

## **A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE REGARDING BIRTH PREPAREDNESS AMONG PRIMIGRAVIDA MOTHERS IN SELECTED P H C AT BANGALORE**

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### **ABSTRACT**

Background: Childbirth is a normal physiological process for the majority of women and a process that, like all other life events, is looked upon with a mixture of anticipation and happy expectation. Childbirth is a universally celebrated event yet for many thousands of women each day. Birth preparedness is the process of planning for the birth. Its Components include, Preparation for normal delivery, readiness to deal with complications, postnatal and new born care. It is a strategy to promote the timely use of skilled maternal care especially during childbirth, based on theory that preparing for childbirth reduces the delays in obtaining care. In India, women of the child-bearing age (15–44 years) constitute 22.2% and children under 15 years of age about 35.3% of the total population. Together, they constitute nearly 57.5% of the total population. By virtue of their numbers, mothers and children are the major consumers of health services, of whatever forms. Global observations show that in developed regions maternal mortality ratio averages at 13/100,000 live births; in developing regions, the figure is 440 for the same number of live births. Infant, child and maternal mortality rates are high in developing countries, much of the sickness and deaths among mothers and children is largely preventable by improving the health of mothers and children. Methodology: The research approach adopted for this study is an exploratory approach. for this study is an evaluative approach. The research design selected for this present study was pre- and post- experimental design which includes one group pre-test and post-test design. 60 primigravida mother of Konankunte PHC at Bengaluru. They were selected by convenience sampling. Data was collected using structured questionnaire. The STP administered on the same day. After that again they were assessed, [post-test] using the same tool. Result: The results of major findings indicated that primigravida mother had



moderate knowledge regarding Birth preparedness. The findings reveal that in the pre-test knowledge assessment, out of 60 primigravida mother 34 [56.67 %] had moderate knowledge, 23 [38.33 %] had adequate and 03 [5 %] had inadequate knowledge. The mean percentage of post-test knowledge score 23.15 was apparently higher than its mean percentage of pre-test knowledge score 21.5 suggesting that administration of Structured teaching program on Birth preparedness to primigravida mother was effective in increasing the knowledge. The Structured teaching program was an effective method of providing information regarding Birth preparedness to primigravida mothers, the statistical paired 't' test implies that the difference in the pre-test and post-test value was found to be statistically highly significant at 5% level ( $p < 0.01$ ) with a paired 't' test value of 2.57 in the aspect of knowledge. This shows a statistically significant enhancement in knowledge score indicating the positive impact of intervention program. Conclusion: The study concluded that the Structured teaching program on Birth preparedness to primigravida mother was an effective method for providing moderate to adequate knowledge and help primigravida mother to enhance their knowledge regarding Birth preparedness.

**Keywords: Childbirth, Birth Preparedness Women, Child, Primigravida, Normal delivery, Labour Maternal health**

## INTRODUCTION

Childbirth is a universally celebrated event yet for many thousands of women each day. Birth preparedness is the process of planning for the birth. Its Components include, Preparation for normal delivery, readiness to deal with complications, postnatal and new born care. It is a strategy to promote the timely use of skilled maternal care especially during childbirth, based on theory that preparing for childbirth reduces the delays in obtaining care.

Timely diagnosis of active or progressive labour is problematic for caregivers and expectant women. The erroneous diagnosis of active labour may lead to a subsequent diagnosis of labour dystocia, the treatments for which are associated with risks for a mother and her infant.

A woman generally has notion that child birth is unbearable pain. This is formed as a result of the tales heard during adolescence or later in life. The information she gets from gossip, media or fiction draws a picture of passive pain to which a woman has to submit in utter helplessness. A negative attitude during labor causes her entire body to tense up with fear and each contraction will become a signal of pain and therefore will result in pain. On the other hand, a trained woman can have a very positive attitude towards birth and may have a smooth and easy labor. Providing information for pregnant women and their families about labour diagnosis may be a means of enabling women to recognize active labour, and to cope with their contractions with confidence. Potential benefits include enhancing women's feelings of control and empowerment, while providing an opportunity for educators to correct inaccurate information. The number of erroneous labour diagnoses may possibly be reduced by enabling women to remain out of hospital until active labour is likely to have become established. A multitude of educational resources have been developed for pregnant women, the quality of which vary greatly. Commonly it is physicians, midwives or ante Different childbirth educators have followed various methods of child birth preparation. The Bradley method was originated by Robert Bradley based on the premise that child birth is a joyful natural process and stresses the important role

