# Effectiveness of Structure Teaching Programme on Knowledge Regarding Primary Prevention of Breast Cancer among Staff Nurses

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## Abstract

**Introduction:** Breast cancer is the $5^{th}$ leading cause of cancer death. Primary Prevention of breast cancer play crucial role to prevent cancer death caused due to breast cancer. It is needed to flourish nurse's knowledge about primary prevention of breast cancer as Nurse Play vital role to aware people in community and in hospital setting. This study has focused to assess effectiveness of structure teaching programme regarding primary prevention of breast cancer.

**Material and method:** By using non probability purposive sampling technique, data was collected from 40 staff nurses by using structured questionnaires of 20 items on primary prevention of breast cancer. One group pre-test post-test design gets adapted. 't' test used to figure out difference between pre and post-test knowledge score.

**Result:** in pre-test, 16 (40%) samples were with excellent knowledge score about primary prevention of breast cancer while, in post-test all 40(100%) samples shown excellent score. The 't' value of oversell knowledge was 10.68 and mean difference between pre and post-test for over all knowledge was 4.7.

**Conclusion:** the study revealed that structure teaching programme is one of the effective methods to improve knowledge regarding primary prevention of breast cancer among staff nurses.

**Keywords:** Primary prevention • Breast cancer • Structure teaching programme

## Introduction

Breast cancer form in cell of breast and result in uncontrolled growth of breast. Both men and women may affect by breast cancer however, it is more common in women [1].

Every 4 minutes one woman gets diagnosed with breast cancer whereas, every 13 minutes one woman dies due to breast malignancy in India [2].

Breast cancer statistic of 2018 has reported 1,62,468 new registered cases and 87,090 reported deaths in the country [3].

There is strong need of awareness about breast cancer and its primary prevention among general population, because awareness is only the key of early detection and better health seeking behaviour [4].

Nurses can play crucial role to aware people regarding primary prevention of breast cancer which can focus to adopt healthy lifestyle and behaviour like maintaining weight, reducing stress, smoking and alcohol consumption, breastfeeding and preferring balanced diet [5].

Structure teaching programme is the well planned intervention to enlighten the knowledge regarding certain topic among study subjects. This is one of the best teaching methods which can help to convey well organized information to the study topic and to give an insight into certain topic in easy way [6].

### Need of study

Breast cancer is turning out to be a global burden by developing physical, emotional and financial strain on patients as well as on health care system [7].

According to the World Health Organization (WHO), lifestyle is a route cause to develop 30-40% burden of cancer and ultimately sedentary lifestyle, smoking, overweight, fast food, excessive alcohol consumption, obesity are responsible for it. However, advanced aging and female sex are the biggest risk factor for breast cancer [8].

Primary prevention of breast cancer help to reduce risk and threats to health by preventing uncontrollable growth of breast cells before it's occur [9].

Health promotion and risk reduction are important elements of primary prevention to reduce risk of invasive cancer which involve diet and lifestyle modification, cessation of smoking and vitamins supplementation [10].

Nurses are the backbone to spread awareness among general population hence it is necessary to educate nurses about all ins and out of breast cancer and its prevention [11].

Structure teaching programme is one of the effective methods in education which help to convey and enlighten the knowledge of nurses. Hence this study has focused to assess the effect of structure teaching programme on knowledge regarding primary prevention of breast cancer [12].

### Objectives

**Primary objectives:** To assess the effectiveness of the structured teaching programme on knowledge regarding primary prevention of breast cancer among staff nurses from selected hospitals.

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## Secondary objectives:

1. To assess the pre-test knowledge score regarding primary prevention of breast cancer among staff nurses from selected hospitals.

2. To assess the post-test knowledge score regarding primary prevention of breast cancer among staff nurses from selected hospitals.

