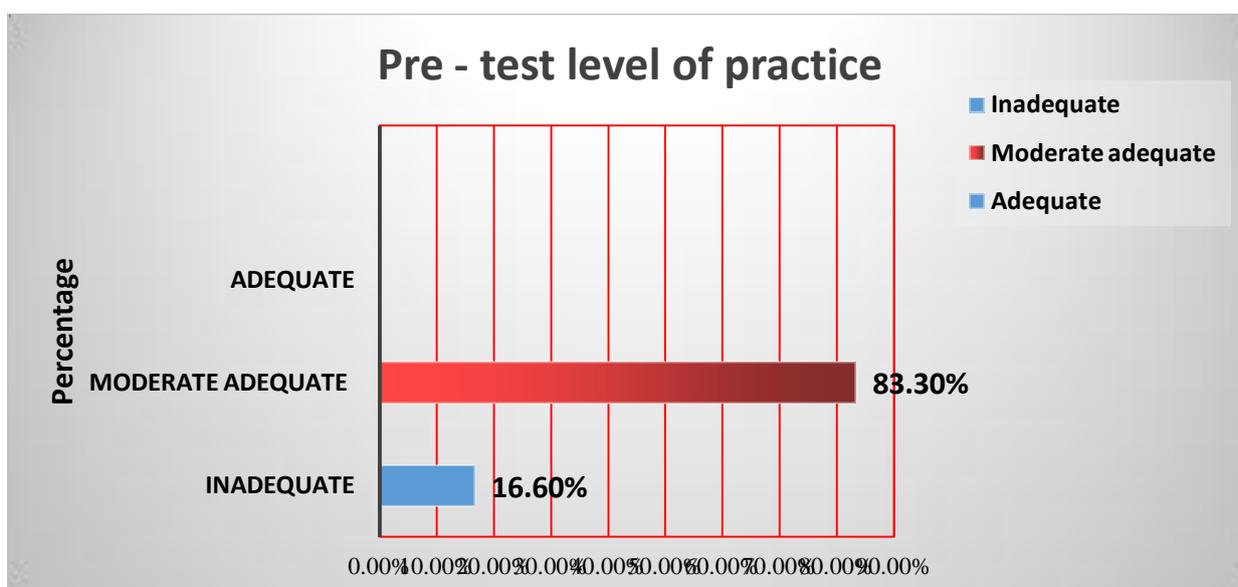


Figure no.13: Bar diagram showing distribution of knowledge level of mothers according to post test.

The above bar diagram indicates that in post - test 3.30% of the mothers had inadequate knowledge, 70% of the mothers had moderate knowledge and 26.60% of the mothers had adequate knowledge.

**Table No.16: Distribution of practice level of mothers according to pre- test.**  
N= 30

Level of practice	Score	Frequency	Pre - test score
Inadequate	0 - 7	5	16.7%
Moderately adequate	08 - 13	25	83.3%
Adequate	14 - 20	0	0%
Total		30	100%