## OBJECTIVES OF THE STUDY

1. To assess the existing level of knowledge of primigravida mothers on birth preparedness by knowledge score.
2. To evaluate the effectiveness of Structured teaching program on birth preparedness among Primigravida mothers by post-test knowledge score.
3. To determine the association between selected demographic variables such as age, religion, education, occupation, family income, type of family, place of residence and source of information on birth preparedness.

## RESEARCH METHODOLOGY

The research approach adopted for this study is an exploratory approach. For this study is an evaluative approach. The research design selected for this present study was pre- and post-experimental design which includes one group pre-test and post-test design. 60 primigravida mother of Konankunte PHC at Bengaluru. They were selected by convenience sampling. Data was collected using structured questionnaire. The STP administered on the same day. After that again they were assessed, [post-test] using the same tool.

## DATA COLLECTION PROCESS

Based on the objectives of the study, a structured knowledge questionnaire was developed to assess the knowledge Birth preparedness among Primigravida mother. It is considered to be an appropriate instrument.

In this study, the data collection instruments are:

Section A: - Demographic data

Section B: - Part A: knowledge regarding concept of labor.

Part B: knowledge regarding Birth preparedness among Primigravida mother. The tool consists of 2 sections,

Section A: Demographic Data

The first section of the tool consisted of 7 items to collect data regarding personal and baseline characteristics of the subjects age, level of education, occupation, family income. religion, Previous exposure/ awareness on Onset of true labor, source of information. The researchers distributed the tool to the subject or respondent and ask them to put a tick (✓) mark against the column provided as per respondent's responses.

Section B: Knowledge on Birth preparedness among Primigravida mother.

Deals with knowledge questionnaire consist of 30 questions. It includes 10 knowledge related general questionnaire on general concept of labor and 20 knowledge related questionnaire on Birth preparedness among Primigravida mother. The items were of multiple-choice types. The total score is 30 for knowledge questionnaire. Each correct response will carry "one score" and "zero" for incorrect response. The questions were prepared in English.

The knowledge of the respondents was arbitrarily categorized as follows:

Adequate :> 75%

Moderately adequate : 51-75%

Inadequate : Below < 50

## RESULTS

Analysis is a detailed examination of the elements or structure of something. In research, analysis means commutation of certain measures along with searching for patterns of relationship that exist among data group.

This chapter deals with the analysis and the interpretation of data obtained from to assess the effectiveness of Structured teaching program on knowledge regarding birth preparedness among Primigravida mothers in selected P H C at Bengaluru.

The purpose of analysis is to reduce the data to an intelligible and interpretable form so that relation of research can be studied.

### THE OBJECTIVES WERE:

1. To assess the existing level of knowledge of Primigravida mothers on Birth preparedness by knowledge score.
2. To evaluate the effectiveness of Structured teaching program of Birth preparedness among Primigravida mother.
3. To determine the association between selected demographic variables such as age, level of education, occupation, family income, religion, Previous exposure/ awareness on Birth preparedness, source of information.

### ORGANIZATION OF FINDINGS

The data is organized, analyzed and presented in the form of tables and diagrams in the following sections.

#### Section–I

Data on demographic variables of the Primigravida mother.

#### Section–II

Data on overall and aspect wise knowledge scores of respondents on information regarding Birth preparedness.

#### Section–III

Data on effectiveness of the Structured teaching program on knowledge regarding birth preparedness among Primigravida mother.

#### Section–IV

Data on Association between demographic variables and knowledge level of Primigravida.

