

## **“A Study To Assess The Effectiveness Of Video Assisted Module On Knowledge And Practices Regarding Breast Self-Examination Among Nursing Students In Selected Nursing College Of Metropolitan City.”**

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### **ABSTRACT**

#### **INTRODUCTION**

Breast cancer affects so many lives today. The peak incidence of breast cancer is the fifth and sixth decades of life. The more familiarity with breast; the more likely women will notice when something has changed. It is vital for the women to understand the key factors about the disease, especially risk factors and methods of early detection. Three methods of early detection of breast cancer are mammography, clinical breast examination and breast self-examination. If breast self-examination is practiced regularly breast disorders can be detected in early stages and treated promptly.

A quantitative experimental approach was used to assess the effectiveness of video assisted learning on knowledge and practices regarding breast self-examination among nursing students. Total 30 nursing students were selected. A non-convenient sampling technique was utilized. The techniques used was structured questionnaire tool for data collection.

#### **RESULT**

The findings of the study were analyzed using frequency and percentage among 30 samples. 100% samples were female. It was concluded that the video assisted learning is effective on knowledge and practices and the comparison done regarding breast self-examination among the nursing students. The calculated t value was found to be 16.72 for knowledge and practices regarding breast self-examination. The mean of pretest is 10.8 and post-test mean is 24.8. The knowledge of nursing student related to breast self-examination is improved.

#### **CONCLUSION**

During the study it was observed that the students with no knowledge of breast self-examination had increased their knowledge and practices with the help of video assisted learning. The objectives of the study were effective and based on it the knowledge and practices were well developed.

**Key words:** Video-assisted module, Knowledge, Practice, Breast self-examination

### **FULL ARTICLE**

***“Life is really simple, but we insist on making it complicated”***

#### **INTRODUCTION**

Breast problems are significant health concerned to women. In a women's life time there is a one in eighth chance that she will be diagnosed with breast cancer. Whether benign or malignant intense feeling of shock, fear and denial often accompany the initial discovery of a lump or change in the breast. These feelings are associated both with the fear of survival and with the possible loss of a breast. Though history the female breast has been regarded as a symbol of beauty, sexuality and motherhood. The potential loss of breast or part of a breast may be devastating for many women because of the significant psychological, social, sexual and body image implications associated with it.

Breast cancer accounts for about 20% cancers in Indian women. It is a more common than cancer cervix in the developed as well as in developing countries. Breast cancer constitutes about 19-34% of all cancer cases among women in India. Age adjusted incidence of breast cancer in India varies from 16 to 25 per lakh population and approximately 80,000 new cases of breast cancer are diagnosed every year. With the rapid urbanization and changing lifestyle, the numbers are likely to increase further.

#### **BACKGROUND OF THE STUDY**

***“It is health that is real wealth and not pieces of gold and silver”***

Breast cancer is the most common cancer in India accounting for 28.2% of all female cancer with an estimated 216,108 cases by 2022. One in 28<sup>th</sup> Indian women is likely to develop breast cancer during her lifetime. It is more (1 in 22) for urban women than the rural group (1 in 60). Percentage of breast cancer is found by self-examination is approximately 50% of cases in women 50years and older and 71% of breast cancer in women younger than 50years are detected by women themselves.<sup>5</sup> The incidence of breast cancer is higher for black women aged less than 40% than for white women.

Women both black and white women aged less than 35 years have the lower breast cancer survival rates of all age groups. The issue of breast self-examination efficacy has special implication for these women because the BSE and the clinical breast examination are the only early detection technique recommended to them.<sup>8</sup>

Over the past decade, several research findings and data sources have indicated an increasing burden of carcinoma in terms of incidence, morbidity, and mortality associated with carcinoma. Breast cancer is additionally the first explanation for cancer death among women globally, liable for about 425,000 deaths in 2020. There will be an estimated 18.1 million new cancer cases (17.0 million excluding non-melanoma skin cancer) and 9.6 million cancer deaths (9.5 million excluding no melanoma skin cancer) in 2021.

