



## **Effectiveness of educational program on knowledge and attitude regarding family planning and its methods among women's of rural areas**

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### **Abstract**

**Background:** Family planning deals with reproductive health of the mother, having adequate birth spacing, avoiding undesired pregnancies and abortions, preventing sexually transmitted diseases and improving the quality of life of mother, fetus and family as a whole.

**Methodology:** A quantitative approach with pre experimental one group pretest post test design was adopted for the study. The samples from the selected rural areas of Dharwad district were selected using convenient sampling technique. The sample consisted of 50 rural women's. The tools used for data collection was structured knowledge questionnaire and structured attitude scale.

**Results:** The study result reveal that, the post-test mean knowledge scores was found higher [mean=23.48, SD of 4.81] when compared with pre-test mean knowledge score value which was 15.75 with SD of 5.21. The statistical paired 't' implies that the difference in the pretest and post-test value was found statistically significant at 5% level ( $P < 0.05$ ) with a paired 't' value of 17.82. With respect to attitude of participants the post-test mean attitude scores was found higher [mean=50.08, SD of 8.32] when compared with pre-test mean attitude score value which was 38.22 with SD of 10.98. The statistical paired 't' implies that the difference in the pretest and post-test value was found statistically significant at 5% level ( $P < 0.05$ ) with a paired 't' value of 13.11. There is partial association between pre-test knowledge scores and no association between attitude scores and socio demographic variables.

**Conclusion:** Study results showed significant improvement in the level of knowledge and attitude regarding family planning and its methods. Thus, it can be concluded that educational program was effective to increase and update their knowledge and attitude on family planning and its methods.

**Keywords:** Family planning and its methods, knowledge, attitude, rural women

### **Introduction**

Family planning is the planning of when to have children and the use of a birth control method to implement these plans. The WHO defines it as 'helps couples to anticipate and attain their needed number of children and the spacing and timing of their births.' It is accomplished through the use of contraceptive methods and involuntary infertility treatment [1]. The capacity of a woman to room and restrict her pregnancies has a direct influence on her health and well-being as well as on the outcome of each pregnancy. In addition, family planning, which is a voluntary and accessible technique of contraception, earlier referred to as birth control, can be tailored to the person's needs with a range of methods that are acceptable to all and effective if used correctly [2].

Family planning (FP) is defined as a way of thinking and living that is adopted voluntarily upon the bases of knowledge, attitude, and responsible decisions by individuals and couples. Family planning refers to a conscious effort by a couple to limit or space the number of children they have through the use of contraceptive methods [3].

Family planning deals with reproductive health of the mother, having adequate birth spacing, avoiding undesired pregnancies and abortions, preventing sexually transmitted

diseases and improving the quality of life of mother, fetus and family as a whole [4].

The world nowadays is facing high population growth, reaching 7.7 billion, and is projected to reach 9.8 billion by the year 2045. Rising population has shifted resources from production to human services [5]. This negatively affects the economic growth, increases rates of poverty and unemployment, and threatens food security, especially in developing low-income and middle-income countries. Thus, there is a need for stabilizing the population through universal access to family planning (FP) services [6].

About one-third of unintended pregnancies each year result from improper use or failure of contraceptives. A lack of knowledge of contraceptive methods, source of supply, cost, or poor accessibility are the barriers that exist in developing countries.

Currently, short-term modern family planning methods are available at all levels of governmental and private health facilities, whereas long-term methods are being provided in health centres, hospitals, and private clinics. The study done in Ethiopia showed that good knowledge about family planning does not necessarily coexist with their good practice [7].

The global population today stands at over 6 billion, one-sixth of which is in India. Uncontrolled population growth

creates a major loophole for national development. Even though India was the first country in the world to implement a national population control program in 1952, the country is still struggling to contain the baby boom. A lot of efforts and resources have been used in the National Family Welfare Programme but the results are disappointing [8].

Globally, the prevalence of contraceptive use has been increasing but the unmet need for contraception remains a problem. Health care providers play a key role in imparting information related to contraceptive measures in reproductive health. Hence present study is undertaken to evaluate the effectiveness of educational program on knowledge and attitude of rural women related to family planning methods.

### Objectives

1. To assess the knowledge and attitude of rural women's regarding Family planning and its methods in terms of pre-test and post test knowledge and attitude scores.
2. To evaluate the effectiveness of educational program on knowledge and attitude of rural women's regarding family planning and its methods by comparing pre-test and post-test knowledge scores.
3. To find the association between the pre-test knowledge scores of rural women's regarding family planning and its methods and selected demographic variables.
4. To find the association between the pre-test attitudes scores of rural women's regarding family planning and its methods and selected demographic variables.