**SECTION – I**

Description of Demographic variables of the participants

TABLE – 1 Distribution representing age of the Primigravida mother

n=60

SI No	Variables	Frequency	Percentage
1.	<b>Age in years</b>		
	a. 19-23 years	21	35%
	b. 24-28 years	17	28.33%
	c. 29-33 years	11	18.33%
	d. 34 and above	11	18.33%
<b>TOTAL</b>		60	100%

The data presented in the above table reveals Out of 60 Primigravida mother, majority 35% of them were in the age group of 19-23 years, followed by 28.33% were in the age group between 24-28 years and the remaining 18.33% were in the age group were between 29-33 years and above 34 years were 18.33%.

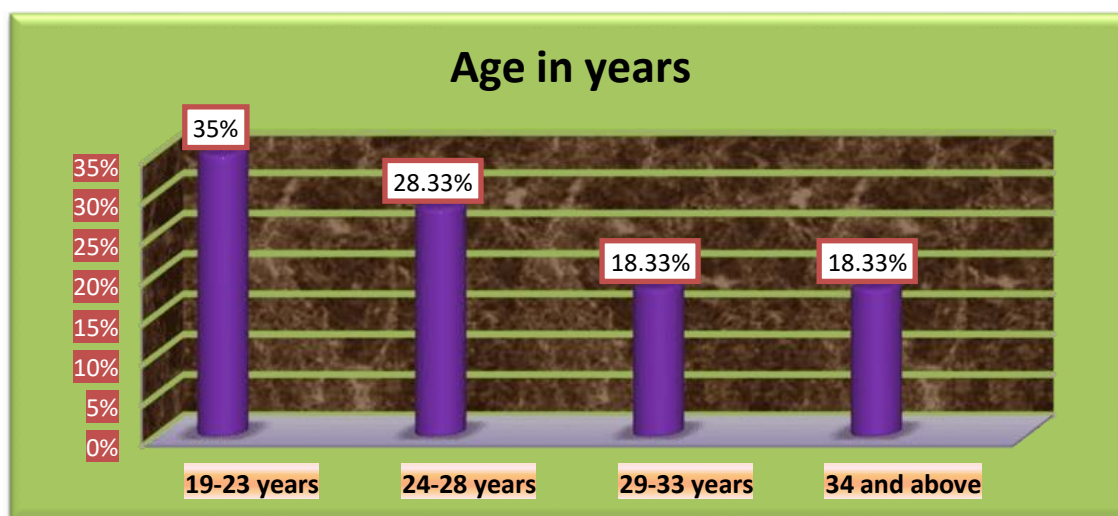


Figure. 1 : Classification of Respondents by Age group



**TABLE – 2**

Distribution of respondents based on Level of Education

n=60

Level of Education			
a.	High school	0	0
b.	PUC	21	35 %
c.	Graduate	30	50 %
d.	Post Graduate	9	15 %
<b>TOTAL</b>		60	100 %

Above table shows Predominantly, 50 % of the subjects completed graduate, 35% completed the secondary education, 15% of them were did their post-graduation.

