



# Effectiveness Of Planned Teaching Programme On Knowledge Regarding Selected Childhood Malignancy Among Mothers Of Children Under 10 Years In A Rural Area Of Palakkad District

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**Abstract:** Cancer is a global problem. It is becoming more a more challenging problem in both developed and developing countries .Cancer is the second leading cause of death. This may be due to increasing number of carcinogens, lack of skilled diagnosis and more people seeking medical care .As the cancer is a malignant disease, it attracted ten public fear and concerns.

Childhood cancer is a physically and cognitively debilitating disease, leading to short-term fatal consequences or long-term adverse effects of prolonged illness and treatment. According to the recent NCRP report based on data from hospital-based cancer registries (HBCRs'), Childhood cancers (0-14 years of age) comprise 4% of all reported cancers in India. The proportion of children affected may be higher owing to "missed cases" due to low coverage, lack of awareness, delayed diagnosis and a fledgling electronic referral system.

## Statement of the problem

"Effectiveness of planned teaching programme on knowledge regarding selected childhood malignancy among mothers of children under 10 years in a rural area of Palakkad District."

## Objectives of the study

- To assess the pre test knowledge regarding selected childhood malignancy among mothers of children under 10 years.
- To assess the post test knowledge regarding selected childhood malignancy among mothers of children under 10 years.
- To evaluate the effectiveness of planned teaching programme regarding selected childhood malignancy among mothers of children under 10 years.
- To determine the association between pretest knowledge with their selected demographic variables.

## Method

The design used in this study is Pre-experimental one group pretest posttest design .Descriptive study conducted by administration of structured knowledge questionnaire to assess the knowledge level of mothers of children under 10 years regarding selected childhood malignancy.Total 30 mothers were selected by non probabilityconvenient sampling. Study conducted among mothers of children under 10 years in Vaniyamkulam, Ottapalam, Palakkad District. The collected data was analyzed by using descriptive and inferential statistics.

## Result

The knowledge score of mothers regarding childhood malignancy was low. The mean pretest knowledge score was 8.9 out of 20. The mean knowledge score percentage was only 44.9%. Data shows that highest percentage (40%) of the mothers had satisfactory knowledge regarding Childhood malignancy. 16.7% of mothers had good knowledge and 36.7% had poor knowledge. Only 6.6% had excellent knowledge about Childhood malignancy. The mean posttest knowledge score obtained is 15. The mean knowledge score percentage was 75%. The data shows that the highest percentage 60% of mothers have good knowledge, 33.3% having excellent knowledge and 6.7% having satisfactory knowledge regarding childhood malignancy. The paired 't' test was done to find out the difference between the mean pretest and post-test knowledge score. The calculated 't' value (5.99) was found to be significant. This reveals that on the whole the knowledge level of Mothers regarding childhood malignancy was low. All chi-square values were lesser than that of the tabulated values. The findings indicated that there is no significant association between the knowledge score and selected demographic variables.

## Interpretation and Conclusion

The knowledge score of Mothers regarding childhood malignancy score was low. The findings of the study would help the nurses to develop an insight into the importance of health education regarding Childhood malignancy and its various aspects.

*Index Terms* - Effectiveness, Planned teaching programme, Knowledge, Mothers, Malignancy

## I. INTRODUCTION

Childhood, a period between infancy and adolescence, is a time of significant growth and development, encompassing physical, emotional, cognitive, and social learning ultimately shaping an individual's health but also the health of the population as they are the future generation.

Childhood malignancies, while rare, is significant health concern, estimated roughly 15.3 cases per 100,000 children<sup>2</sup>.

Childhood cancers are relatively rare compared to adult cancers, accounting for 1% of all cancers diagnosis globally. According to data from organizations like American Cancer Society and the World Health Organization, approximately 300,000 children are diagnosed with cancer each year worldwide. Despite their rarity, childhood cancers are the leading cause of disease-related death in children in many developed countries<sup>3</sup>.

Despite these challenges, progress in combating childhood malignancies has been made. Since the 1970s, survival rates have soared, because of multi-agent chemotherapy, refined radiation techniques, and innovations like immunotherapy (e.g., CAR-T cell therapy for Leukemia). Organizations such as St. Jude Children's Research Hospital and the Children's Oncology Group have spearheaded clinical trials, tailoring treatments to pediatric needs. Prevention, however, remains elusive. Instead, focus lies on early detection recognizing symptoms like persistent fever, unexplained weight loss, or unusual lumps and improving treatment<sup>4</sup>.