BSE monthly between the 7<sup>th</sup> and 10<sup>th</sup> day of the cycle is that the simplest yet extremely important thanks to detect carcinoma at the first stage of growth. Doing BSE is one way for a woman to know how her breasts normally feel so that she can notice any changes that do occur. In order to perform BSE, the individual must possess the knowledge of and have the skill of doing so. BSE is important for enabling women become familiar with the feel and appearance of their breast; and help them easily and quickly detect any changes that occur.<sup>1</sup>

### NEED FOR THE STUDY

*"Even too much sunshine can be devastating, while only with rain can growth occur. Accept both as part of the growing process in the garden of life."*

Breast Self-Examination (BSE) is important in early detection and for mass awareness especially in resource poor countries. When carcinoma is detected early, the probabilities for survival are far better. Although to reduce the burden of breast cancer in India, it is necessary to first determine the level of knowledge and practice (skill) relating to breast self-examination as a breast cancer prevention strategy especially among our teeming youths who at this stage of life can continue this practice to adulthood.<sup>2</sup>

A randomized controlled experimental study was conducted to determine the effects of breast cancer and a breast self-examination training program on women's knowledge, attitude, and practices relating to breast cancer. The study included 92 women participants. A training program was provided to the experimental group, while no such training was provided for the control group. This study found that planning and implementing a training program based on the Health Belief Model, particularly a regular and one-to-one training and follow-up program, may lead to a regular and proper breast self-examination practice. The training program used in this study made a positive contribution to women's knowledge, attitudes, and health behaviors regarding breast self-examination.

A study was conducted to determine the knowledge, attitude, and practice of SBE among female university students. A disproportionate stratified sampling technique was used to select a sample size of 250 nursing students. Self-administered questionnaires were used to collect the data. The results revealed 95% respondents had ever heard of breast cancer and BSE. Majority of respondents cited the media and formal education as their source of information on breast cancer and BSE. Even though the majority of respondents claimed they had heard of SBE, only 80% knew how to perform it. The study showed that majority of respondents were aware of breast cancer as a disease and self-breast examination as a screening method, but their knowledge and understanding of the method of BSE was very low.<sup>3</sup>

### PROBLEM STATEMENT

"A study to assess the effectiveness of video assisted module on knowledge and practices regarding breast self-examination among nursing student in selected nursing college of metropolitan city."

### OBJECTIVES OF PROBLEM

- 1) To assess existing knowledge and practices regarding breast self-examination among nursing student.
- 2) To assess effectiveness of video assisted teaching programme on knowledge and practices regarding breast self-examination nursing students.
- 3) To find out the association between the effectiveness of video assisted teaching programme on knowledge and practices regarding breast self-examination among nursing students.

### REVIEW OF LITERATURE

A literature review is a search and evaluation of the available literature in a given subject. It provides guidelines about background for understanding what has been already learned on topic and illuminates the significance of new study.

The study was conducted to assess the effectiveness of planned teaching programme on breast self examination on nursing students. An evaluative approach with one group pre-test post-test design was used for the study. 100 samples were selected using purposive sampling technique. A structured knowledge questionnaire was used to collect the data and analysis was done using descriptive and inferential statistics. A significant difference between pre test and post test knowledge was found ('t' value 32.250,  $p < 0.05$ ). The study findings showed that the structured teaching programme was

effective in improving the knowledge of nursing students on BSE.<sup>4</sup>

The descriptive study on women of age group between 30 to 55 years regarding knowledge related to breast self-examination at selected areas of Nandanahalli village, Mysuru. 60 women of age group between 30 to 55 years were selected using convenient sampling technique by using a structured questionnaire based on the objectives of the study. The result shows that in pre test 58.3% had inadequate knowledge 40% had good knowledge and 1.6% had excellent knowledge regarding breast self-examination. In post-test 6% had inadequate knowledge 61.6% had good knowledge and 28.3% had excellent knowledge about breast self examination. The study shows that women had good knowledge. The study also shows that the video assisted teaching programme is effective in improving the knowledge on breast self-examination among women of age group between 30 to 55 years in selected areas of Nandanahalli village of Mysuru. Based on the recommendations of the study, the same type of study can be replicated on more population and comparative studies also can be conducted to help the population in gaining knowledge regarding breast self-examination.<sup>5</sup>