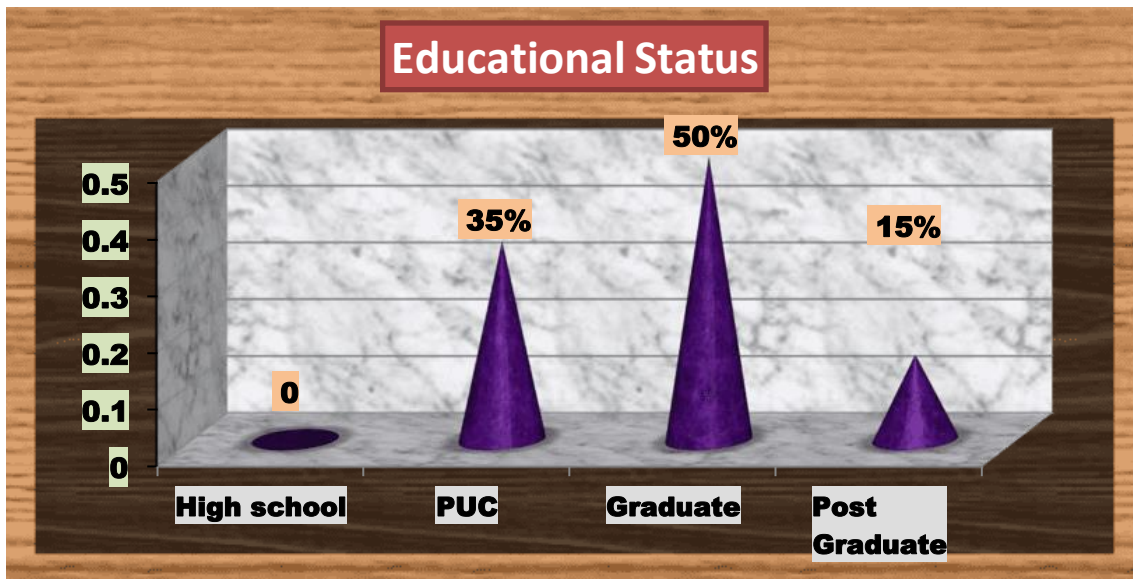


Figure. 2; Classification of Respondents by Education level

**TABLE – 3**

Distribution representing occupation of the Primigravida women

n=60

Occupation			
3.	a. Govt. Employee	14	23.33 %
	b. Private Employee	11	18.33 %
	c. House maker	26	43.33 %
	d. Business	9	15
<b>TOTAL</b>		<b>60</b>	<b>100%</b>

Above table shows that majority of participants 43.33 % of the subjects were House makers, 23.33% of them were Govt. Employee, 18.33 % were private employees and remaining 15% were business women.

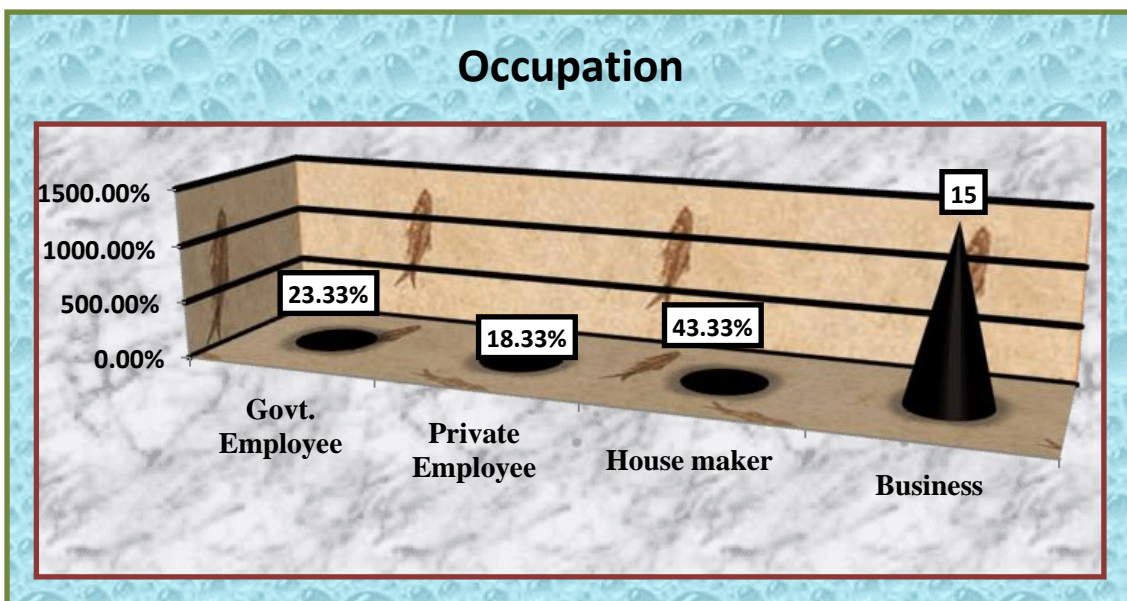


Figure. 3: Classification of Respondents by Occupation

**TABLE – 4**



Distribution representing religion of the primigravida

n=60

4. Marital Status				
	a.	Hindu	34	56.67%
	b.	Muslim	16	26.67%
	c.	Christian	10	21.66%
<b>TOTAL</b>			60	100%

Above table shows that majority of participants 56.66% of the subjects were Hindus, 21.67% of them were Muslims and the remaining 21.67 % were Christians.