## II. RESEARCH METHODOLOGY

### 3.1 Population and Sample

The population of the study consists of mothers who are in the group of 25-40 years at Vaniyamkulam area. Sample size is 30 mothers. Non-Probability Convenient Sampling technique was used in the study. The formal permission was obtained from the Anganwadi at Vaniyamkulam. The study was carried out for a period of one week from 8/04/2025 to 14/04/2025.

### 3.2 Data and Sources of Data

For this study, secondary data has been collected. The data collection period is ranging from 8/04/2025 to 14/04/2025. The samples' pre-test knowledge was assessed by using a planned teaching questionnaire. The teaching was given to the selected sample. After a week, the knowledge was assessed by using the same planned knowledge questionnaire.

### 3.3 Theoretical framework

Variables of the study contain dependent and independent variables.

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### 3.4 Statistical tools and econometric models

#### Tool for the study

Data collection are the procedure or instruments used by the researcher to observe or measure the key variable in the research problem. A structured knowledge questionnaire was used to collect the data. The tool was prepared on the basis of objectives of the study<sup>28</sup>.

#### Description of Tool

The tool consist of 2 sections.

- Part A : Demographic Performa
- Part B : Structured knowledge regarding selected childhood malignancy.

#### 1Part A : Demographic Performa

It includes Age ,religion , type of family, education, source of health information.

#### Plart B : Structured Knowledge Questionnaire Regarding Selected Childhood Malignancy

The structured knowledge questionnaire consist of 20 questions for assessing the effectiveness of planned teaching programme regarding selected childhood malignancy among mothers of children under 10 years. The multiple choice questionnaire was used. The total score of the tool is 20 .Each correct answer carry “one” mark and wrong answer carry “zero” mark.

### INTERPRETATION

MARKS	PERCENTAGE	REMARK
16-20	80%	Excellent
12-16	61-80%	Good
8-12	40-60%	Satisfactory
<8	<40%	Poor

#### 3.4.1 Descriptive Statistics

Descriptive Statics has been used to find the maximum, minimum, standard deviation, mean and normally distribution of the data of all the variables of the study. In order to achieve the stated objectives of the study the data obtained from the subject was coded numerically and tabulated. After tabulation and coding was entered to a spread sheet. The collected data was analysed using descriptive and inferential statistics.

### IV. RESULTS AND DISCUSSION

#### 4.1

#### DATA ANALYSIS AND INTERPRETATION

The chapter deals with the analysis and interpretation of the data collected from the mothers of children who are under 10 years of age, who were residing at Vaniyamkulam. To assess the effectiveness of planned teaching programme on selected childhood malignancy.

The findings based on the descriptive and inferential statistical analysis tabulated as follows:-

SECTION A - Distribution of demographic variables of mothers in the age group 25-40 years.

SECTION B - Description about comparison between pre- test and post - test knowledge scores.

SECTION C - To determine association between pre-test knowledge score with selected demographic variable.