A quasi experimental study was conducted to assess effectiveness of video assisted teaching programme regarding importance and awareness of BSE in early detection of breast cancer among the women under the age group of 20 to 40 years in selected areas of Ahmedabad, Gujarat. The mean and standard deviation on concept mapping in pre-test was 11.46 and 3.58, whereas the mean and Standard deviation of post-test was 16.06 and 3.19. The calculated "t" value was greater than tabulated "t" value. The result shows that when video assisted teaching program was given to the age group of women they achieve the best scores.<sup>6</sup>

The study was conducted using quantitative educative and evaluative approach. 70 female adolescent students samples were selected through a random sampling method. The tool consisted of multiple-choice questionnaires with three parts; included with sociodemographic data, knowledge questionnaire on BSE, and checklist to assess attitude toward BSE. Post-test results are showing high effectiveness on the test results; most of the participants represented an excellent hike in knowledge with 97.10%, and only a few of around 2.90% showed adequate knowledge on BSE.<sup>7</sup>

## METHODOLOGY

Research methodology is the backbone of any scientific or academic study. It outlines the specific strategies and tools used to collect, analyze, and interpret data. A well-defined research methodology ensures that a study is conducted systematically, yielding reliable and valid results. It includes the overall framework within which the research is conducted, detailing the methods of data collection and analysis.

Research Approach	Quantitative research
Research Design	Pre-experimental one group pre-test post-test design
Targeted Population	Nursing students of selected nursing college in the metropolitan city
Accessible Population	2 <sup>nd</sup> Year B. BSc. Nursing Students
Sample and Size	30
Sampling Technique	Non – probability convenient sampling technique
Tools of Research	Semi Structured Questionnaire
Collection of Data	Self reported method
Method of Data Analysis and Presentation	Descriptive and Inferential Statistics data presented in the form of table and figure

Method of Data Analysis and Presentation. Descriptive and Inferential Statistics data presented in the form of table and figure.

## FINDINGS AND INTERPRETATION

The findings have been illustrated in the following graphs and tables:

**Table no.2 figure no.3: Distribution of subjects as per the Academic year (n=30)**

ACADEMIC YEAR	NO. OF NURSING STUDENTS	PERCENTAGES
First year basic B.Sc. Nursing	10	33.33%
Second year basic B.Sc. Nursing	10	33.33%
Third year basic B.Sc. Nursing	10	33.33%
<b>Total</b>	<b>30</b>	<b>100%</b>

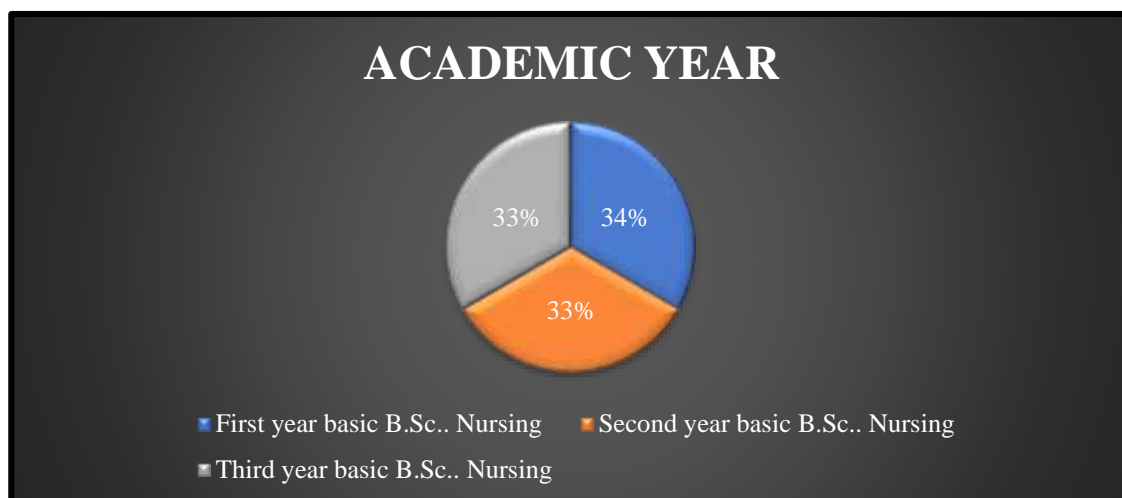


Table no.2 and figure no.3 shows that equal subjects from first year, second year and third year are responses to this study.