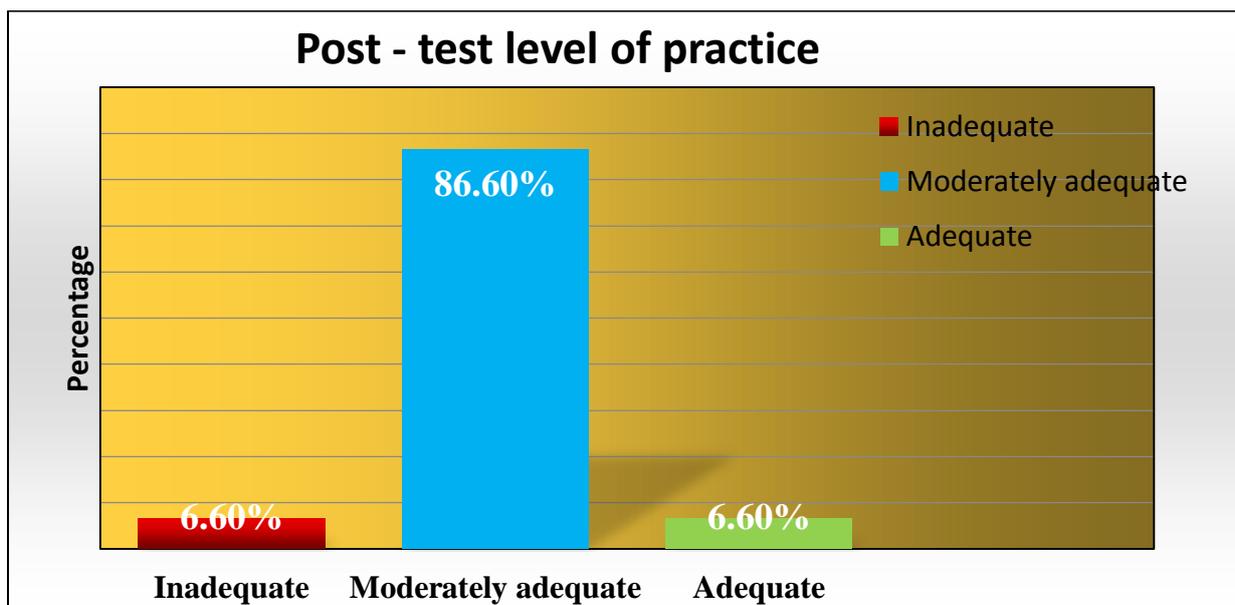
**Figure no.14: Bar diagram showing distribution of practice level of mothers according to pre - test.**

The above bar diagram indicates that in pre - test 16.6% of the mothers had inadequate practice, 83.3% of the mothers had moderate practice and none of the mothers had adequate practice.

**Table No.17: Distribution of practice level of mothers according to post- test.**

**N= 30**

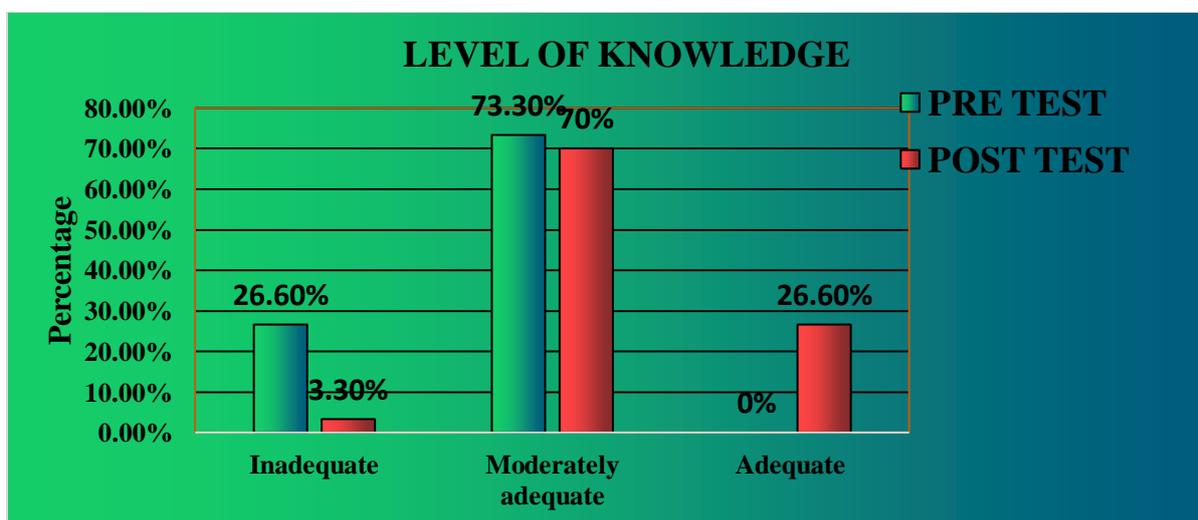
Level of practice	Score	Frequency	Post - test score
Inadequate	0 - 7	2	6.7%
Moderately adequate	8 - 13	26	86.6%
Adequate	14 - 20	2	6.7%
Total		30	100%