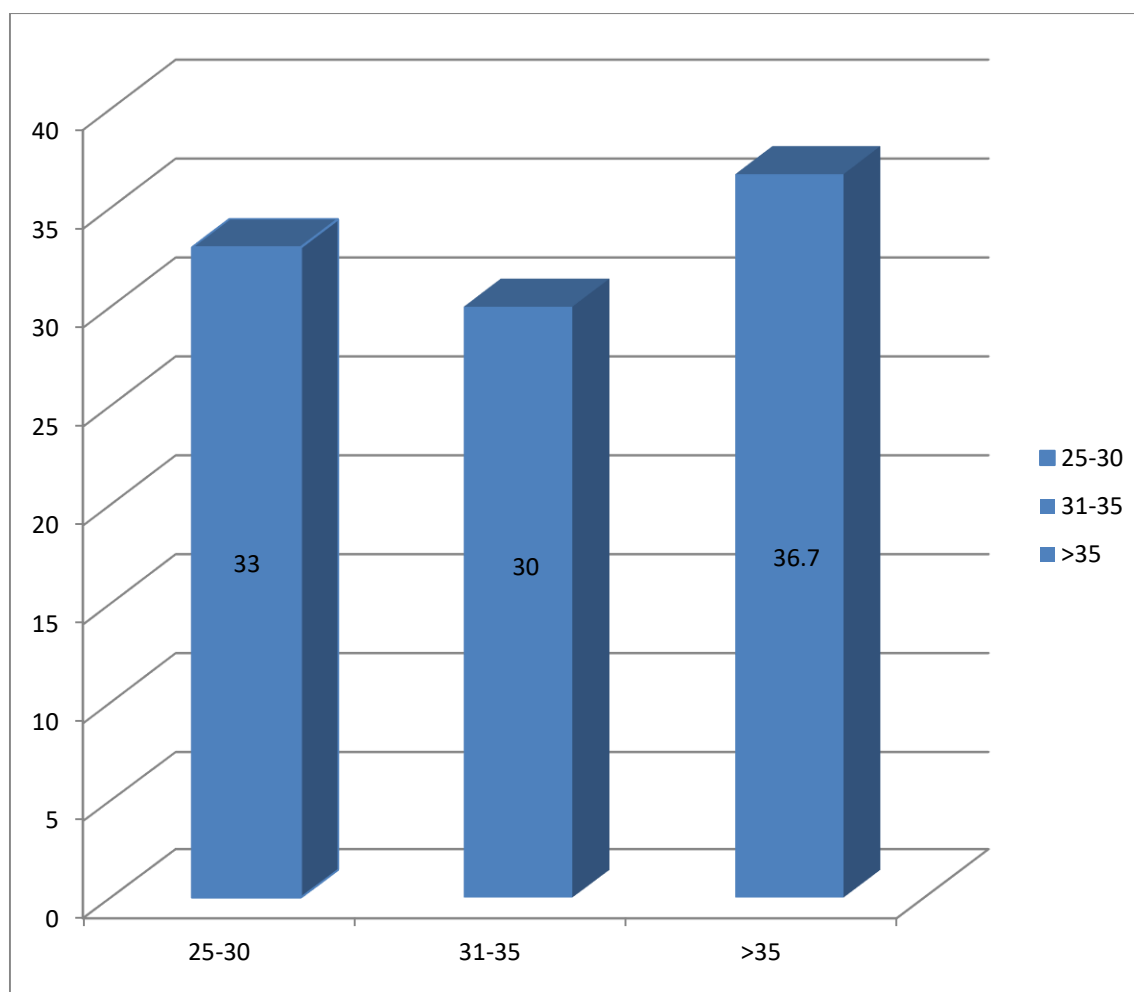
## SECTION A

Table 1: Frequency and percentage distribution of samples according to their demographic variables

Sl. NO	Demographic variables	Frequency	Percentage %
1.	Age		
	25-30	10	33.3
	31-35	9	30
	>35	11	36.7
2.	Type of family		
	Nuclear	16	51.3
	Joint	14	46.7
	Extended	2	2
3.	Religion		
	Hindu	24	80
	Christian	6	20
	Muslim	3	3
4.	Source of health information		
	Mass media	14	46.7
	Family members	3	10
	Health personnel	13	43.3
5.	Mother's education		
	Up to +2	13	43.3
	Graduate	11	36.7
	PG and above	6	20