**Table no.3 and figure no. 4: Distribution of subjects according to Age of menarche**

Demographic data	Younger than 15 years	15 years or older
Age of menarche	60%	40%

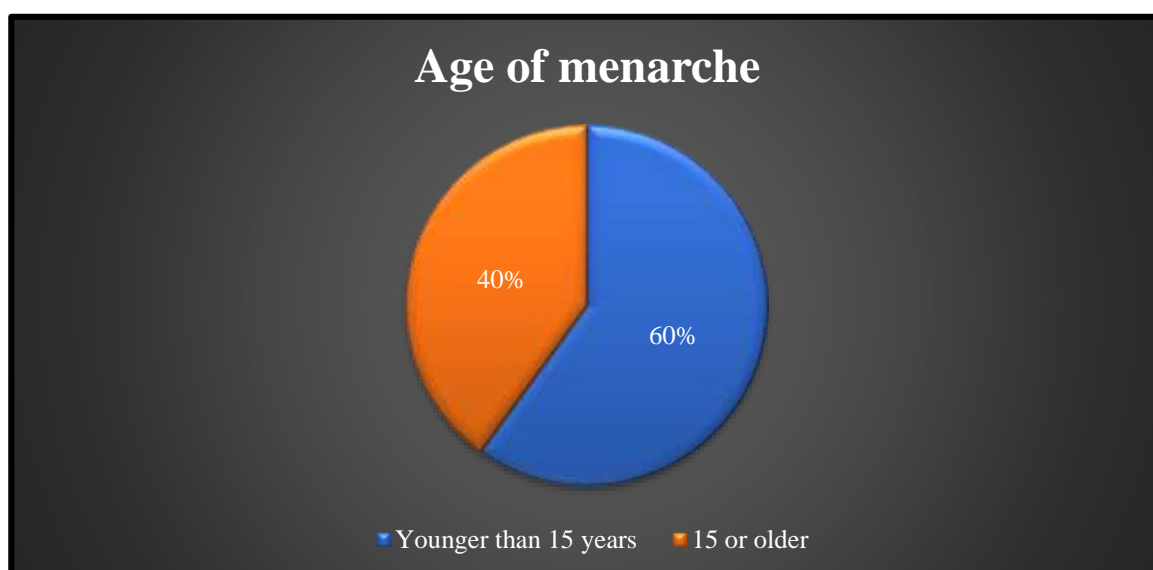


Table no.3 and figure no.4 shows that maximum 60% subject having history of menarche since younger than 15 years whereas 40% were having since 15yrs or older age.

**Table no.4 and figure no.5: Distribution of subjects according to demographic data.**

DEMOGRAPHIC DATA	Yes	No	other
History of breast cancer in family	0%	100%	0%
History of other cancer such as ovarian or prostate in family	0%	96.7%	3.3%
Exposure to information about breast self-examination	66.7%	33.3%	0%

