



# **“A STUDY TO EVALUATE THE EFFECT OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING BREAST CANCER AMONG WOMEN IN SELECTED RURAL AREA AT AHMEDABAD.”**

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## **ABSTRACT**

### **Background**

The women in rural area lacked knowledge regarding breast cancer. The study was designed to evaluate the effect of structured teaching programme on knowledge regarding breast cancer among women in selected rural area at Ahmedabad.

### **Aim**

This study aimed to evaluate the effect of structured teaching Programme on knowledge regarding Breast cancer among women in Selected rural area at Ahmedabad.”

### **Objectives of the study were,**

- To evaluate the pre-test knowledge regarding breast cancer among women in selected rural area at Ahmedabad.
- To evaluate the post-test knowledge regarding breast cancer among women in selected rural area at Ahmedabad.
- To evaluate the effect of structured teaching programme on breast cancer.
- To find out the association between pre-test knowledge score regarding breast cancer with selected demographic variables.

### **Methods**

Pre-experimental one group pre-test and post-test design with the aid of a questionnaire schedule was conducted among 60 women in selected rural area at Ahmedabad. The pre-test knowledge was assessed using structured knowledge questionnaire.

### **Result**

Out of 60 women, most of the participants gained knowledge about breast cancer. The mean Pre-test score was 11.85 and the mean post -test score was 18.63. The mean post-test knowledge score is significantly higher than the mean pre-test knowledge score with the mean difference of 6.78 and the calculated “t” value ( $t=38.803$ ) as greater than tabulated “t” value ( $t=1.98$ ) which was significantly proved at 0.05 level of significance. Therefore, the null hypothesis was rejected and research hypothesis was accepted and it revealed that the structured teaching program was effective in increasing knowledge regarding breast cancer among women in selected rural area at Ahmedabad.

### **Conclusions**

The study concluded that structured teaching programme was an effective strategy in improving the knowledge regarding breast cancer among women in selected rural area at Ahmedabad.

**Key words**

Evaluate, effect, structured teaching programme, knowledge, breast cancer, women.

**INTRODUCTION**

Women are the female human being that can produce eggs and offspring. In many cultures, the female breast is a potent symbol of beauty, motherhood, vitality and sexuality. Any actual or suspected disease or injury affecting the breast tends to reflect the prevailing societal view of the breast. The Breast is an accessory organ that is made up of specialized tissue that produces milk.

Cancer is a malignant growth or tumour resulting from an uncontrolled division of cells and destroy the body tissues. There are different types of gynaecologic cancers. The top five cancers affecting women are breast cancer, Cervical cancer, Ovarian cancer, Vaginal cancer, Vulval cancer, Uterine cancer.

The term "breast cancer" refers to a malignant(cancerous) tumour that has developed from cells in the breast. Cancer begins when healthy cells in the breast change and grow out of control and forming a mass or sheet of cells called a tumour. A tumour can be cancerous or benign. A cancerous tumour is malignant, meaning it can grow and spread to other parts of the body. A benign tumour means the tumour can grow but will not spread. Breast cancer cells usually form a malignant tumour.

Breast cancer was the most common cancer in women worldwide, contributing 25.4% of the total number of new cases diagnosed in 2018. Breast cancer is the most common cancer in women in almost all countries worldwide. It is a leading cause of cancer death both in the developed and less developed countries. Breast cancer is a major global disease happening in many women and it became a leading root of mortality among women. It is the most common malignancy of women worldwide associated with a high level of mortality and morbidity.

**Objectives of the study were,**

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- To evaluate the post-test knowledge regarding breast cancer among women in selected rural area at Ahmedabad.
- To evaluate the effect of structured teaching programme on breast cancer.
- To find out the association between pre-test knowledge score regarding breast cancer with selected demographic variables.

**Methods**

A Pre-experimental one group pre-test and post-test design with the aid of a questionnaire schedule was conducted in 2021 among 60 women in selected rural area at Ahmedabad. The pre-test knowledge was assessed using structured knowledge questionnaire. The researcher developed a structured knowledge questionnaire for the evaluation of the pre-test and post-test effect of structured teaching programme on knowledge regarding breast cancer. A brief description of the study objectives was explained, and by convenience, those who agreed to respond to the questionnaire written consent is taken. Incomplete questionnaire dropped out. Participants who are not willing to participate were excluded. Participation was voluntary with assurance about the confidentiality of their information, as no identifiers or personal information were collected. The data collection tool comprised of two sections, The researcher prepared a demographic profile and structured knowledge questionnaire to evaluate the effect of structured teaching programme on knowledge regarding breast cancer among women in a selected rural area at Ahmedabad.

Section A: - Demographic data which gives baseline information obtained from rural women such as age, educational status, occupation, Previous knowledge of breast cancer, from which source do you gain information.