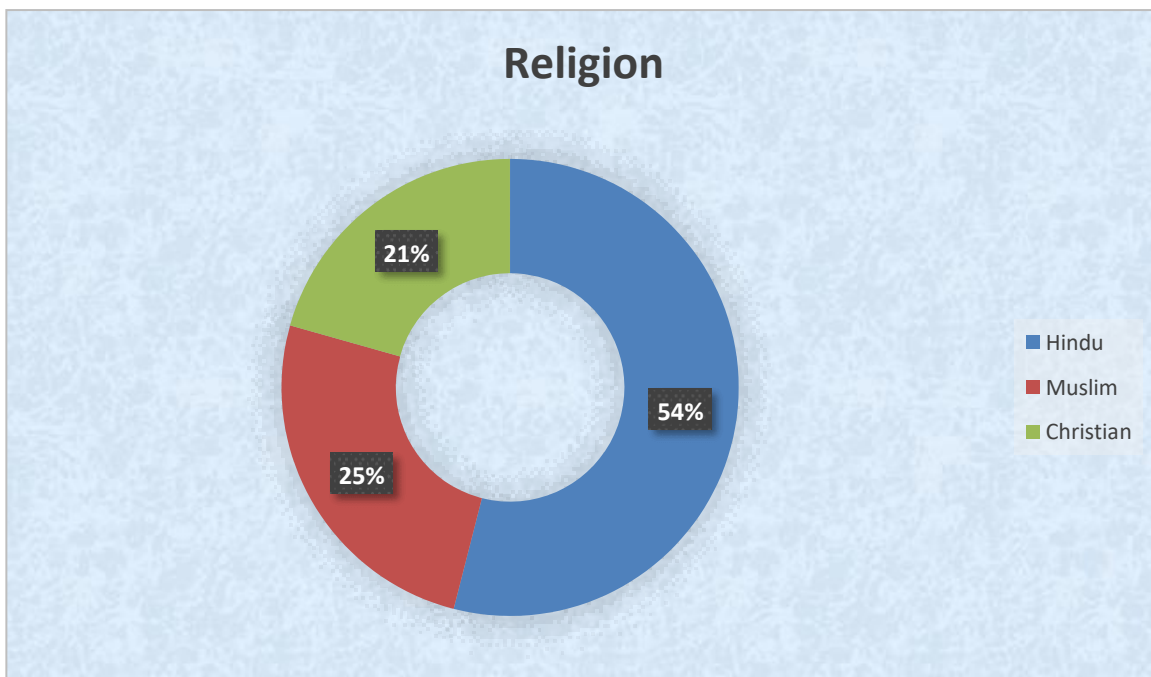


Figure. 4: Classification of Respondents by Religion.

**TABLE – 5**

Frequency and percentage distribution of Respondents by Family income, Previous exposure/ awareness on Birth preparedness, source of information

n=60

5.	<b>Family Income</b>		
	a. 10,000-20,000	9	15 %
	b. 20,001 – 30,000	24	40 %
	c. >30,000	27	45 %
6.	<b>Previous exposure/ awareness on Birth preparedness</b>		
	a. Yes	41	68.33 %
	b. No	19	31.67 %
7.	<b>Source of information</b>		
	a. Electronic Mass media	26	43.33 %
	b. Family, Friends	22	36.67 %
	c. Education by Health personnel	12	20 %

- Above table shows Predominantly, 45 % of the subjects were having the family income above 30,000, 40 % of them were between 20,001 – 30,000 and the remaining 15% were with 10,000-20,000 range.
- Among 60 Primigravida mothers 68.33% were had Previous exposure/ awareness on Birth preparedness.
- Source of information is mostly of from electronic mass media that is 43.33 %.36.67 % from family and friends and 20 % from education by health personnel.

