

# A Study to Evaluate the Effectiveness of Structured Teaching Programme (STP) on Knowledge Regarding Cervical Cancer and Pap Smear Test among Women Who are Attending Gynaecology Opd'S at Selected Hospitals of Bangalore

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## ABSTRACT

Statement of problems "A study to evaluate the effectiveness of structured teaching programme (STP) on knowledge regarding cervical cancer and pap smear test among women who are attending gynaecology opd's at selected hospitals of Bangalore. Objectives of the study was to assess the level of knowledge regarding cervical cancer and pap smear test before and after the administration of Structured Teaching Programme, to evaluate the effectiveness of Structured Teaching Programme by comparing the pretest and post test knowledge scores, to find out the association between women's pre test knowledge on cervical cancer and Pap smear test with their selected demographic variables. Methodology One group pre-test and post-test design with quasi-experimental design was used to assess the effectiveness of Structured Teaching Programme on Cervical cancer and pap smear among women who are attending OBG OPD's at RMV Hospital, Bangalore and Prakriya Hospital, Bangalore. In view of the nature of the problem and to accomplish the objectives of the study, a Structured Teaching Programme was prepared focusing on Cervical cancer and pap smear test; a structured questionnaire was prepared to assess the effectiveness of Structured Teaching Programme. Reliability of the tool was tested and validity was ensured in consultation with guides and experts in the field of nursing and medicine. The study was carried out in RMV Hospital, Bangalore. 80 women were selected by convenient sampling. Structured Knowledge questionnaire was given on the participants to collect the needed data. Collected data was analyzed by using descriptive and inferential statistics. Results revealed that With regard to the pre-test knowledge assessment, the mean was 11.03 and mean percentage was 42.4 percent and SD was 10.4. In Post-test significant increase in knowledge was found. However, the mean percentage of knowledge score had improved from 42.4 percent in pre-test to 79.0 percent in the post-test. The dispersion of pre-test scores (11.03) was found to be more than that of their post-test (20.54) score. That shows the teaching was effective. The overall 't' value 28.72 ( $P < 0.05$ ) shows significance which indicates that the STP was effective in increasing the knowledge score. This study proved that there was significant association between the pre-test knowledge scores and selected demographic variable like education.

**How to cite this paper:** Sonali Dixit | Vinutha M. T. "A Study to Evaluate the Effectiveness of Structured Teaching Programme (STP) on Knowledge Regarding Cervical Cancer and Pap Smear Test among Women Who are Attending Gynaecology Opd'S at Selected Hospitals of Bangalore"

Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-9 | Issue-3, June 2025, pp.340-345,

URL: [www.ijtsrd.com/papers/ijtsrd79862.pdf](http://www.ijtsrd.com/papers/ijtsrd79862.pdf)



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**KEYWORDS:** *stp, pap smear, cervical cancer, gynaecology OPD*

## Background of the study

The term cancer is used to refer malignant neoplasm. It is a disease of the cells in which the normal mechanisms of the control of growth and proliferation

have been altered. Cancer is invasive, spreading directly to surrounding tissue as well as to new sites in the body, disease process that begins when an

abnormal cell is transformed by the genetic mutation of the cellular DNA. Cancer is not a single disease with a single cause; rather, it is a group of distinct diseases with different causes, manifestations, treatments and prognosis.<sup>1</sup>

Cancers can occur in any part of the female reproductive system like in the vulva, vagina, cervix, uterus, fallopian tubes, ovaries or breasts these cancers are called gynaecological cancer. Gynaecological cancers can directly invade nearby tissues and organs or spread through the lymphatic vessels and lymph nodes (lymphatic system) or bloodstream to distant parts of the body.<sup>2</sup>

It is reported that cancer is the cause for one tenth of all deaths and in developed countries it is 2<sup>nd</sup> most frequent cause of death. WHO reports that without rigorous control measures cancer will become the leading cause of death and there will be 300 million new cancer cases and 200 million deaths from cancer in the coming 25 years. In the United States, an estimated 65 million women undergoing cervical cancer screening. About 11,000 cases of invasive cervical cancer were diagnosed in 2008. Cervical cancer is the fourth most common cancer among women worldwide, with an estimated 528,000 new cases and 266,000 deaths in 2012. Cervical cancer is the leading cause of morbidity and mortality among women worldwide. Each year there are 52,000 new cases of cervical cancer in Latin America and the Caribbean alone, according for over 3,00,000 deaths per year. In India every year cervical cancer is diagnosed in about 50,000 women globally and is responsible for more than 2,80,000 deaths annually.<sup>12</sup>

## STATEMENT OF THE PROBLEM

“A study to evaluate the effectiveness of structured teaching programme (stp) on knowledge regarding cervical cancer and pap smear test among women who are attending gynaecology opd's at selected hospitals of Bangalore.