Section: B Structured knowledge questionnaire consist of 30 items and the maximum score was 30. Every correct answer was given a score of one (1) and the wrong answer was given a score of zero (0). The response given by the samples is address by putting tick marks [√]. The answer key for a structured knowledge questionnaire prepared by the researcher.

**Result**

Among 60, distribution of samples by age, majority of the samples 27 (45.0%) belong to the age group of 19-25 years, 16 (26.7%) samples belong to the age group of 26- 30 years, 16 (26.7%) belong to the age group of 31-35 years and 1(1.7%) 18 years. Distribution of samples according to educational status, majority of the samples 28 (46.7%) were graduation and above, 18 (30%) were primary & secondary school level and 14 (23.3%) were higher secondary school level. As regard occupation the majority of the samples 25 (41.7%) were housewives, 25 (41.7%) were other, 6 (10%) having a private job, 4 (6.7%) having a government job. As about previous knowledge of breast cancer majority of sample 60 (100.0%) were knowing about breast cancer. Distribution of samples according to from which source do you gain information, majority of the samples 29 (48.3%) having information from a health professional, 13 (21.7%) having information from mass media, 11 (18.3%) having information from family/ friends. 7 (11.7%) having information from social media.

**Table: 1 Analysis and interpretation of demographic variables of the samples**

Sr. No	Demographic variable	Frequency	Percentage (%)
1	<b>Age</b>		
	A 18 years	01	1.7
	B 19-25 years	27	45.0
	C 26-30 years	16	26.7
	D 31-35 years	16	26.7
	<b>Total</b>	<b>60</b>	<b>100.0</b>
2	<b>Educational status</b>		
	A no formal education	00	00
	B primary / secondary school level	18	30.0

	C higher secondary school level	14	23.3
	D graduation and above	28	46.7
	<b>Total</b>	<b>60</b>	<b>100.0</b>
<b>3</b>	<b>Occupation</b>		
	A housewife	25	41.7
	B private job	6	10.0
	C government job	4	6.7
	D other	25	41.7
	<b>Total</b>	<b>60</b>	<b>100.0</b>
<b>4</b>	<b>Previous knowledge of breast cancer</b>		
	A yes	60	100.0
	B no	00	00
	<b>Total</b>	<b>60</b>	<b>100.0</b>
<b>5</b>	<b>From which source do you gain information?</b>		
	A family members/ friend		
	B mass media (tv, radio, newspaper)	11	18.3
	C health professionals	13	21.7
	D social media	29	48.3
		7	11.7
	<b>Total</b>	<b>60</b>	<b>100.0</b>

Table: 2 analysis and interpretation of the data related to association of demographic variables with pre-test score knowledge.

Demographic variable		Pre-total		Total	Fishers' chi square	Df	Table value	Sig/non-sig
		Average	Poor					
Age in years	18	1	0	1	10.383	3	7.82	S
	19-25	16	11	27				
	26-30	16	0	16				
	31-35	11	5	16				
Educational status	Primary & secondary school level	13	5	18	8.223	2	5.99	S
	Higher secondary school level	14	0	14				
	Graduation and above	17	11	28				
Occupation	Housewife	20	5	25	6.758	3	7.82	Ns
	Private job	6	0	6				
	Govt. Job	4	0	4				
	Other	14	11	25				
Previous knowledge of breast cancer	Yes	4	2	6	Can't be computed			
From which source do you gain information	Family members/ friends	7	4	11	4.541	3	7.82	Ns
	Mass media (tv, radio, newspaper)	11	2	13				
	Health professionals	19	10	29				

	Social media	7	0	7				
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The study represents There was a significant association between Age, Educational status and pre-test knowledge score and there is no significant association between demographic variable occupation and from which source do you gain information and pre-test knowledge score.

## Discussion

The finding suggests, the mean post-test knowledge score was higher than the mean pre-test knowledge score. Hence it was proved that the Structured Teaching Programme was effective in increasing knowledge regarding breast cancer among women in selected rural area at Ahmedabad. There was a significant association between Age, Educational status and pre-test knowledge score. Hence it was concluded that there is no significant association between demographic variable occupation and from which source do you gain information and pre-test knowledge score.

## Conclusion:

The study concluded that structured teaching programme was an effective strategy in improving the knowledge regarding breast cancer among women in selected rural area at Ahmedabad.

**Conflict of interest:** The authors declare that they have no competing interests.

## Ethics declarations

Ethics approval and consent to participate

JG College of nursing reviewed this study and granted ethical approval. A consents form has been obtained from participants.

## Consent for publication

Written consent for publication was obtained from each participant.