### Hypothesis

**H<sub>1</sub>:** The mean post test knowledge scores of rural women's regarding family planning and its methods, who have undergone the educational program, will be significantly higher than their mean pre-test knowledge scores.

**H<sub>2</sub>:** The mean post test attitude scores of rural women's regarding family planning and its methods who have undergone the educational program will be significantly higher than their mean pre-test attitude scores.

**H<sub>3</sub>:** The level of knowledge of rural women's regarding family planning and its methods will be significantly associated with their selected personal variables.

**H<sub>4</sub>:** The level of attitude of rural women's regarding family planning and its methods will be significantly associated with their selected personal variables.

### Methodology

Research Approach: Quantitative Research Approach

Research Design: Pre experimental one group pretest-post test design

Sampling technique: Non-Probability; Convenient Sampling Technique

Sample size: 50

Setting of study: Selected rural areas, Dharwad district

**Tool used for data collection:** Following tools used for the data collection

- **Part I: Demographic data:** It consists of 8 items related to demographic data of participants

- **Part II: Structured knowledge questionnaire:** This section consists of 37 structured multiple choice items with the multiple options for each item to assess the knowledge of rural women's regarding family planning and its method.
- **Part II: Structured attitude scale:** A structured attitude scale consisted of 13 statements regarding family planning and its method.

### Procedure of data collection

Data was collected after obtaining administrative permission from rural health authority of Dharwad district. The investigator personally explained the participants the need and assured them of the confidentiality of their responses. The investigator gathered participants in a comfortable room and conducted Pre-Test in community hall of selected rural areas, Soon after the test, the educational program was administered. On 8th day post-test was given with the same structured knowledge and attitude scale and took about 45 minutes to complete the post-test.

### Results

#### a. The findings related to socio-demographic variables of participants

**Table 1:** Frequency and percentage distribution of socio-demographic variables of participants

N=50

Sl. No	Demographic variables	Frequency (f)	Percentage (%)
1.	<b>Age in years</b>		
	a) 18 - 25	13	26
	b) 26 - 35	21	42
	c) 35 -45	16	32
2.	<b>Educational Qualification</b>		
	a) No formal education	6	12
	b) Primary school	14	28
	c) High school	12	24
	d) PUC	14	28
	e) Degree and above	04	08
3.	<b>Religion</b>		
	a) Hindu	29	58
	b) Muslim	13	26
	c) Christian	3	06
	d) Other	5	10
4.	<b>Type of family</b>		
	a) Nuclear	26	52
	b) Joint	23	46
	c) Extended	01	02
5.	<b>Number of Children</b>		
	a) Nil	12	24
	b) One	06	12
	c) Two	19	38
	d) More than two	13	26
4.	<b>Previous knowledge</b>		
	a) Yes	34	68
	b) No	16	32
5.	<b>Source of information</b>		
	a) News papers	11	22
	b) Family & friends	16	32
	c) Visual Media	16	32
	d) Other	07	14

## b. Distribution of pre-test and post-test knowledge scores of participants

**Table 2:** Mean, median, mode, standard deviation and range of pre test and post test knowledge scores of participants

N = 50

Area of Knowledge	Mean	Median	Mode	Standard deviation	Range
Pre test	15.75	14.50	14	5.21	2-29
Post test	23.48	24	19	4.81	14-34

Table 2 reveals pre test knowledge score of participants regarding family planning and its methods, it shows that; the pretest knowledge scores respondents mean was 15.75, median was 14.50, mode was 14 with standard deviation

5.21 and score range was 2-29. The post test knowledge scores respondents mean was 23.48, median was 24, mode was 19 with standard deviation 4.81 and score range was 14-34.

**Table 3:** Mean, median, mode, standard deviation and range of pre test and post test attitude scores of participants

N = 50

Area of attitude	Mean	Median	Mode	Standard deviation	Range
Pre test	38.22	36	53	10.98	16-61
Post test	50.08	51	49	8.32	29-63

Table 3 reveals pre test attitude score of participants regarding family planning and its method, it shows that; the pretest attitude scores respondents mean was 38.22, median was 36, mode was 53 with standard deviation 10.98 and score range was 16-61. The post test knowledge scores respondents mean was 50.08, median was 51, mode was 49

with standard deviation 8.32 and score range was 29-63.