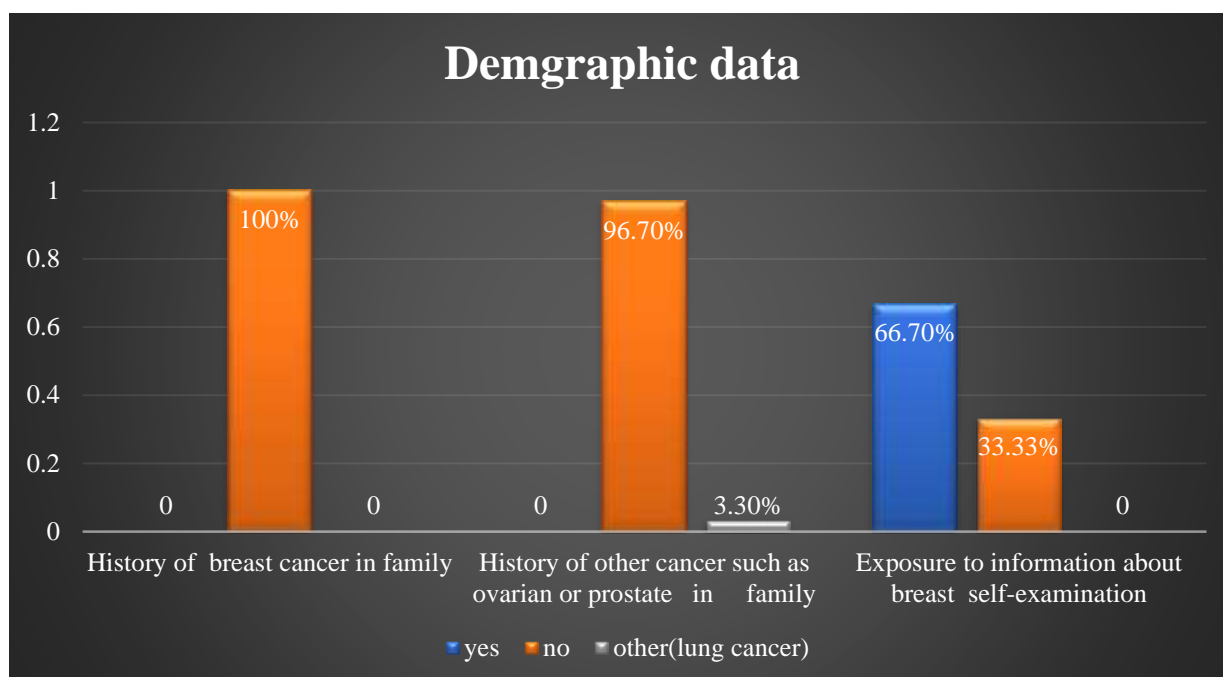


Table no.4 and figure no.5 shows that

- 100% subject don't have any family history of breast cancer.
- 96.7% subject don't have any family History of other cancer such as ovarian or prostate and only 3.3% subject were having history of lung cancer.
- 66.7% subject have been exposed to information about breast cancer whereas 33.3% subject were unaware.

## SECTION I

### KNOWLEDGE ON BREAST CANCER

Table no.5 and figure no.6: Distribution of subjects with regards to Knowledge on breast cancer N=30

Knowledge on breast cancer	PRE-TEST		POST TEST	
	F	%	F	%
Number of lobes are there in each breast	8	26.70%	29	96.70%
When does the breast tissues, vary in consistency	15	50%	29	96.70%
What is malignant tumor	15	50%	30	100%
Who are at high risk for developing of breast cancer	15	50%	29	96.70%
Method of contraception induces breast cancer	11	36.70%	29	96.70%
Risk factor of breast cancer after menopause	14	46.70%	22	73.30%
What are the clinical manifestations of breast cancer	14	46.70%	29	96.70%
What is simplest method to detect breast abnormalities by the person herself	10	33.30%	29	96.70%
Total	102	42.5%	226	94.16%



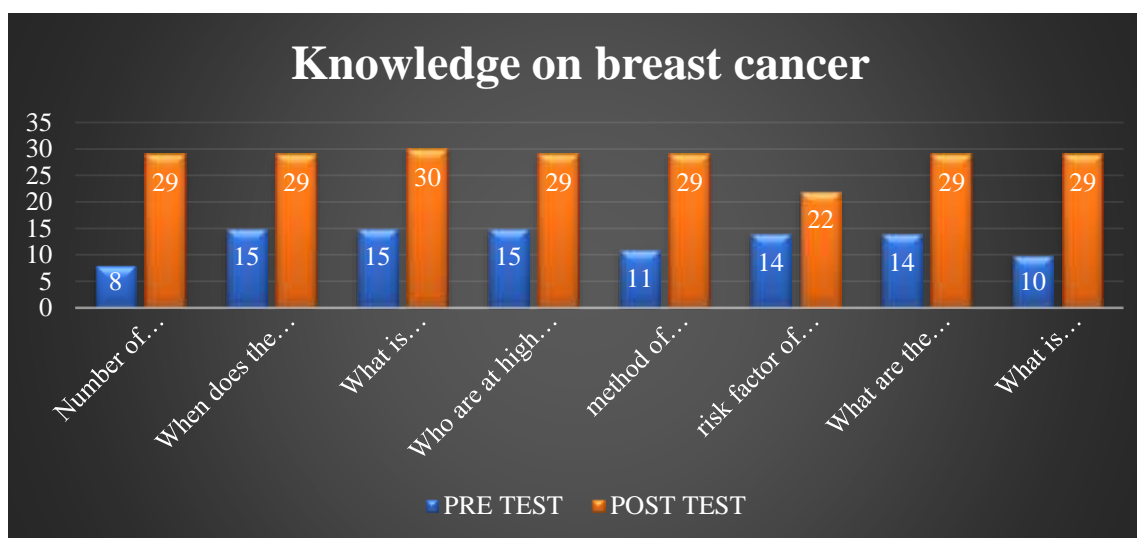


Table no.5 and figure no.6 shows that improvement in knowledge on breast cancer from 42.5% in pretest to 94.16% in post test.