**SECTION B- Effectiveness of video assisted teaching on knowledge and practice regarding optimal feeding practice among mothers of low birth weight babies in selected hospitals U.P.**

*Table no. 18: Comparison of pre-test and post-test knowledge of mothers of low birth weight baby. N = 30*

Level of knowledge	Range of score	Pre – test	Post - test
Inadequate	<50	26.6%	3.3%
Moderate	51- 75	73.3%	70%
Adequate	> 75	0%	26.6%
Total		100%	100%



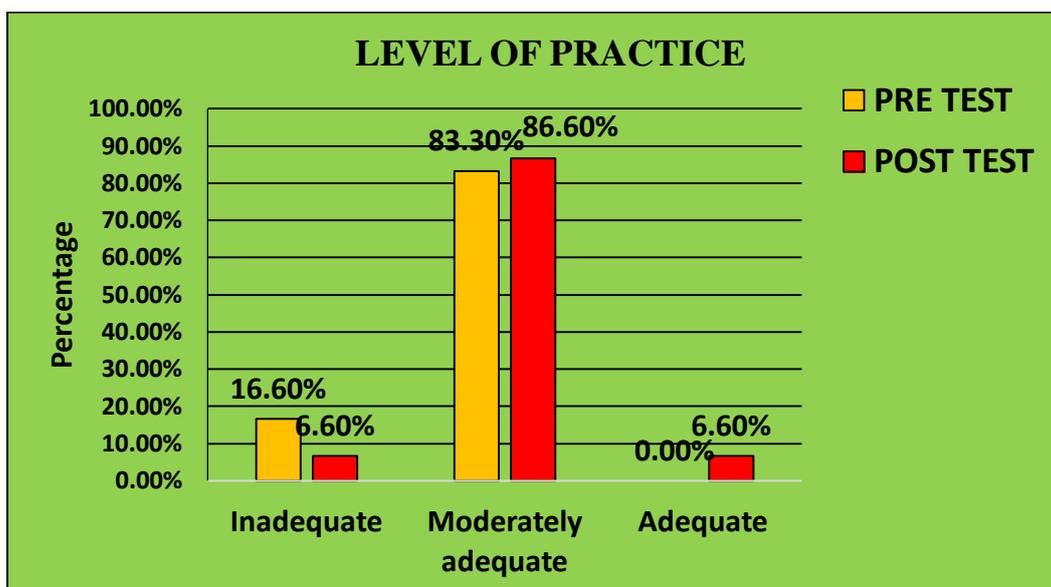
*Figure no. 16: Bar diagram showing percentage wise distribution of mothers of low birth weight babies according to their level of knowledge score.*

The above bar diagram represents percentage wise distribution of level of knowledge of mothers. It reveals that in pre - test (26.6%) of the mothers had inadequate knowledge, (73.3%) of the mothers had moderate knowledge and none of the mothers had adequate knowledge. The data shows that in pre - test, none of the mother had adequate knowledge whereas in post - test, moderately adequate knowledge of mother is highest.

**Table No.19: Comparison of pre-test and post-test practice of mothers of low birth weight baby.**

**N= 30**

Level of practice	Range of score	Pre - test	Post - test
Inadequate	<50	16.6%	6.6%
Moderately adequate	51 - 75	83.3%	86.6%
Adequate	>75	0%	6.6%
Total	100%	100%	



**Figure no. 17: Bar diagram showing percentage wise distribution of mothers of low birth weight babies according to their level of practice score.**

The above bar diagram represents percentage wise distribution of level of practice of mothers. It reveals that in pre - test (16.60%) of the mothers had inadequate practice , (83.3%) of the mothers had moderate practice and none of the mothers had adequate practice .The data shows that in pre - test, none of the mother had adequate practice whereas in post - test ,moderately adequate practice of mother is highest.