## c. Distribution Respondent's Pretest and Post Test Scores According To Their Level of Knowledge And Attitude

### 1. Knowledge Scores

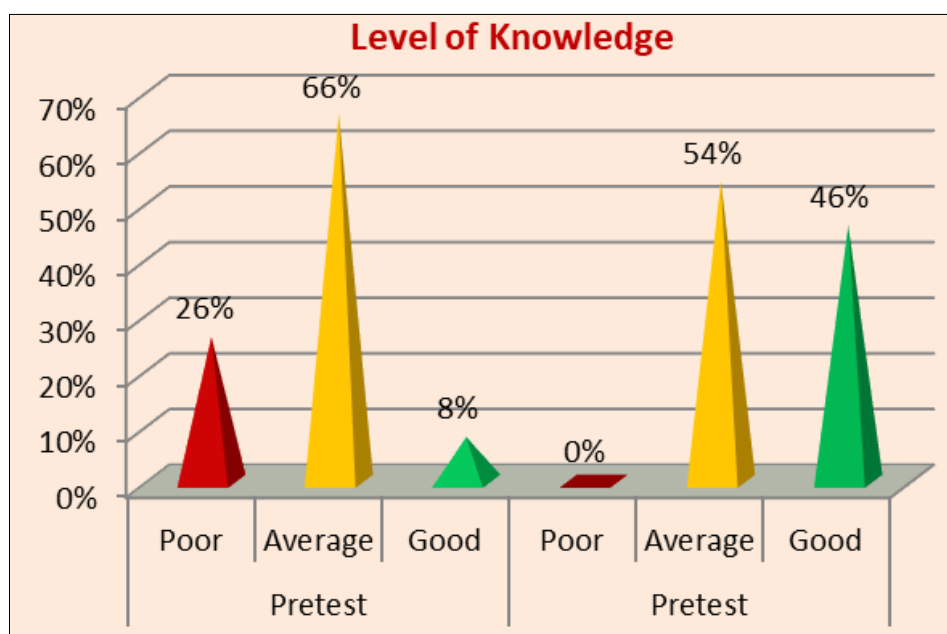
**Table 4:** Frequency and Percentage distribution of respondents according to level of Knowledge regarding family planning and its methods

N=50

Level of Knowledge					
Pre test			Post test		
Poor f (%)	Average f (%)	Good f (%)	Poor f (%)	Average f (%)	Good f (%)
13 (26%)	33 (66%)	04 (8%)	00	27 (54%)	23 (46%)

The data presented in the Table 4 depicts the respondent's level of knowledge during pretest and post test regarding family planning and its methods; with regard to pre test level of knowledge it shows that, maximum 33(66%) respondents were had average knowledge, 13 (26%)

respondents were had poor knowledge and remaining 4(8%) of respondents were had good knowledge. During post-test maximum 27 (54%) of respondents were had average knowledge and 23(46%) of respondents were had good knowledge.



**Fig 1:** Pre-test and post test level of knowledge

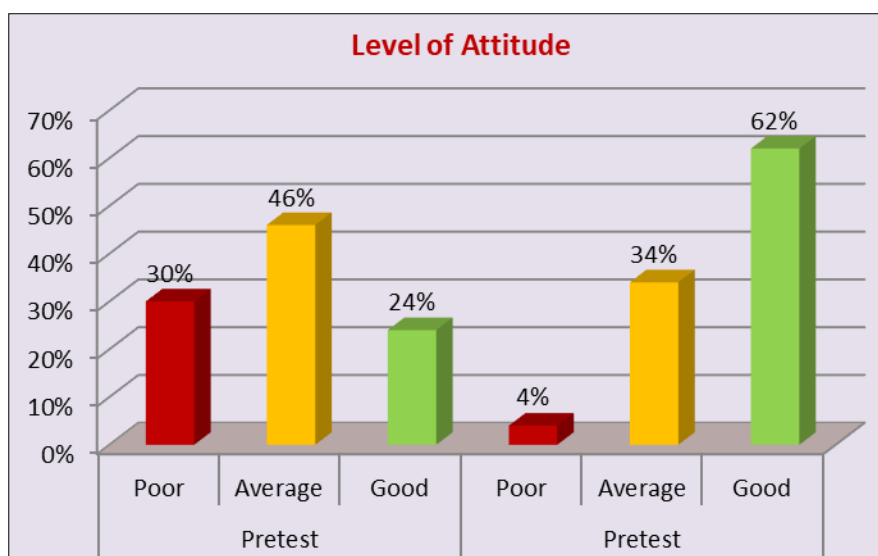
## 2. Attitude Scores

**Table 5:** Frequency and Percentage distribution of respondents according to level of Attitude regarding family planning and its methods

