



## Impact of Planned Teaching Program on Knowledge about the Prevention and Management of Constipation among Mothers of Infants

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## Abstract

Infants are the age group between birth to 1 year. Constipation is very common alignment in feeding problems. Every child has suffered with constipation. infancy period of the constipation is common problem . Constipation is defined as the difficulty in passing stool or longer than a normal time between the bowel movements.<sup>1</sup>

There are various home remedies which help to relieve constipation. It is our duty to create awareness among women regarding management of constipation. With the same motto investigator conducted this study.

## Keywords

### Statement of the Problem:

A study to evaluate the effectiveness of planned teaching program on Knowledge about the prevention and management of constipation among the mothers of infants in Alur Village, Hassan(Karnataka).

## INTRODUCTION

Infants are the age group between birth-1 years. Constipation is very common alignment in feeding problems. Every child has suffered with constipation sometimes our rapidly changing living standards shifting on to the constipation and in the infancy period of the constipation is a special problem. Constipation is a condition in which a child has fewer than two bowel movements a week, or hard, dry, and small bowel movements that are painful or difficult to pass. Infant constipation manifested with straining or pain at passing the stool, feeling of incomplete bowel emptying, hard and dry stool , baby cry severely because of

colicky pain, bloating – excessive gas in the gut; Coated tongue, offensive breath, , loss of appetite and loss of weight.

The infant constipation can be managed by

- **Increase Liquids**
- **Change Formula by** Using of soy based diet
- **Try a Bath or Baby Massage**
- **Karo Syrup**
- **Flax Oil**

## NEED FOR THE STUDY

The constipation is a common problem throughout the world. It occurs in about 0.3% to 28% of children worldwide. Most childhood constipation results from intentional withholding of stool following a painful experience with defecation. Thus, an extensive evaluation is often not necessary in a child presenting with constipation.

## OBJECTIVES

1. Assess the pre test level of knowledge regarding prevention and management of

constipation among the mothers of infant (birth-1year).

2. Assess the Post test level of knowledge regarding prevention and management of constipation among the mothers of infant (birth-1year).

3. Evaluate the effectiveness of planned teaching program by comparing the pretest and post test level of knowledge.

4. Associate the pre test level of Knowledge regarding the prevention and management of constipation with selected socio demographic variables.

### **HYPOTHESIS**

H1: There will be significant increase in the knowledge regarding Prevention and management of constipation after the planned teaching program.

### **RESEARCH DESIGN**

Pre experiment research design with one group pre test and post test design with no control group.

### **SETTING OF THE STUDY-**

The present study was conducted in Alur village of Hassan district in Karnataka.

#### **Target Population**

The target population of the present study includes the mothers of infant in selected community areas such as Alur at Hassan district.

#### **Sample Size**

Sixty mothers of infant who fulfilled the inclusion and exclusion criteria.

### **SAMPLING TECHNIQUE**

In this study, the non-probability convenient sampling was used.

### **CRITERIA FOR THE SELECTION OF THE SAMPLE**

#### **Inclusion Criteria**

- Mothers were willing to participate in the study.
- All the mothers of infant Residing in Alur Village.
- Mothers of infants who are available at the time data collection
- Mothers of infants who can read and write either Kannada.

### **DEVELOPMENT OF THE TOOL**

#### **Description of the Tool:**

The data was collected by using the structured questionnaire to assess the knowledge regarding the prevention and management of infant constipation. The tool consists of 2 sections. They are as follows:

#### **Section-A**

Consist of demographic data such as sample no. age in years, educational status of the mother, occupation, type of work, types of family, religion, no of children, occupation of parents, source of information and previous experience related to infant constipation.

## Section-B

This section consists of 30 questions to assess the knowledge of prevention and management of infant constipation. For each correct response score '1' was given and for the incorrect response '0' score was given.

The scoring interpretation of the level of knowledge and practice as follows.

Score	Level of knowledge
<50%	Inadequate
51-75%	Adequate
>76%	Excellent

## Ethical Issues

- Permission was obtained from the concerned authority
- Written informed concern was obtained from all participants of the study after explaining the purpose and other details.
- The subjects were asked to maintain confidentiality of the data obtained and about and proceeding of the educational program.
- The subjects were informed that their participation was voluntary, had the freedom to dropout the training program at any time.