**Table no. 20: Comparison of knowledge of mothers of low birth weight baby according to pre - test and post - test mean, SD & mean percentage.**

**N=30**

Overall knowledge Score	Mean	SD	t-value	df	p-value	Remark
Knowledge pre-test	14.90	3.82	-9.31	29	<0.001	Highly Significant
Knowledge post-test	23.00	2.88				

The above table indicates that mean value of pre-test & post-test were 14.90 and 23.00 and SD were 3.82 & 2.88 respectively. It reveals that the mean post-test knowledge score 23.00(67.64%) were higher than the mean pre-test 14.90 (43.8%) knowledge score of the mothers of low birth weight babies and SD of post-test was (2.88) which is less than SD of the pre-test (3.82) indicating an improvement in knowledge. Hence the research hypothesis H1 is accepted i.e. there is a significant difference between pre-test and post-test knowledge scores of mothers of low birth weight babies regarding optimal feeding practice.

**Table no. 21: Comparison of practice of mothers of low birth weight baby according to pre - test and post - test mean, SD & mean percentage.**

N = 30

Over all practice Score	Mean	SD	t-value	df	p-value	Remarks
Practice Pre -test	8.23	2.20	-4.79	<4.79	<0.001	Highly Significant
Practice Post-test	10.03	1.19				

The above table indicates that mean value of pre-test & post-test were 8.23 and 10.03 and SD were 1.119 & 2.20 respectively. It reveals that the mean post-test practice score 10.23(51.15%) were higher than the mean pre-test 8.23(41.15%) practice score of the mothers of low birth weight babies and SD of post-test was (1.19) which is less than SD of the pre-test (2.20) indicating an improvement in practice. Hence the research hypothesis H<sub>2</sub> is accepted i.e. there is a significant difference between pre-test and post-test practice scores of mothers of low birth weight babies regarding optimal feeding practice.

**SECTION E- Correlation between knowledge and practice regarding optimal feeding practice among mothers of low birth weight babies.**

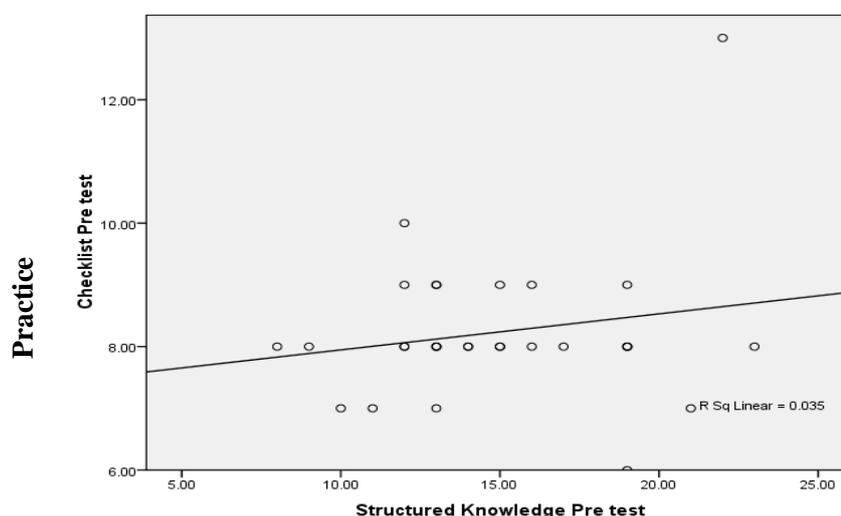
**Table.no.25: Correlation between pre-test knowledge and practice among the mothers of low birth weight babies with their selected demographic variables.**

N=30

Area	Knowledge score	Practice score	Correlation 'r'	P – value
Overall	14.90 ± 3.82	8.23 ± 2.20	0.187	.323 S.P>0.01

\* is significant at 0.01 level

There was a significant positive correlation between knowledge and practice score. 'r' value 0.187 was significant (.323) at 0.01 % level of significance.