## List of references:

### Books

1. Basavanthappa BT. Text book of Midwifery and Reproductive Health Nursing. 1 st ed. New Delhi: Jaypee Brother Publication; 2006.
2. Basavanthappa BT. The text book of Nursing Research. 2nd ed. New Delhi: Jaypee Brothers Medical Publishers; 2007.
3. Best WJ, Kahn VJ. Research in Education. 6 th ed. New Delhi: Prentice Hall of India; 1999.
4. Burns RB. Introduction to Research Methods. 4 th ed. New Delhi: SAGE Publications; 2000.
5. Dutta DC. Text book of Obstetrics. 6th ed. Calcutta: New central book agency publication; 2004.
6. Hesook Suzie Kim, Ingrid Kollak. Nursing Theories, conceptual & Philosophical Foundations. Second edition. New York: Springer Publishing Company;2006.
7. Jacob A. A Comprehensive text book of Midwifery.1st ed. New Delhi: Jaypee Brother Medical Publication; 2005.
8. Kumari N. Midwifery and Gynaecological Nursing. 1st edition. Jalandhar city: Svikas and company; 2010.
9. Mahajan B.K. Method in Biostatistics, for Medical Students and Research Workers. 6th ed. New Delhi: Jaypee Brothers; 1997.
10. Marshall J, Raynor M. Myles Textbook for Midwives. 16th ed. China: Churchill Livingstone Elsevier; 2014.
11. Marilyn E. Parker. Nursing Theories and Nursing Practice. Second edition. Philadelphia: F. A. Davis Company;2005.
12. Marlaine C. Smith, Marilyn E. Parker. Nursing Theories and Nursing Practice. Fourth Edition. Philadelphia: F. A. Davis Company;2015.
13. Melanie McEwen, Evelyn M. Wills. Theoretical Basis for Nursing, Fourth Edition. Philadelphia: Wolters Kluwer health;2014.
14. Polite D, Hungler BP. Nursing Research Principles and Methods. Philadelphia: J.B. Lippincott Co; 1986.
15. Polit DF, Hungler BP. Nursing Research-principles and Methods. 4 th ed. Philadelphia: J.B Lippincott Co; 1991.
16. Polit DF, Hungler BP. Nursing Research. 5th ed. Philadelphia: J.B. Lippincott Co; 1999.
17. Sharma SK. Nursing Research & Statistics. 2nd ed. Rishikesh (Uttarakhand): Elsevier (A division of RELX India Pvt Ltd); 2016.
18. Treece and Treece. Research in Nursing. 4th edi. St. Louis: C.V. Mosby Co; 1986.



**E-JOURNAL**

- 1) Anjana Tiwari, Mamta Naik (2018) Effectiveness of structured teaching program on knowledge and practice regarding breast self-examination among college girls in a selected college of Bhilai, Chhattisgarh, India. International journal of community medicine and public health.
- 2) Amal bakr abo El-Ata et al, effect of a health education program about breast cancer and BSE on the knowledge and practices of female employees. Journal of health, medicine and nursing ISSN 2422- 8499, vol 23,2016.
- 3) Ahuja. S, Chakrabarti. N. To Determine the Level Of Knowledge Regarding Breast Cancer And To Increase Awareness About Breast Cancer Screening Practices Among A Group Of Women In A Tertiary Care Hospital In Mumbai, India. The Internet Journal of Public Health. 2010. 1(1). DOI: 10.5580/1b7c.
- 4) Austoker J Bankhead C Forbes LJ et al. Interventions to promote cancer awareness and early presentation: systematic review. Br J Cancer 2009; 101(Suppl. 2): S31–9.
- 5) Andrew Lee MSci, CASM, Nasim Mavaddat MBBS, PhD (2019) a comprehensive breast cancer risk prediction model incorporating genetic and nongenetic risk factors Journal of genetics in medicine,1708-1718.
- 6) Dolly Sharma, Manna Debnath, (2019) A Survey Study on Breast Cancer Awareness Among Secondary, Higher Secondary Female Students and Teachers of Different Schools in Anand District. International Journal of Pharmaceutical and Clinical Research 101-105.
- 7) John molly, P mercy, Effectiveness of a structured teaching programme on knowledge of breast cancer and skill of breast self-examination: a quasi- experimental study in rural women, January 2016 International Journal of Community Medicine and Public Health.
- 8) Kazi S. Manir, Anindya Mukhopadhyay, Debanti Banerjee. Breast Cancer Awareness among Urban Indian Women: An Internet Survey. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS). e-ISSN: 2279-0853.
- 9) Knowledge and Practice of Breast Self-Examination among female undergraduates in South-Eastern Nigeria, American Journal of Public Health Research,2015;1(3):1134-1141.
- 10) Linsell L, Forbes L, Burgess C, Kapari M, Thurnhan A, Ramirez A (2010). Validation of a measurement tool to assess awareness of breast cancer. European Journal of Cancer,46, 1374-1381.
- 11) Mena M Wiafe-Addai B Sauvaget C et al. Evaluation of the impact of a breast cancer awareness program in rural Ghana: a cross-sectional survey Int J Cancer2014; 134:913–24.
- 12) N N Chate, S B Deshmukh, (2017) Awareness of Breast Cancer Risk Factors among Nurses in a Tertiary Rural Health Care Centre in India, IJSS journal of surgery.
- 13) Smrithi Maniraj, Angusubalakshmi R (2019) A study of awareness and practices regarding breast cancer among women of self-help groups in rural Puducherry, National journal of research in community medicine.
- 14) Smith R.A, Caleffi, M., Albert, U.S Tony H.H C, & Stegen, W. D. (2006). Breast cancer in limited resource countries: Early detection and access to care. The breast Journal,12(suppl.): S16-S26