## SECTION 1

**Table- 1– Distribution of mothers according to socio demographic variables by frequency and percentage N=60**

Sociodemographic Variables	Frequency	Percentage
<b>1. Age of mothers</b>		
a) 18 - 25years	25	41.66%
b) 26 - 35 years	31	51.66%
c) 35- 45 years	4	6.67%
d) 45 years and above.		
<b>2. Religion:</b>		
a) Hindu,	30	50%
b) Muslim,	17	28.33%
c) Christian	13	21.66%
<b>3. Family Income per month</b>		
a) >Rs. 5000	29	48.33%
b) Rs.5000- Rs.10000	21	35%
c) Rs.10000<	10	16.70%
<b>4. Type of Family</b>		
a) Nuclear family	37	61.70%
b) Joint family	23	38.30%
<b>5. Educational status</b>		
a) Primary education	12	20%
b) Secondary education	10	16.70%
c) Higher education	6	10%
d) Graduates	7	11.70%
e) No formal Education	25	41.70%
<b>6. Source of information</b>		
a) Friends and relatives	9	15%

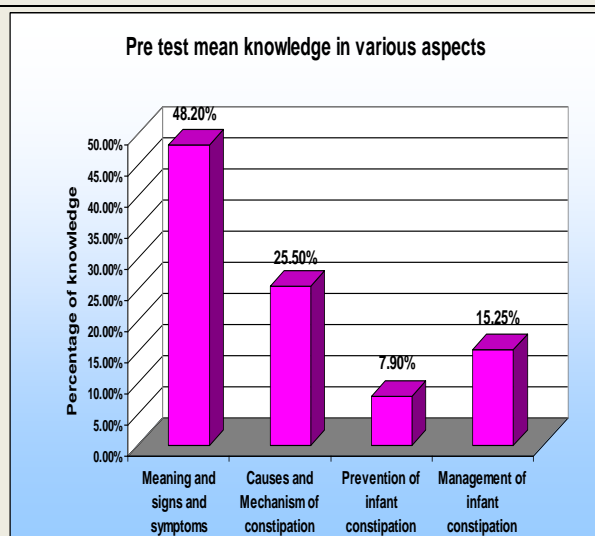
b) Health professionals	19	31.70%
c) ANM and VHN	14	23.30%
d) Mass media.	18	30%
<b>7)Number of children</b>		
a) 1	25	41.70%
b) 2	33	55.00%
c) 3 and above	2	3.30%
<b>8)Occupation of the parents</b>		
a) Health service workers.	5	8.33%
b) non health workers	55	91.70%
<b>9)past history of infant constipation</b>		
Yes	42	70%
No	18	30%

### Objective: 1

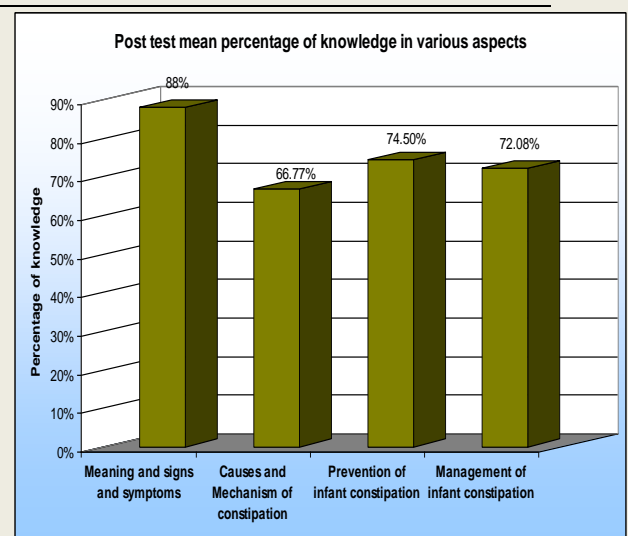
Assess the pre test level of knowledge about the prevention and management of infant constipation among the mothers

**Table-2 Distribution of pre test knowledge on Prevention and management of infant constipation N=60**

	Mean	SD	Percentage
Various aspects of knowledge			
Meaning and signs and symptoms	2.41	1.27	48.20%
Causes and Mechanism of constipation	2.36	0.9	25.50%
Prevention of infant constipation	0.31	0.53	7.90%
Management of infant constipation	1.83	1.12	15.25%
Over all pre test knowledge	6.95	2.32	23.16%



**Figure (1)** Bar diagram showing the pre test mean percentage of knowledge in three aspects of Prevention and management of infant constipation.