**SECTION – II TABLE – 6**

**Data on overall knowledge scores of respondents on information regarding Birth preparedness. knowledge Level**

knowledge Level	Category	Classification of Respondents			
		Pre-Test		Post-Test	
		Number	Percent	Number	Percent
<b>Inadequate</b>	≤ 50 % Score	03	5%	0	0%
<b>Moderate</b>	51-75 % Score	34	56.67%	27	45%
<b>Adequate</b>	> 75 % Score	23	38.33%	33	55%
<b>Total</b>		<b>60</b>	<b>100.0</b>	<b>60</b>	<b>100</b>

The above table shows the knowledge level of Primigravida mothers in the pre-test and post-test. It is clearly depicted that in the pre-test assessment 5 % had inadequate knowledge, while in the post test there was no one with inadequate knowledge. However, the responses with moderate knowledge were almost similar; 56.67 % and 45 % in pre-test and post-test respectively. The responses with adequate knowledge in pre-test were increased from 38.33 to the post test it was 55 %.

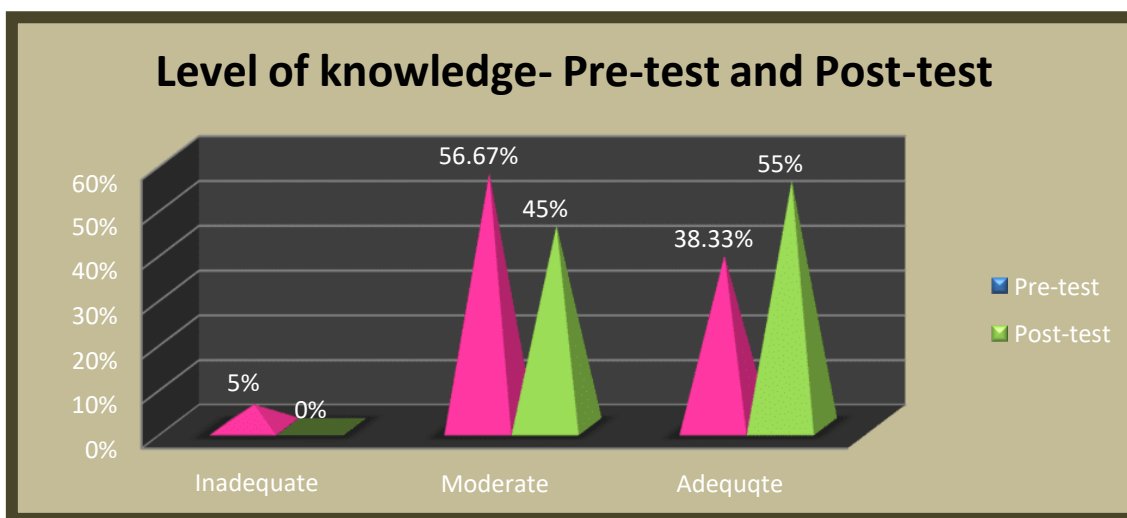


Figure. 5: Overall pre-test and post-test level of knowledge.

**TABLE - 7**

Aspect wise and overall mean scores of respondents on information regarding Birth preparedness.

N=60

Sl No	Aspe cts	Statements	Max. Score	Pre-Test Scores		Post-Test Scores	
				Mean	SD	Mean	SD
1.	Knowledge questions on general concept of labour	10	10	6.97	2.05	7.65	1.60
2.	Knowledge questions on birth preparedness	20	20	14.53	2.49	15.5	1.57
<b>TOTAL</b>		<b>30</b>	<b>30</b>	<b>21.5</b>	<b>4.18</b>	<b>23.15</b>	<b>2.67</b>

The table shows score of Primigravida mothers of in the aspect of knowledge overall mean of respondents on information regarding Birth preparedness was 21.5 with the standard deviation of 4.18 in pre-test and 23.15 mean and standard deviation of 2.67 after post-test.

**SECTION - III**

Data on effectiveness of the Structured teaching program on knowledge regarding Birth preparedness among Primigravida mother.