## OBJECTIVE OF THE STUDY

1. To assess the level of knowledge regarding cervical cancer and pap smear test before and after the administration of STP.
2. To evaluate the effectiveness of STP by comparing the pretest and post test knowledge scores.
3. To find out the association between women's pre test knowledge on cervical cancer and Pap smear test with their selected demographic variables.

## HYPOTHESIS

H1- The mean post test knowledge score of women regarding Cervical cancer and pap smear test will be significantly higher than the mean pre-test knowledge score.

H2- There will be a significant association between the pre-test knowledge score and selected demographic variables.

## DELIMITATIONS

The study is limited to:

- Sample size of 80 women
- Data collection period from 4-6 weeks
- Pre experimental single group pre test post test design.

## Methodology

**Research approach:** An experimental approach was used to evaluate the effectiveness of STP on cervical cancer and pap smear test.

**Research design:** The research design used for the present study is pre-experimental; single group pre-test post-test design. It includes manipulation, no randomization and no control group.

## Variables

### Independent Variable

STP on cervical cancer and Pap smear test

### Dependent Variable

Knowledge of women on Cervical cancer and PAP smear test

### Setting of the study

The study was conducted on women who are attending Gynecology OPD's at selected Hospitals of Bangalore.

### Population

The population for the study includes 80 women aged between 18-55 years who are attending Gynecology OPD's at selected Hospitals of Bangalore.

### Sample

A Sample consists of a sub-set of a population selected to participate in a research study. The sample for the study consisted of 80 women who are attending Gynecology OPD's at selected Hospitals of Bangalore.

## Criteria for sample selection

### Inclusion criteria

1. Women in the age group of 18-55 years
2. Women who are willing to participate in the study
3. Women who are available at the time of data collection.

### Exclusion criteria

1. Women who are not available at the time of data collection.
2. Women who are seriously ill.

### Data collection tools

The tool consisted of 2 parts.

**Part I: Demographic Data:** It contains 12 items for obtaining information regarding Age, marital status,

Gravida, educational qualification, religion, occupation, monthly income, sources of health information, menopause, Previous history of cancer, History of previous illness, History of previous surgery.

## Part II: Structured knowledge questionnaire on PAP smear test

The structured knowledge questionnaire regarding PAP smear test consisted of 35 multiple choice questions under 6 aspects such as anatomy and physiology of cervix, definition, risk factors, Purpose, Recommendations, procedure. Each question has four responses with one correct answer. Score “1” was given for each correct response in a single question and score “0” was given for wrong answers. The total number of structured knowledge questions was 35.

The resulting scores were ranged as follows

- Adequate Knowledge - 76-100 %
- Moderately adequate knowledge - 51-75 %
- Inadequate knowledge - below 50 %

## Data Collection Process

The Study was conducted in RMV Hospital, Bangalore, Karnataka. The period of data collection was from 07-01-2021 to 30-01-2021. Prior to data collection permission was obtained from the concerned authorities. The investigator administered the structured questionnaire by interview schedule for assessing their knowledge regarding cervical cancer and pap smear test. The STP was administered after pre-test. After 7 days post-test was conducted using the same tool to evaluate the effectiveness of STP.

## Analysis and interpretations of data

### Section – A: Frequency Distribution and Percentage of demographic variables

**Table – I: Distribution of frequency and Percentage of demographic variables**

**N = 80**

Sl. No	Demographic Variables	Frequency	Percentage (%)
1.	<b>Age in years</b>		
	18-28	29	36.3
	29-39	32	40.0
	40-50	19	23.7
	50 and above	00	00
2.	<b>Marital Status</b>		
	Married	60	75.0
	Unmarried	20	25.0
3.	<b>Gravida of Women</b>		
	Nil	20	25.0
	1-2	35	43.7
	3-4	25	31.3
4.	<b>Educational Qualification</b>		
	Illiterate	14	17.5
	Up to 7 <sup>th</sup> std	30	37.5
	8 <sup>th</sup> -10 <sup>th</sup> std	29	36.2
	PUC/Degree	7	8.8
5.	<b>Religion</b>		
	Hindu	43	53.7
	Muslim	20	25.0
	Christian	17	21.2
6.	<b>Occupation</b>		
	House wife	53	66.3
	Agriculture	12	15.0
	Private	15	18.7
7.	<b>Monthly Income</b>		
	Rs.2,000 –3,000	24	30.0
	Rs.3001-4,000	43	53.7
	Rs.4,001-5,000	13	16.2
8.	<b>Source of health information</b>		
	Mass media	27	33.7
	Friends and Relatives	28	35.0
	Health personnel	25	31.2