**Figure (2)** Bar Diagram shows the post test mean percentage of knowledge

## Objective: 2

Assess the Post test level of knowledge about the prevention and management of infant constipation among the mothers.

**Table- 3 Distribution of post test level of knowledge on Prevention and management of infant constipation among the mothers N=60**

Various aspects of knowledge	Mean	SD	Percentage
Meaning and signs and symptoms	4.48	0.89	88%
Causes and Mechanism of constipation	6.01	1.09	66.77%
Prevention of infant constipation	2.98	0.83	74.50%
Management of infant constipation	8.65	1.8	72.08%
Over all post test Knowledge	22.05	2.31	73.50%

## Objective: 3

Evaluate the effectiveness of planned teaching program by comparing the pre test and post test level of knowledge .

**Table- 4 Distribution of effectiveness of comparing the pre test and post test knowledge by area wise. N=60**

	Pre test		Post test		Paired t test
Various aspects of knowledge	Mean	SD	Mean	SD	T=4.78 P<0.01 S*
Meaning and signs and symptoms	2.41	1.27	4.48	0.89	T=7.66 P<0.01 S*
Causes and Mechanism of constipation	2.36	0.9	6.016667	1.09	T=2.35 P<0.01 S*
Prevention of infant constipation	0.31	0.53	2.98	0.83	T=4.8 P<0.01 S*
Management of infant constipation	1.83	1.12	8.65	1.8	

➤ **Table- 4** shows that comparing the knowledge mean, SD, mean percentage and between the pre test and post test area wise. In the pre-test, Meaning and signs and symptoms related knowledge mean is 2.41,SD= 1.27,Causes and Mechanism of constipation related knowledge mean is 2.36, SD= 0.9, Prevention of infant constipation related knowledge mean is

0.31, SD= 0.53 Management of infant constipation 1.83, SD=1.12 .In the post - test, Meaning and signs and symptoms related knowledge mean is 4.48, SD= 0.83 Causes and Mechanism of constipation related knowledge mean is 6.01,SD= 1.09 , Prevention of infant constipation related knowledge mean is 2.98, SD=

0.,Management of infant constipation 8.65,  
SD= 1.8

**Table- 5** Distribution of effectiveness of comparing over all pre test and post test knowledge  
N=60

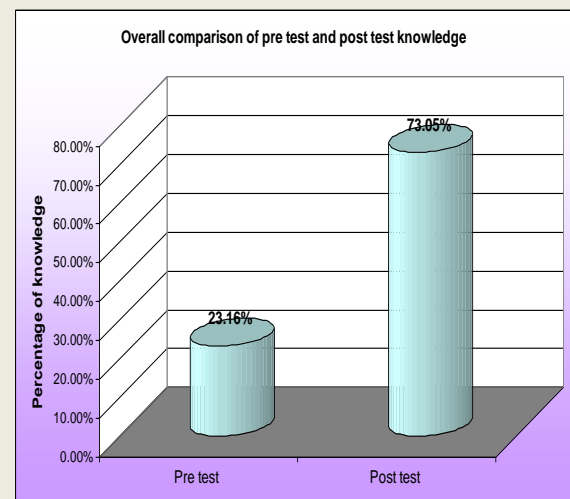
	Pre test			Post test			Percentage Of Effectiveness	Paired - Test value	P-value
	Mean	SD	%	Mean	SD	%			
Knowledge	6.95	2.32	23.16%	22.05	2.31	73.05%	50.34%	56.1 S***	P=0.0001

\* \*\* -Significance  $P < 0.001$

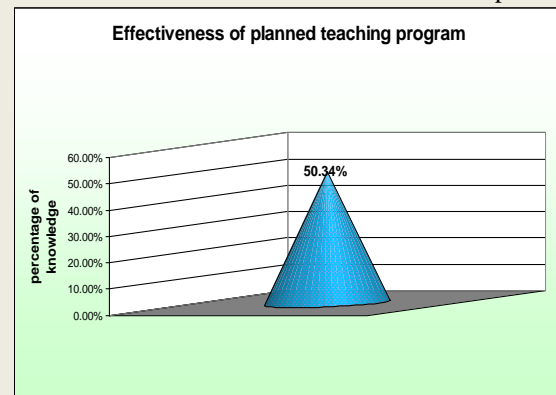
Table- 5 shows that the paired t test Over all knowledge mean of the pretest score is 6.95 with SD of 2.32 and mean percentage 23.16% .After the intervention the over all post test mean Score is 22.05and SD is 2.31 and mean percentage is 73.05% . The paired t test value is 56.1.It shows that there is significant increase in the knowledge after the Planned teaching program at the level of  $p < 0.001$ . The net Effectiveness on knowledge of Planned teaching program is 50.34%.