Level of Attitude					
Pre test			Post test		
Non favorable f (%)	Favorable f (%)	Positive f (%)	Non favorable f (%)	Favorable f (%)	Positive f (%)
15 (30%)	23 (46%)	12(24%)	2 (4%)	17 (34%)	31 (62%)

The data presented in the **Table 5** depicts the respondent's level of attitude during pretest and post test regarding family planning and its methods; With regard to pre test level of attitude it shows that, majority 23 (46%) respondents were had favorable attitude, 15(30%) of respondents were had

non favorable attitude and remaining 12(24%) were had positive attitude. During post-test maximum 31(62%) of respondents were had positive attitude, 17(34%) of respondents were had favorable attitude and 2(4%) of respondents were had non favorable attitude.



**Fig 2:** Pre-test and post test level of attitude

### d. Effectiveness of educational program

Paired 't' value was computed to find out the significance of difference between means of pre-test and post test knowledge and attitude scores of respondents.

**Table 6:** Mean, standard deviation, standard error of difference and 't' value of pre-test and post-test knowledge and attitude scores

N=50					
Area	Aspects	Mean	Sd	SEMD	Paired t Test
Knowledge	Pre-test	15.75	5.21	0.43	17.82*
	Post-test	23.48	4.81		
Attitude	Pre-test	38.22	10.98	0.90	13.11*
	Post-test	50.08	8.32		

\* Significant at 5 % level

Table 6 indicates the overall mean knowledge and attitude scores of pre-test and post-test scores –

### Knowledge

With respect to knowledge scores of participants, the findings reveal that the post-test mean knowledge scores was found higher [mean=23.48, SD of 4.81] when compared with pre-test mean knowledge score value which was 15.75 with SD of 5.21.

The statistical paired 't' implies that the difference in the

pretest and post-test value was found statistically significant at 5% level ( $P < 0.05$ ) with a paired 't' value of 17.82. There exists a statistical significance in the difference of knowledge score indicating the positive impact of educational program.

Hence, the research hypothesis  $H_1$  is supported. This indicates that the enhancement in knowledge is not by chance and the rural women's who exposed to educational program on family planning and its methods, significantly improved in their knowledge.

### Attitude

With respect to attitude scores of participants, the findings reveal that the post-test mean attitude scores was found higher [mean=50.08, SD of 8.32] when compared with pre-test mean attitude score value which was 38.22 with SD of 10.98.

The statistical paired 't' implies that the difference in the pretest and post-test value was found statistically significant at 5% level ( $P < 0.05$ ) with a paired 't' value of 13.11. There exists a statistical significance in the difference of attitude score indicating the positive impact of educational program. Hence, the research hypothesis  $H_2$  is supported. This indicates that the enhancement in attitude is not by chance and the rural women's who exposed to educational program on family planning and its methods, significantly improved in their attitude.

### e. Association between Level of Knowledge, Attitude and Selected Socio Demographic Variables

The computed Chi-square value for association between levels of knowledge of rural women's regarding family planning and its methods and their selected demographic variables is found to be statistically significant at 0.05 levels for religion, previous knowledge and sources of knowledge of participants and is not found statistically significant for other socio demographic variables. Therefore, the findings partially support the hypothesis H<sub>3</sub>, inferring that rural women's level of knowledge regarding family planning and its methods is significantly associated only with religion and previous knowledge and sources of knowledge.

The computed Chi-square value for association between level of attitude of rural women's regarding family planning and its methods and their selected demographic variables is not found to be statistically significant at 0.05 levels for any of the selected socio demographic variables. Therefore, the findings do not support the hypothesis H<sub>4</sub>, inferring that rural women's level of attitude regarding family planning and its methods is not significantly associated any of the selected socio demographic variables.

### Conclusion

The conclusions drawn from the study were as follows

- The overall pretest knowledge and attitude of rural women's regarding family planning and its methods was average and favorable respectively.
- There was a need for teaching program regarding family planning and its method among rural women's.
- Post test results showed significant improvement in the level of knowledge and attitude regarding family planning and its method. Thus, it can be concluded that educational program was effective to increase and update their knowledge and attitude on family planning and its method.
- The results revealed that there is partial association between pre-test knowledge scores and no association between attitude scores and socio demographic variables.

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