**Knowledge**

**Figure no. 18: Scatter graph showing Correlation between pre-test knowledge and practice among the mothers of low birth weight babies with their selected demographic variables.**

The above scatter graph represents that pre-test knowledge and practice was correlated with correlation coefficient of 0.187 & it is significant with p value 0.323.

Hence the research hypothesis  $H_4$  is accepted because there was significant positive correlation between knowledge and practice of mothers regarding optimal feeding practice and  $H_{04}$  is rejected.

This clearly represents that knowledge and practice regarding optimal feeding practice among mothers of low birth weight babies is improved.

### **IMPLICATIONS**

● The present study has several implications in Nursing service, Nursing education, Nursing research and Nursing administration.

#### **Nursing service**

● Conduct awareness programmes among mothers regarding optimal feeding practice.

#### **Nursing education**

● The findings of the present study can be a foundation for conducting the study on large section of population.

● The studies can be baseline for the future studies to build up and motivate to conduct further studies.

#### **Nursing research**

● The findings can be utilized for conducting research on the effectiveness of VATM on various aspects of optimal feeding practice.

● The findings can be used to plan further research in this area

#### **Nursing administration**

● The nurse administrator may allocate resources and provide motivation for further study in rural and urban areas.

● Implement guidelines regarding optimal feeding practices in hospitals and Communities

### **VIII. RECOMMENDATIONS:**

➤ A comparative study can be conducted to identify the differences and similarities between rural and urban areas of mother's knowledge and practice level in optimal feeding practice.

➤ An experimental study can be conducted with control group for comparison.

➤ A similar study can be conducted in hospital settings.

### **IX. CONCLUSION**

From the finding of the present study, it can be concluded that the knowledge and practice of mothers of low birth weight babies were improved after video assisted teaching

Hence, video assisted teaching was found effective in improving the knowledge and practice of mothers of low birth weight babies regarding optimal feeding practice.

Prior to administration of video assisted teaching to mothers had total mean score 14.90, whereas after the administration of video assisted teaching to mothers had total mean score 23.00 which had revealed gain in the knowledge and practice among mothers after administration of video assisted teaching. There was significant difference found with mean difference of (-8.1) between the pre-test and post-test knowledge score among mothers of low birth weight babies. (-1.8) between the pre-test and post-test practice score among mothers of low birth weight babies. There was no association between pre-test knowledge and practice score and demographic variables as age, education, occupation, monthly income of family, type of family, religion, mode of delivery & source of information at (0.05) level of significance.

### **BIBLIOGRAPHY**

- [1]. Berger J. A study to assess the effectiveness of structured teaching programme on knowledge regarding breast feeding techniques and devices among mothers. *Journal of Human Lactation*, Sage Pvt. Available from [www.internationalbreastfeedingjournal.com](http://www.internationalbreastfeedingjournal.com).
- [2]. American Academy of Pediatrics. A study to assess the knowledge regarding breast-feeding and the use of human milk. (policy statement) *Pediatrics* 129, e827-e841 Retrieved April 27, 2017.
- [3]. World Health Org. (2001, May1). A study to assess the practice of infant feeding recommendation. retrieved June 13, 2012.
- [4]. Sarala G , A study to assess the effectiveness of information booklet on knowledge regarding optimal feeding practice among mothers of low birth weight babies March 202-205.(2018).
- [5]. American Academy of Pediatrics. (2012, February27). Breastfeeding and the use of human milk (policy statement) *Pediatrics* 129, e827-e841 Retrieved April 27, 2017.
- [6]. Chandrashekhar TS , A interventional study to assess the knowledge and practice regarding breast feeding practice among mothers of low birth weight babies. January 301-306(2012).
- [7]. Madhu K, A cross sectional study to assess the knowledge regarding complementary feeding and nutritional status of 6 - 12 months old infants among mothers of infants.