<b>9.</b>	<b>Menopause</b>		
	Yes	4	5.0
	No	76	95.0
<b>10.</b>	<b>Previous history of cancer</b>		
	Yes	3	3.8
	No	77	96.2
<b>11.</b>	<b>History of previous illness</b>		
	Yes	28	35.0
	No	52	65.0
<b>12.</b>	<b>History of previous surgery</b>		
	Yes	6	7.5
	No	74	92.5

**Section B:-** Analysis of pre-test and post-test knowledge level of women was made as under:

In pre-test knowledge on cervical cancer and PAP smear test. Out of 80 women 59 (73.7 percent) of them had inadequate knowledge and 21 (26.3 percent) of them had moderately adequate knowledge and none of them were having good knowledge

In post-test knowledge on cervical cancer and PAP smear test. 56 (70.0 percent) of women had adequate knowledge and 24 (30.0 percent) of women had moderately adequate knowledge and none of them were having Inadequate knowledge.

### **Section – C**

#### **Comparison of area wise pre-test and post-test knowledge scores of women on cervical cancer and pap smear test**

Findings illustrated that pre-test knowledge score was found that women had overall mean of 1.76 and mean percentage was 44.1 standard deviation was 19.6 related to anatomy and physiology of cervix. With respect to post-test knowledge scores findings revealed that knowledge related to anatomy and physiology of cervix mean was 3.05 and the mean percentage was 76.3 this indicate that women had adequate knowledge after the STP. The overall standard deviation was 18.6.

Findings revealed that regarding pre-test knowledge score was found that women had overall mean of 2.23 and mean percentage was 44.5 standard deviation was 28.5 related to definition of pap smear. With respect to post-test knowledge scores findings revealed that knowledge related to definition and purpose of pap smear mean was 4.23 and the mean percentage was 84.5 this indicate that women had adequate knowledge after the STP. The overall standard deviation was 18.3.

Findings showed that regarding pre-test knowledge score was found that women had overall mean of 1.36 and mean percentage was 45.4 standard deviation was 26.6 related to risk factors. With respect to post-test knowledge scores findings revealed that knowledge related to risk factors mean was 2.29 and the mean percentage was 76.3 this indicate that women had adequate knowledge after the STP. The overall standard deviation was 25.5.

Findings revealed that regarding pre-test knowledge score was found that women had overall mean of 1.69 and mean percentage was 42.2 standard deviation was 21.3 related to purpose. With respect to post-test knowledge scores findings revealed that knowledge related to Purpose mean was 3.39 and the mean percentage was 84.7 this indicate that women had adequate knowledge after the STP. The overall standard deviation was 16.6.

Findings depicted that regarding pre-test knowledge score was found that women had overall mean of 2.36 and mean percentage was 39.4 standard deviation was 16.6 related to recommendations of pap smear. With respect to post-test knowledge scores findings revealed that knowledge related to recommendations of pap smear mean was 4.60 and the mean percentage was 76.7 this indicate that women had adequate knowledge after the STP. The overall standard deviation was 18.7.

Findings represented that regarding pre-test knowledge score was found that women had overall mean of 1.63 and mean percentage was 40.6 standard deviation was 20.8 related to procedure. With respect to post-test knowledge scores findings revealed that knowledge related to procedure mean was 2.99 and the mean percentage was 74.7 this indicate that women had adequate knowledge after the STP. The overall standard deviation was 21.6.

**Section – D- Evaluate the effectiveness of STP.****Table – 5 Comparison of mean and mean percentage of pre test and post test**

Knowledge assessment	Mean	Mean %	Difference of Mean	Difference of Mean %	SD	Df	Paired "t" Value	P Value
Pre-Test	11.03	42.4	9.51	36.6	10.4	79	28.72	<0.05
Post-Test	20.54	79.0			8.4			

**HYPOTHESIS TESTING** -The stated hypothesis is

**H<sub>1</sub>:** - The mean post test knowledge score of women regarding cervical cancer and PAP smear test will be significantly higher than the mean pre-test knowledge score.