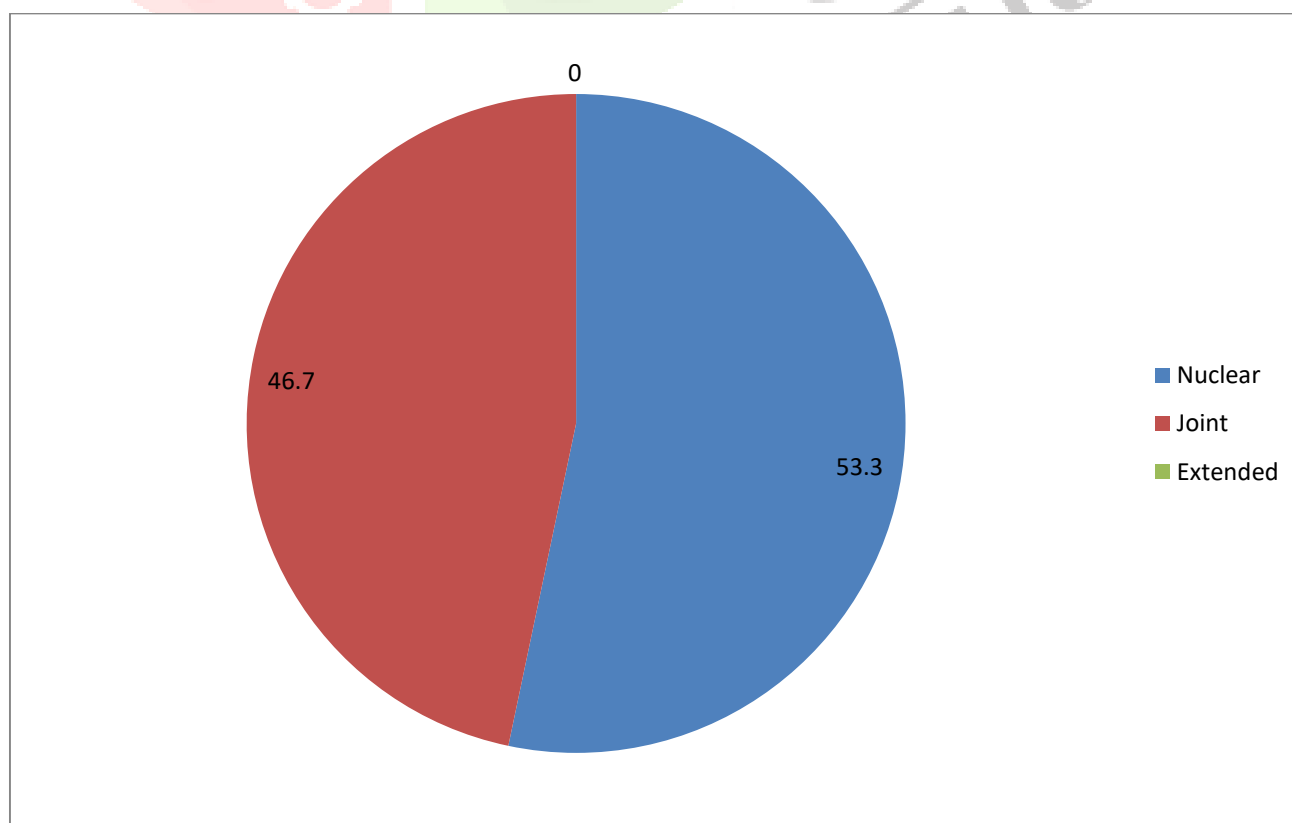
- Regarding the age group 10(33.3%) were in the age group of 25-30, 9 (30%) were in the age group 31-35, 11(36.7%) were in the age group of > 35.
- Considering the type of family 16(53.3%) were belonging to nuclear family, 14 (46.7%) belongs to joint family.
- Regarding the religion 24 (80%) belongs to Hindu religion, 6 (20%) belongs to Christian religion.
- Considering the source of health information 14(46.7%) obtains information through mass media, 3(10%) obtains information through family members, 13(43.3%) obtains information through health personnel.
- Regarding mother's education 13(43.3%) had +2 level of education , 11(36.7%) are graduates, 6(20%) are PG and above.