3. To compare the pre and post-test knowledge score regarding primary prevention of breast cancer among staff nurses from selected hospitals.
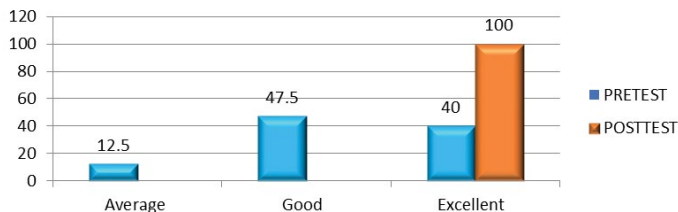
## Material and Method

By using non probability purposive sampling technique, 40 staff nurses from selected hospitals of Chandrapur, Maharashtra has involved in this study. We have adopted one group pre-test and post-test design to conduct this study. Approval obtained from higher authority and ethical committee of institution and also informed consent had taken from study subjects. Structured questionnaires of 20 multiple choice items constructed on primary prevention of breast cancer which get used to collect pre-test data and post test data after structure teaching programme, from study subjects.

## Result

Data in Graph.1 and Table.1 revealed overall knowledge level regarding primary prevention of breast cancer. Out of 40 samples 5 (12.5%) samples had average knowledge in pre-test and 19 (47.5%) students had good knowledge in pretest regarding topic.16 (40%) students had excellent knowledge in pretest which subsequently increased to 40 (100%) in post-test.

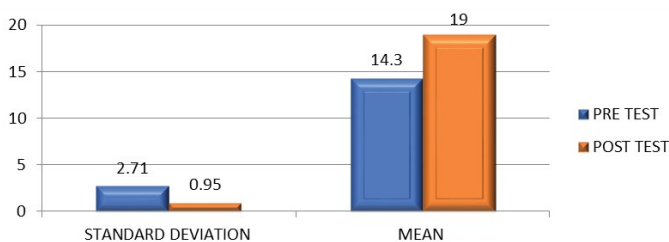Graph.2 and Table.2 display the comparison of overall pre and post-test knowledge score regarding topic.

Before calculating t value null hypothesis (HO1) and alternative hypothesis (H1) was stated. The table t value for 0.05 level of significance was 2.02 for degree of freedom 39.



**Graph 1.** Overall knowledge level regarding primary prevention of breast cancer (N=40).

**Table 1.** Overall knowledge level regarding primary prevention of breast cancer.

| Sr. No | Knowledge level | Pre-test | | Post-test | |
|---|---|---|---|---|---|
| | | F | % | F | % |
| 1 | Poor (0 – 5) | 0 | 0 | 0 | 0 |
| 2 | Average (6 – 10) | 5 | 12.5 | 0 | 0 |
| 3 | Good (11 - 15 ) | 19 | 47.5 | 0 | 0 |
| 4 | Excellent (16 - 20) | 16 | 40 | 40 | 100 |
| | **Total** | 40 | 100 | 40 | 100 |



**Graph 2.** Effect of structure teaching programme on overall knowledge of sample (N=40).

**Table 2.** Effect of structure teaching programme on overall knowledge of sample.

| Comparison of knowledge | | Mean | S.D. | M.D. | SEMD | t value | P value | Significance at 5% |
|---|---|---|---|---|---|---|---|---|
| Overall knowledge | Pre-test | 14.3 | 2.71 | 4.7 | 0.44 | 10.68 | < 0.00 | Yes |
| | Post-test | 19 | 0.95 | | | | | |

Calculated t value was found to be 10.68 for overall knowledge regarding topic. As calculated t value is greater that table t value at 0.05 level so alternative hypotheses (H1) is accepted. Post-test mean (19) is higher than pre-test mean (14.3). And this suggests that structure teaching programme support to improve knowledge regarding primary prevention of breast cancer among undergraduate nursing students.

## Conclusion

The study was conducted to assess effectiveness of structure teaching programme on knowledge regarding primary prevention of breast cancer among staff nurses from selected hospitals.

The study depict that staff nurses had somewhat knowledge regarding primary prevention of breast cancer but after structure teaching programme on the same topic their knowledge get improved to full extent.

## Recommendation

1. Similar study can be conducted to educate general population in community and hospital setting

2. Similar study could conducted on nursing students

3. For wider generalizations a similar study can be conducted on larger samples

## Acknowledgement

## Conflict of Interest

No conflict of interest.

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