## SECTION II

### KNOWLEDGE ON BREAST SELF-EXAMINATION

Table no.6 and figure no.7: Distribution of subjects with regards to Knowledge on breast self-examination N=30

Knowledge on breast self-examination	PRE TEST		POST TEST	
	F	%	F	%
What is breast self-examination	18	60%	29	96.70%
What is the purpose of breast self-examination	15	50%	29	96.70%
When women should start practicing breast self-examination by herself	13	43.3%	30	100%
When should the post-menopausal women practice breast self-examination	20	66.7%	28	93.3%
How many steps are there in breast self-examination	13	43.3%	29	96.70%
Which is the most appropriate time to perform breast self-examination	12	40%	23	76.70%
Total	91	50.55%	168	93.3%

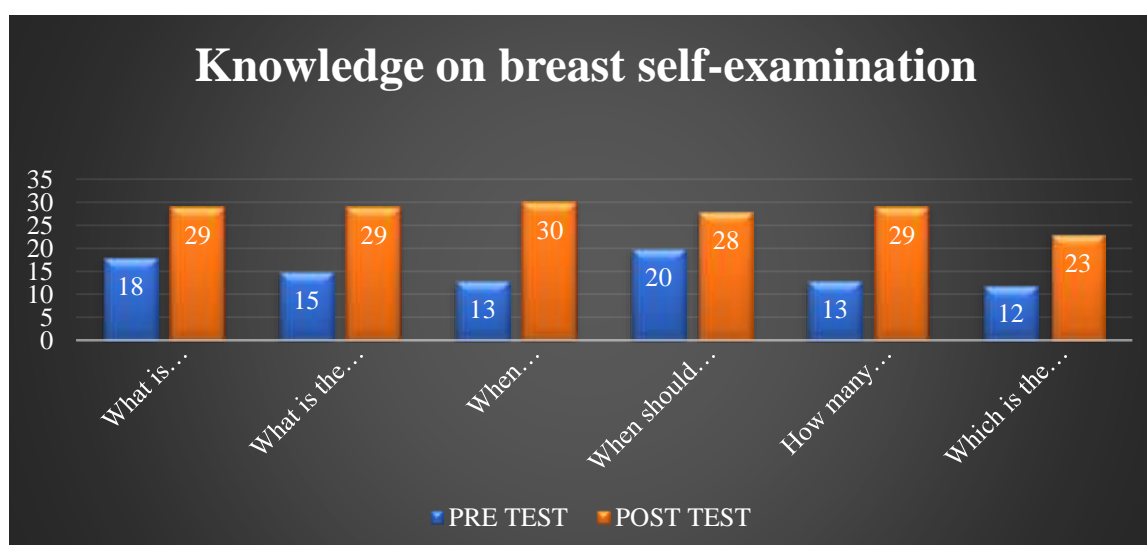


Table 6 and figure no.7 shows that improvement in knowledge on breast-self examination from 50.5% in pretest to 93.3% in post test.

### SECTION III PRACTICES REGARDING TO BREAST SELF-EXAMINATION

Table no 7: Distribution of subjects with practices regarding to breast self-examination N=30

Practices regarding to breast self-examination	PRE TEST		POST TEST	
	F	%	F	%
Which part of the hand helps to practice breast self-examination	10	33.3%	29	96.70%
Which fingers will you use during palpation of the breast	12	40%	29	96.70%
Which position suitable to perform breast self-examination	14	46.7%	30	100%
Which position you will maintain during inspection	15	50%	30	100%
what you should observe while inspecting breast in front of mirror	5	16.7%	30	100%
When you are palpating the right breast in lying down position the pillows should kept under...	15	50%	29	96.70%
What are the changes you will observe during breast self-examination	12	40%	30	100%
When you are doing breast self-examination in the vertical strip pattern involve Moving the fingers in....	16	53.3%	30	100%
When you are practicing breast self-examination, the benign lumps are detected by	4	13.3%	28	93.3%
When you are practicing breast self-examination, the entire breast is covered from...	9	30%	28	93.3%
When you are doing breast self-examination, the superficial tissues of the breasts are felt with....	13	43.3%	29	96.7%
What is the lumps diameter detected in breast self-examination	8	26.7%	28	93.3%
<b>Total</b>	<b>133</b>	<b>36.94%</b>	<b>350</b>	<b>97.2%</b>