**Figure 1: Bar diagram showing distribution of mothers of children under 10 years according to their age**



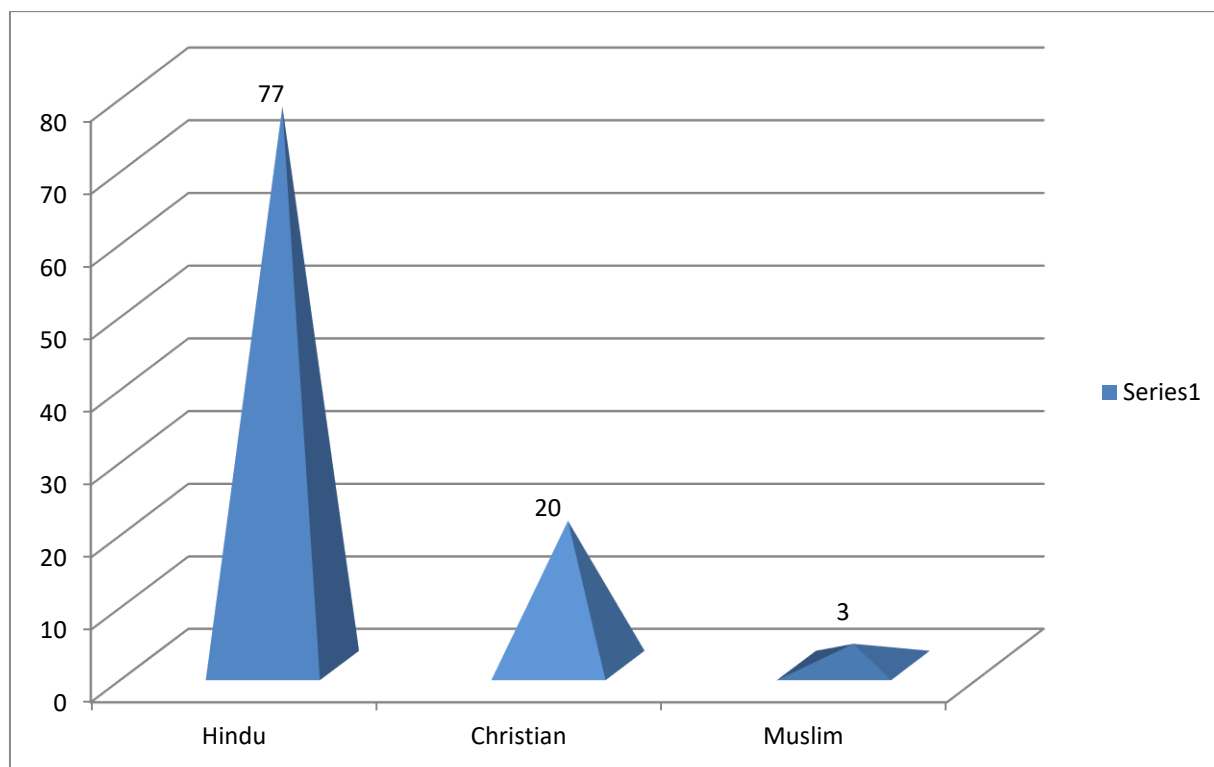
Distribution of mothers of children under 10 year according to their age shows that majority( 36.7%) was in the age group of greater than 35,33% were in the group of 25-30 and 30% were in the group of 31-35 .

**Figure 2: Pie diagram showing the distribution of mothers of children under 10 years according to their type of family**



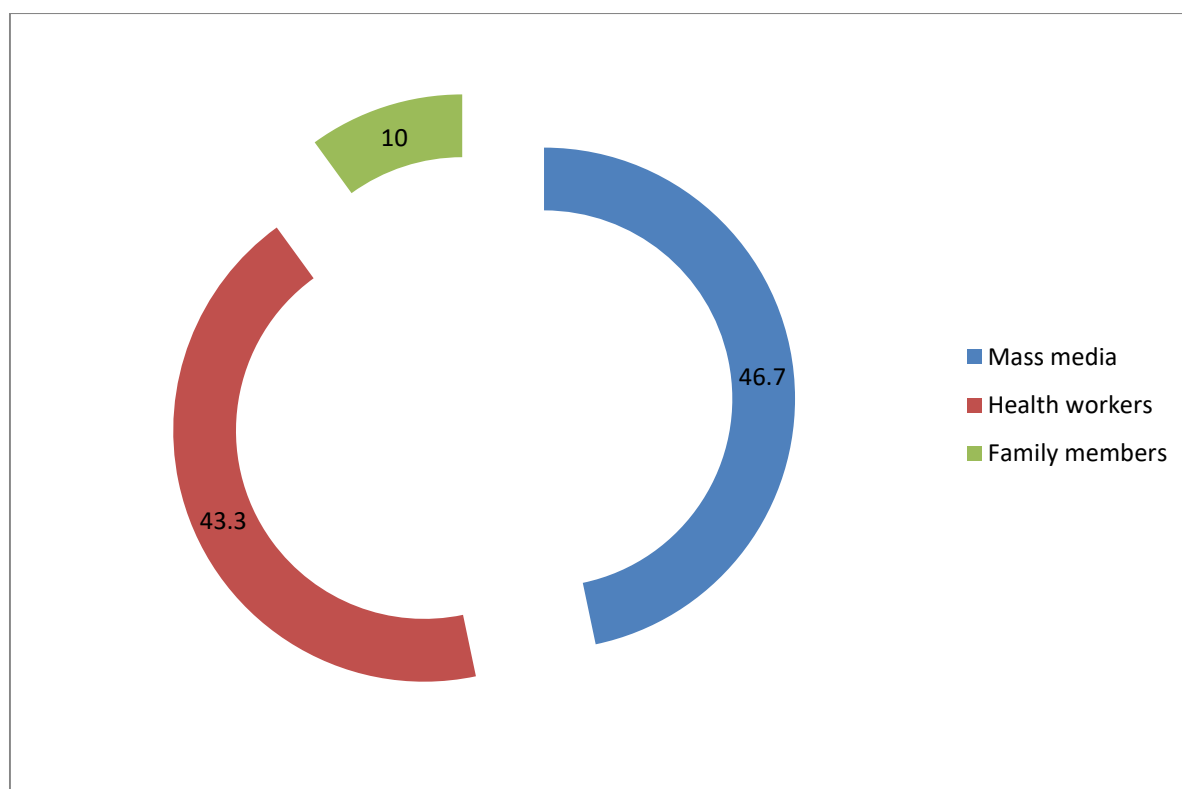
Percentage wise distribution of mothers according to their type of family reveals that highest percentage (51.3%) of samples belong to nuclear family, 46.7% belong to joint family and 2% belongs to extended family