**NET REFERENCE**

- > Breast cancer cases deaths per year in US and in world. [www.imaginis.com](http://www.imaginis.com)
- > Breast cancer statistics. [www.breastcancer.org](http://www.breastcancer.org).
- > Breast self-examination. [www.wikipedia.com](http://www.wikipedia.com)
- > Breast self-examination. [www.breastcancerpreventionfund.org](http://www.breastcancerpreventionfund.org).
- > The importance of breast self-examination. [www.mta.ca.com](http://www.mta.ca.com)
- > Breast cancer cases on the rise. [www.articles.indiatimes.com](http://www.articles.indiatimes.com)
- > The importance of breast self-exams. [www.cyfairhospital.com](http://www.cyfairhospital.com)
- > Breast self-examination training through the use of multimedia: a bench mark multimedia development methodology for bio medical applications. [www.dtic.mil.com](http://www.dtic.mil.com).
- > The komen foundation. [www.komen.org](http://www.komen.org).
- > The memorial Sloan - Kettering cancer centre. [www.learnbse.com](http://www.learnbse.com)
- > Routine Physician Examinations on Breast-Cancer Mortality. [www.newenglandjournalofmedicine.org](http://www.newenglandjournalofmedicine.org)
- > The knowledge and practice of breast self-examination and mammography in a group of women in a rural area in western Turkey. [www.biomedcentral.com](http://www.biomedcentral.com).
- > Patient education and counseling. [www.dx.doi.org](http://www.dx.doi.org).
- > Breast self-examination abstract. [www.scribd.com](http://www.scribd.com)
- > [www.anpublication.org](http://www.anpublication.org)
- > Television as a patient education tool: A review of its effectiveness. [www.sciencedirect.com](http://www.sciencedirect.com)
- > [www.google.com](http://www.google.com)
- > [www.breastcancerindia.com](http://www.breastcancerindia.com)
- > URL:<http://www.pubmed.com/21545196>.
- > URL:<http://www.pubmed.com/9361639/1228347>.
- > URL:<http://www.pubmed.com/12581112>

- > URL:<http://www.pubmed.com/16504119/1403793>
- > URL:<http://www.pubmed.com/1844220>
- > <http://www.Breast cancer.org/illustrations/i0020.html>
- > [www.jsirjournal.com](http://www.jsirjournal.com)
- > <https://www.mayoclinic.org/diseases-conditions/breast-cancer/symptoms-causes/syc-20352470>
- > <https://www.medicalnewstoday.com/articles/37136>
- > <https://www.cancer.gov/types/breast>
- > <https://www.healthline.com/health/breast-cancer>
- > [https://www.cdc.gov/cancer/breast/basic\\_info/what-is-breast-cancer.htm](https://www.cdc.gov/cancer/breast/basic_info/what-is-breast-cancer.htm)
- > <https://www.webmd.com/breast-cancer/understanding-breast-cancer-basics>
- > <https://www.breastcancer.org/>
- > [https://en.wikipedia.org/wiki/Breast\\_cancer](https://en.wikipedia.org/wiki/Breast_cancer)
- > <https://timesofindia.indiatimes.com/city/ahmedabad/13-rise-breast-cancer-cases-in-three-years/articleshow/72552522.cms#:~:text=AHMEDABAD%3A%20The%20data%20tabled%20on,India's%20average%20is%2012.4%25.>
- > <https://acsjournals.onlinelibrary.wiley.com/doi/10.3322/caac.21660>
- > <https://www.cancer.gov/about-cancer/understanding/statistics>
- > <https://acsjournals.onlinelibrary.wiley.com/doi/10.3322/caac.21492>
- > <https://www.biospectrumindia.com/views/21/15300/statistical-analysis-of-breast-cancer-in-india.html>
- > <https://www.who.int/news-room/fact-sheets/detail/breast-cancer>