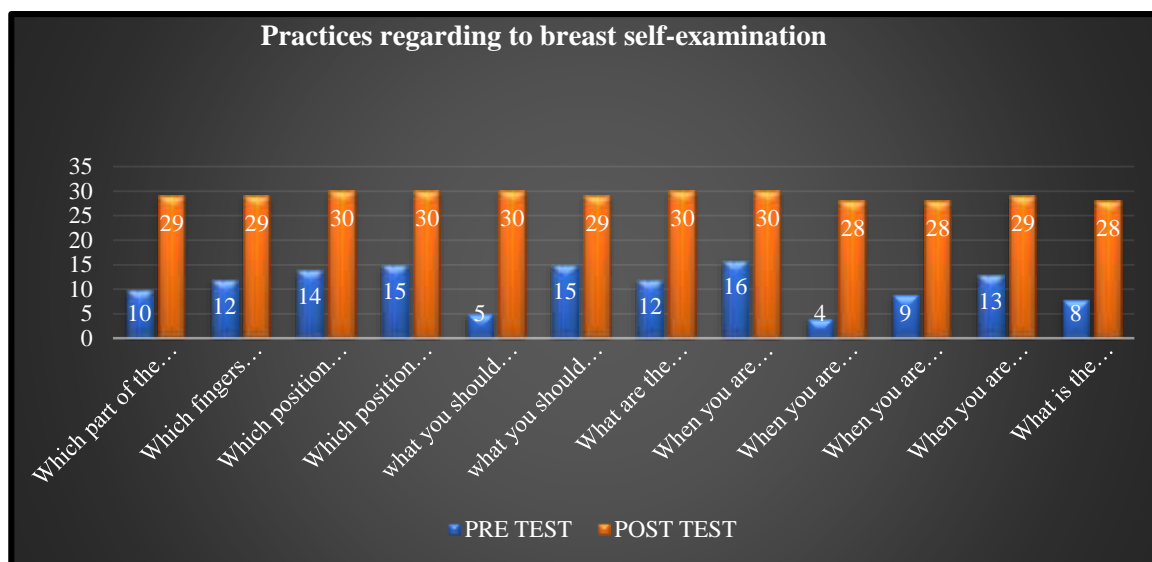


Table no.7 and figure no.8 shows that improvement in practices regarding breast self-examination from 36.9% in pretest to 97.2% in post test.

#### Section-4

##### Part A:

This part deals with analysis of the data to determine the effect of video assisted learning on knowledge and practices regarding breast self-examination. In order to determine the effect of videoassisted learning t value was calculated.

**Table no: 8 Effect of video assisted learning on knowledge and practices regarding breast self-examination**

Sr.No	Areas of knowledge	Pre test		Post test		Calculated t value
		M1	SD	M2	SD	
□	Knowledge and practices regarding Breast self-examination	10.8	3.82	24.8	2.52	16.72

Table no 8 shows that the mean score for knowledge and practices regarding breast self-examination in pretest was 10.8 with a standard deviation of 3.82, whereas the mean score in posttest improved to 24.8, with a lower standard deviation of 2.52. The calculated t-value (**16.72**) indicates a statistically significant improvement in knowledge and practices following the intervention.

#### **PART B:**

This section deals with the analysis and interpretation data to find out the effect of video assisted learning on the knowledge and practices of the samples regarding breast self-examination.