**Figure 3: Cone diagram showing the distribution of mothers of children under 10 years according to the religion**



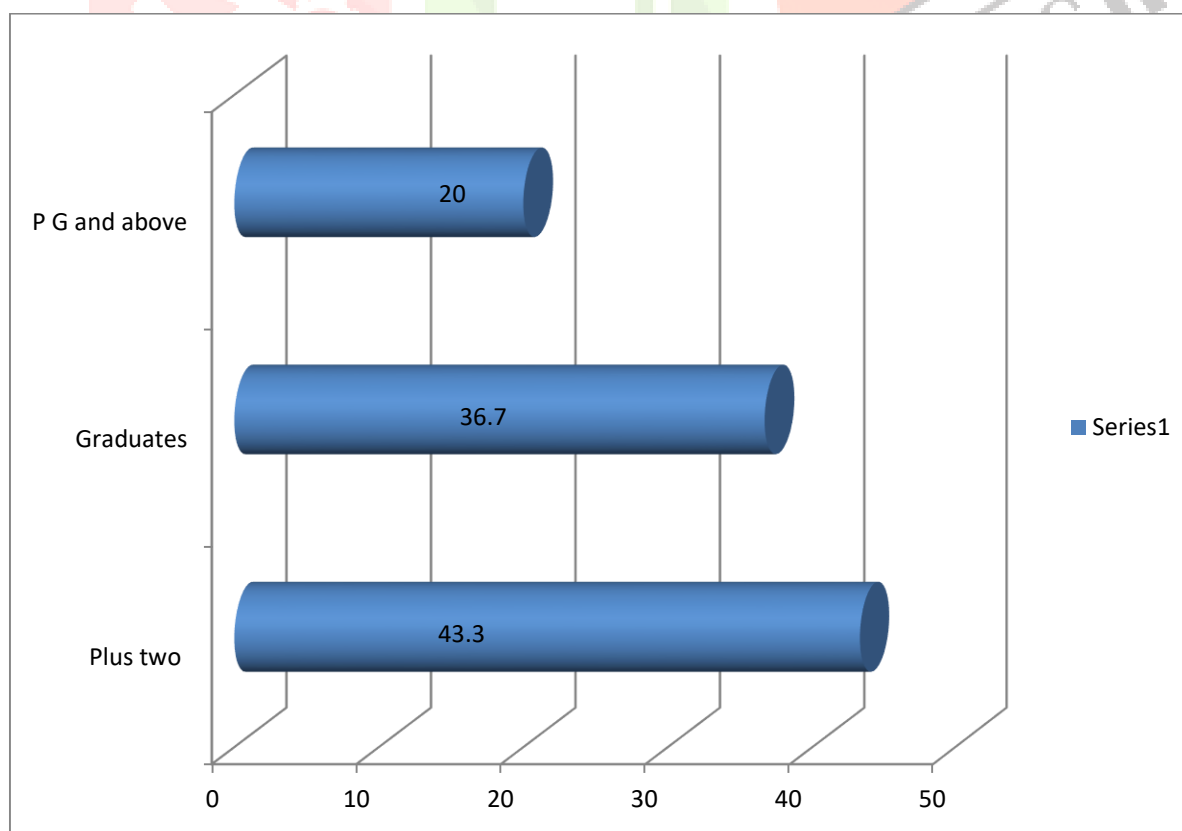
Distribution of mothers of children under 10 years according to their religion shows that highest percentage (77%) were belongs to Hindu , 20% were belongs to Christian and the least percentage (3%) belongs to Muslim