➤ From the above results according to the third objectives, the Pre test and post test mean of knowledge compared. The paired 't' value obtained is 56.1( $P < 0.001$ ) .It is clearly states that the planned teaching program is effective to increase the knowledge on Prevention and management of infant constipation among the mothers.

**Figure(15)** Cylindrical Diagram showing the distribution in the over all pre test and post test knowledge



**Figure (16)** Cone Diagram Showing the Effectiveness of planned teaching program on knowledge about the Prevention and management of infant constipation





### SECTION 3

**Table-6** Associate the selected Socio demographic Variables with the level of knowledge on Prevention and management of infant constipation N=60

Sociodemographic Variables	Adequate	Mod.adequate	Chi square value
<b>1. Age:</b>			
a) 18 - 25years	8	17	$\chi^2 = 3.3$ P=0.4 NS
b) 26 - 35 years	14	16	
c) 35- 45 years	3	1	
d) 45 years and above.			
<b>2. Religion:</b>			
a) Hindu,	5	25	$\chi^2 = 0.476$ P=0.78 NS
b) Muslim,	16	1	
c) Christian	4	9	
<b>3. Family Income per month</b>			
a) >Rs. 5000	15	14	$\chi^2 = 2.37$ P=0.3 NS
b) Rs.5000- Rs.10000	7	14	
c) Rs.10000<	3	7	
<b>4. Type of Family</b>			
a) Nuclear family	15	22	$\chi^2 = 0.5$ P=0.8 NS
b) Joint family	10	13	
<b>5. Educational status</b>			
a) Primary education	5	7	$\chi^2 = 1.01$ P=0.907 NS
b) Secondary education	5	5	
c) Higher education	2	4	
d) Graduates	2	5	
e) No formal Education	11	14	
<b>6. Source of information</b>			
a) Friends and relatives	8	1	$\chi^2 = 1.18$ P=0.09 NS
b) Health professionals	7	12	
c) ANM and VHN	6	8	
d) Mass media.	4	14	
<b>7)Number of children</b>			
a) 1	13	12	$\chi^2 = 2.9$ P=0.235 NS
b) 2	10	23	
c) 3 and above	2	0	
<b>8)Occupation of the parents</b>			
a) Health service workers.	3	2	$\chi^2 = 0.75$ P=0.4 NS
b) non health workers	22	33	
<b>9)past history of infant constipation</b>			
Yes	15	27	$\chi^2 = 2.04$ P=0.15 NS
No	10	8	

\* -Significance  $P < 0.05$  NS – No Significance



Table - 6 shows that the association between the level of knowledge and socio demographic variable

The chi-square value shows that there is no significance association between age of mothers, religion, family income per month, type of family ,educational status, number of children ,occupation ,past history and source of information about the infant constipation ( $P > 0.05$ ).

## RESULTS

- Over all pre test knowledge mean 6.95 SD 2.32 and mean percentage is 23.16%.
- Over all post test knowledge mean 22.05 SD 2.31and mean percentage is 73.50%.
- The paired t test value is 56.1. It shows that there is significant increase in the knowledge after the planned teaching program at the level of  $p < 0.001$ .
- The net Effectiveness PTP 50.34%of knowledge about the prevention and management of infant constipation.
- The chi-square value test shows that there is no significance association between socio demographic variables and knowledge.

## CONCLUSION &

## RECOMMENDATION

The Findings of the study recommended the further interventional approaches regarding the prevention and management

of infant constipation. Special health education campaign related to the Prevention and management of infant constipation creates awareness, minimizes gastro intestinal complaints in infancy although promote the breast feeding. The present study proved that planned teaching program was effective among the mothers to increase Knowledge about the Prevention and management of infant constipation.

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