**TABLE - 8**

**N=60**

Aspects	Statements	Max. Score	Pre-Test Scores		Post-Test Scores		Enhancement		Paired 't'-Test
			Mean	SD	Mean	SD	Mean	SD	
knowledge	30	30	21.5	4.18	23.15	2.67	1.65	1.51	2.57 *

\* Significant at 5% level,

The above table highlights the aspect wise mean pre-test and post knowledge of the Primigravida mothers on Birth preparedness. Since the paired 't'-test value of all aspects is more than the table value, it shows there is significant gain in knowledge after the administration of Structured teaching program.

The statistical paired 't' test implies that the difference in the pre-test and post-test value was found to be statistically highly significant at 5% level ( $p < 0.01$ ) with a paired 't' test value of 2.57 in the aspect of knowledge. This shows a statistically significant enhancement in knowledge score indicating the positive impact of intervention program.

**SECTION - IV TABLE – 9**

Data on Association between Demographic variables and Knowledge level regarding Birth preparedness among Primigravida mother.

n=60

Demographic Variables	Category	Sample	Respondents Knowledge				χ <sup>2</sup> Value	df
			< Median		Median >			
			N	%	N	%		
Age in years	19-23	21	9	15	12	20	0.62 ~ NS	2
	24-28	17	9	15	8	13.33		
	29-33	11	4	6.67	7	11.67		
	34 & above	11	5	8.33	6	10		
Level of Education	Primary	0	0	0	0	0	9.11* ~ S	2
	Secondary	21	15	25	6	10		
	Graduate	30	9	15	21	35		
	Post Graduate	9	3	5	6	10		
Occupation	Govt. Employee	14	5	8.33	9	15	0.89 ~ NS	2
	Private Employee	11	6	10	5	8.33		
	House Maker	26	11	18.33	15	25		
	Business	9	5	8.33	4	6.67		



Religion	Hindu	34	16	26.67	18	30	0.13 ~	1
	Muslim	16	7	11.67	9	15		
	Christian	10	4	6.67	6	10		
Family Income	< 10,000	9	4	6.67	5	8.33	4.03* ~ S	2
	10,001-20,000	24	7	11.67	17	28.33		
	>20,001	27	16	26.67	11	18.33		
Previous exposure/ awareness	Yes	41	21	35	20	33.33	2.02 NS	1
	No	19	6	10	13	21.67		
Source of information	Electronic Mass media	26	12	20	14	23.33	0.069 NS	2

**\* Significant at 0.05% Level      NS: Non-significant ~Yates Correction**

The above table depicts the chi-square test value established at 0.05 level of significant for finding out the association between post-test knowledge and selected demographic characteristics. The table denotes that calculated chi square values for level of education and family income is greater than the table value at 0.05 level of confidence hence it is concluded that there is statistically significant association between the post-test knowledge and demographic variables such as level of education and family income.

The remaining demographic characteristics such as age, occupation, religion, Previous exposure/ awareness on Birth preparedness, source of information have no statistically significant association, since the calculated chi square values are lesser than that of table values at 0.05 level of confidence.

## CONCLUSION

On the basis of the findings of A study to assess the effectiveness of STP on knowledge regarding Birth preparedness among Primigravida women in selected PHC at Bangalore, the below said conclusion was drawn. It brings out the limitations of the study in the picture and the implications are given on various aspects like Nursing practice, Nursing Education, Nursing Administration and Nursing Research. It also gives an insight to carry on with further studies.

Major findings of the study:

- Majority 35% of women were in the age group of more than 19-23 years.
- 56% of Primigravida women who were Hindus.
- Majority 50% of Primigravida women had graduation.
- Majority 43% of Primigravida women were house wives.
- 45% of them had their family income more than 30.000 rupees.
- Majority 43% of them knew about Birth preparedness through the electronic mass media.
- The mean pretest knowledge score was 21.5 and in posttest, it was 23.15.
- The obtained ‘t’ value was 2.57, which showed the effectiveness of STP at  $P < 0.001$ .

The Conclusion of study was as follows:

Structured teaching program on Birth preparedness shows significant improvement in knowledge of Primigravida women. Hence the Structured teaching program was highly effective.

Significant association was found between posttest knowledge score of the Primigravida women and level of education and family income. However no significant association was found between other demographic variables such as age, occupation, religion, awareness on Birth preparedness and source of information.

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