**Table no.9 and Figure no. 9: -Difference between pretest and post test of knowledge and practices score**

TEST	MEAN	STANDARD DEVIATION	MEAN DIFFERENCE	STANDARD ERROR SEDM	T- TEST
PRE-TEST	10.8	3.82	14	0.69	16.72
POST- TEST	24.8	2.52			

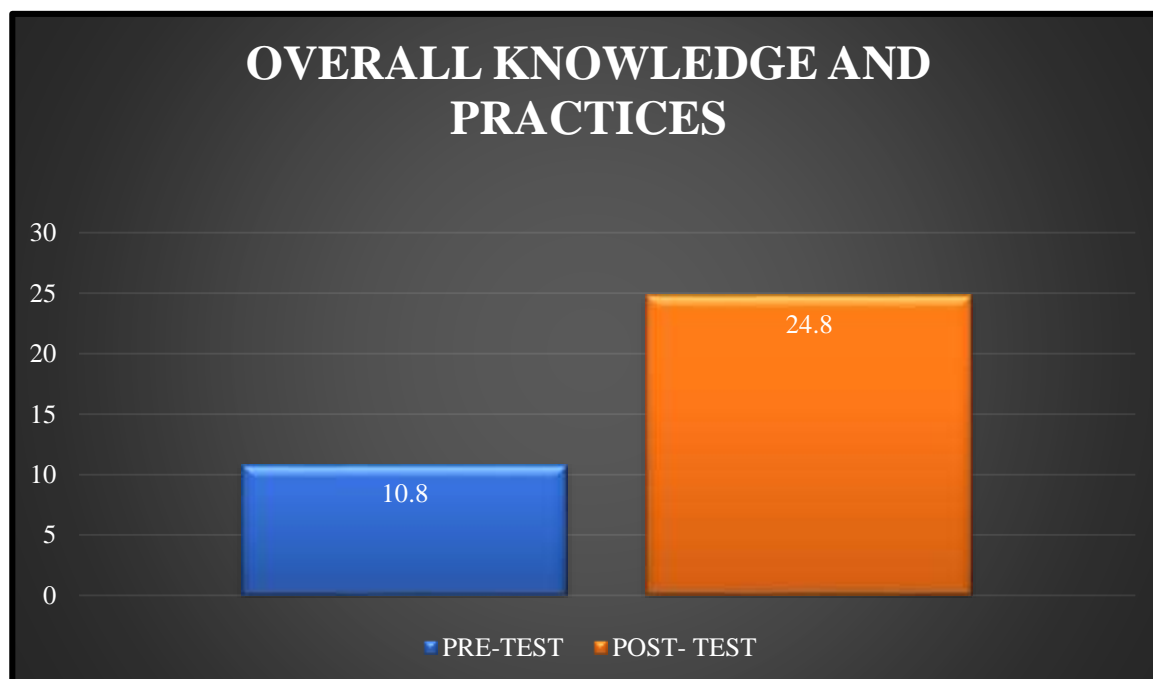


Table no.9 and figure no.9 shows that the post-test mean is significantly higher than the pre-test mean for overall knowledge and practices.

#### **IMPLICATIONS OF THE STUDY**

The findings of the study have implications in nursing service, nursing administration, nursing education, nursing administration and nursing research development cell.

#### **NURSING SERVICE**

The study will help to determine the knowledge and practices of basic B.Sc. Nursing about the breast self- examination.



### **NURSING ADMINISTRATION**

The finding will help the nurse administrator to plan in service education program about breast self-examination or video assisted techniques for delivering knowledge on various other aspects at the clinical setting.

### **NURSING EDUCATION**

The finding of the study may help student to improve their knowledge of breast cancer, and practices of breast self-examination.

The finding of the study may help student to improve their health.

The findings of the study may help to improve student's communication skill.

The findings of the study may help to improve student's attitude regarding breast self-examination.

### **NURSING RESEARCH**

This study will help to progress to remaining aspects of Breast cancer awareness or Breast self-examination techniques for new research studies.

### **RESULT**

The findings of the study were analyzed using frequency and percentage among 30 samples. 100% samples were female. It was concluded that the video assisted learning is effective on knowledge and practices and the comparison done regarding breast self-examination among the nursing students. The calculated t value was found to be 16.72 for knowledge and practices regarding breast self-examination. The mean of pretest is 10.8 and post-test mean is 24.8. The knowledge of nursing student related to breast self-examination is improved.

### **CONCLUSION**

During the study it was observed that the students with no knowledge of breast self-examination had increased their knowledge and practices with the help of video assisted learning. The objectives of the study were effective and based on it the knowledge and practices were well develop. Breast cancer and self-breast examination awareness campaigns or informatics are therefore necessary to improve early breast cancer detection.

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