The findings according to Table no. 5 illustrated that the mean post-test knowledge scores (20.54) was higher than mean pre-test knowledge scores (11.03). The computed "t" value 28.72 ( $P < 0.05$ ) showed that there was a significant difference between the pre-test and post-test mean knowledge scores. ( $t(79) = 28.72, P < 0.05$ ). Hence hypothesis H<sub>1</sub> was accepted. This indicates that the STP was effective in increasing the knowledge on cervical cancer and PAP smear test among women.

**Section – E: Association between pre-test knowledge scores and selected demographic variables.****Table – 6: Association between pre-test knowledge score and selected demographic variables****N=80**

SL NO	Demographic variables	Pre test knowledge scores						df	Table value	$\chi^2$ Calculated value
		Inadequate		Moderate						
		N	%	n	%	N	%			
1	Age							2	5.991	1.51 NS
	18-28	21	72.4	8	27.6	29	100			
	29-39	22	68.7	10	31.3	32	100			
	40-50	16	84.2	3	15.8	19	100			
2	Marital Status							1	3.841	2.60 NS
	Married	47	78.3	13	21.7	60	100			
	Unmarried	12	60.0	8	40.0	20	100			
3	Gravida of women							2	5.991	2.67 NS
	Nil	12	60.0	8	40.0	20	100			
	1-2	27	77.1	8	22.9	35	100			
	3-4	20	80.0	5	20.0	25	100			
4	Educational Qualification							3	7.815	9.05 * Significant
	Illiterate	12	85.7	2	14.3	14	100			
	Up to 7 <sup>th</sup> std	24	80.0	6	20.0	30	100			
	8-10 <sup>th</sup> std	21	72.4	8	27.6	29	100			
	PUC	2	28.6	5	71.4	7	100			
5	Religion							2	5.991	0.82 NS
	Hindu	30	69.8	13	30.2	43	100			
	Muslim	16	80.0	4	20.0	20	100			
	Christian	13	76.5	4	23.5	17	100			
6	Occupation							1	3.841	0.62 NS
	House Wife	40	75.5	13	24.5	53	100			
	Other	19	70.4	8	29.6	27	100			
7	Monthly Income							2	5.991	0.18 NS
	Rs.2,000-3,000	17	70.8	7	29.2	24	100			
	Rs.3,001-4,000	42	97.67	1	2.32	43	100			
	Rs.4001-5000	9	69.23	4	30.76	13	100			
8	Source of health information							3	5.991	0.79 NS
	Mass Media	21	77.8	6	22.2	27	100			
	Friends and relatives	19	67.9	9	32.1	28	100			
	Health Personnel	19	76.0	6	24.0	25	100			

<b>9</b>	<b>History of Previous Illness</b>									
	Yes	22	78.6	6	21.4	28	100	1	3.841	0.52 NS
	No	37	71.2	15	28.8	52	100			
<b>10</b>	<b>Menopause</b>									
	Yes	3	75	1	25	4	100	1	3.841	0.75 NS
	No	60	76	16	78.9	76	100			
<b>11</b>	<b>Previous History of cancer</b>									
	Yes	2	66.7	1	33.3	3	100		3.841	1.27 NS
	No	70	90.9	7	9.1	77	100			
<b>12</b>	<b>History of Previous surgery</b>									
	Yes	4	66.7	2	33.3	6	100		3.841	0.98 NS
	No	60	81.08	14	18.91	74	100			

Level of significance –0.05 , \* - Significant , NS – Non Significant

The findings according to Table no. 6 illustrated that that there is a significant association between the Pre-test level of Knowledge score with the educational qualification. 12 (85.7 percent) of respondents were illiterate, 24 (80.0 percent) were studied up to 7<sup>th</sup> standard, 21 (72.4 percent) were studied up to 8-10<sup>th</sup> standard and 2 (28.6 percent) were studied up to PUC had inadequate knowledge. 5 (71.4 percent) of respondents were studied up to PUC, 8 (27.6 percent) were studied up to 8-10<sup>th</sup> standard, 6 (20.0 percent) were studied up to 7<sup>th</sup> standard and 2 (14.3 percent) were literate had moderately adequate knowledge. However the chi-square value established ( $\chi^2 = 9.05^*$ ) at 0.05 level signifies that there was a association

between educational qualification and knowledge of the respondents.

### INTERPRETATION AND CONCLUSION

Overall experience of conduct of this study was satisfying and enriching, even the respondents was happy and satisfied with the information they received. For the investigator, the study was a new learning experience; the study also showed that there is a great need to educate the women regarding cervical cancer and pap smear. All health care professionals are responsible for providing a comprehensive and holistic care to reduce the mortality and morbidity of the women.