**Figure 4: Doughnut diagram showing the distribution of mothers of children under 10 years according to their source of health information**



Percentage wise the distribution of mothers according to the source of health information reveals that the highest percentage (46.7%) of samples received information from Mass media, 43.3% gained the knowledge from health workers and 10% gained the knowledge from Family members.

**Figure 5: Coloumn diagram showing he distribution of mothers of children under 10 years according to their Educational status**





Distribution of mothers according to their educational status shows that the highest percentage (43.3%) had plus two level education, 36.7% were graduates and 20% were post graduates.

## SECTION B

**Table 2: Description About Comparison Between the pre-test and post-test Knowledge Score.**

Sl.No.	Group	Mean	SD	't' value	Level of significance
1	Pre test	8.9	4.2	11.6	0.05
2	Post test	15	2.13		

## SECTION C

**Table 3 :- Association of the knowledge score of mothers of children under 10 years with demographic variables**

### Demographic variables.

n=30

Sl. No.	Characteristics	Below Mean	Above Mean	Df	X <sup>2</sup>	Remarks
1.	Age in years			2	1.5	Not significant
	a).25-30	4	6			
	b) 31-35	6	3			
	c) >35	5	6			
2	Type of family			2	0.25	Not significant
	a)Nuclear	7	9			
	b)Joint	8	6			
	c)Extended	0	0			
3	Religion			2	1.24	Not significant
	a)Hindu	11	12			
	b)Christian	3	2			
	c)Muslim	1	1			
4	Mother's education			2	3.52	Not significant
	a)Up to +2	7	6			
	b)Graduate	7	4			
	c)PG and above	1	5			
5	Source of health information			2	6.24	Significant
	a)Mass Media	4	10			
	b)Family Members	3	0			
	c)Health personnel	8	5			

Table 3: Inorder to determine the significant association of pre-test knowledge score with selected demographic variables variables, chi-square test was used. All chi-square values were lesser than that of the tabulated values except health information. The findings indicated that there is no significant association between the knowledge score and selected demographic variables like age, type of family, religion and Mother's education but there is a significant association between the knowledge score and the source of health information.



## DISCUSSION

The present study was designed to assess the effectiveness of planned teaching programme on knowledge regarding selected childhood malignancy among mothers of children under 10 years of age in a rural area of Palakkad District. In the nature of the problem understudy to achieve the objectives of the study a one group knowledge testing was done using structured knowledge questionnaire. Non probability convenient sampling technique was used. The data was collected from 30 mothers of children under 10 years.

### Testing of Hypothesis

The knowledge score of mothers regarding childhood malignancy score was low. The mean score was 8.9 out of 20. The mean knowledge score percentage was only 44.5%. Data shows that highest percentage (40%) of the mothers had satisfactory knowledge regarding childhood malignancy 16.6% of mothers had good knowledge and 18% had poor knowledge. Only 8% had excellent knowledge about childhood malignancy. This reveals that on the whole the knowledge level of mothers regarding childhood malignan The mean pretest knowledge score was 8.9 and the mean post test knowledge score was 15. The paired t test value was 11.6 at 0.05 level of significance. Hence the research hypothesis was accepted. It shows that the planned teaching programme was effective improving the knowledge of mothers regarding childhood malignancies.

### Association of the knowledge score of mothers with demographic variables.

In order to determine the significant association of pre-test knowledge score with selected demographic variables, chi-square test was used. All chi-square values were lesser than that of the tabulated values. The findings indicated that there is no significant association between the knowledge score and selected demographic variables like age, type of family, religion, mothers education and source of health information.

## CONCLUSION

### Major findings

The knowledge score of mothers regarding childhood malignancy score was low. The mean score was 8.9 out of 20. The mean knowledge score percentage was only 44.5%. Data shows that highest percentage (40%) of the mothers had satisfactory knowledge regarding childhood malignancy. 16.6% of mothers had good knowledge and 36.7% had poor knowledge. Only 6.7% had excellent knowledge about childhood malignancy. This reveals that on the whole the knowledge level of mothers regarding childhood malignancy was low.

The findings of the present study show that there was no association between the knowledge scores and selected demographic variables.

The following conclusions are made based on the above findings.

- In knowledge score assessment it has been found that majority of the mothers had satisfactory knowledge
- There was no association between the knowledge score about childhood malignancy among mothers and selected demographic variables.

### Implications

The findings of the present study have implications in various areas of nursing education, nursing practice and nursing research.

#### Nursing Practice:

Promotion of health and prevention of diseases is the present day trend in health care industry, which is also greatly emphasized by WHO. Nurses have a major role in improving the health of the people by conducting awareness programme. Hence nurses should take keen interest in preparing different teaching strategies to the schools, colleges and community. So that students will become much knowledge about childhood malignancy.

#### Nursing education:

Nurses should have thorough knowledge regarding various aspects of health in order to provide comprehensive care to the society. One of the important aspects of health is childhood malignancy. Nurses need to have in depth knowledge regarding childhood malignancy and issues so that they can motivate the mothers

of community about consequences of unawareness about childhood malignancy. The findings of the study would help the nurses to develop an insight into the importance of health education regarding childhood malignancy and its various aspects. .

#### Nursing Research

Nursing practice should be based on scientific body of knowledge. Further research should be conducted to create awareness about childhood malignancy.

#### LIMITATIONS

- Sample size was small so the generalization of the finding is limited.
- Study was conducted only in a selected Anganwadi, so the generalization of the finding is limited.

#### IMPLICATIONS

##### Nursing Implications

The findings of the present study have implications for the field of nursing education, nursing practice, nursing administration and nursing research.

##### Implication for Nursing Education

1. The study also gives priority for the continuing educational programme as it upholds and maintains knowledge and thus making them more competent.
2. Effects should be made to improve and expanded nursing curriculum to provide adequate management and its effectiveness.
3. Periodic conferences, seminars and group discussions can be arranged regarding Childhood Malignancy.

##### Implication for Nursing Practice

1. A gap between the existing knowledge and expected level indicates the need for more informative programme on Childhood malignancy.
2. Nurse can be encouraged to teach childhood malignancy to the mothers of children under 10 years.
3. Practices and awareness about childhood malignancy reduces different problems in the childhood age.

##### Implications for Nursing Administration

1. Nursing administration should take initiative in creating plans and programmes on conducting awareness programmes. They should plan for man power, material, money, methods and time to conduct successful education programmes. Materials regarding childhood malignancy should be made available.
2. Leaders in nursing are confronted with understanding the health need of the patients. The nurse administrator should be take part in health policy making developing protocol procedure for patient education.
3. The health care system has responsible to provide patient education services, part of high qualities, cost effectiveness care

##### Implication for Nursing Research

1. The present study is an initial investigation in the area of childhood malignancy. There is a need for extensive and intensive research in the area of knowledge of mothers regarding childhood malignancy.
2. The essence of research is to build up a body of knowledge in nursing as it is an evolving progression. The effectiveness of the research study can be made by further replication of the study.

#### LIMITATIONS

- Sample size was small so the generalization of the finding is limited.
- Study was conducted only in a selected Anganwadi, so the generalization of the finding is limited.

#### RECOMMENDATIONS

On the basis of the study finding, the following recommendations have been made for further study.

1. A study could be conducted on the larger sample , there by the findings can be generalized.
2. A exploratory study could be conducted to identify the knowledge of mothers regarding childhood malignancy.
3. An experimental study could be under taken by having control group.

#### III. ACKNOWLEDGMENT

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