Indian Journal of Holistic Nursing
Volume 13, Issue 4 - 2022, Pg. No. 8-13
Peer Reviewed & Open Access Journal

Research Article

Effectiveness of Video-assisted Teaching Programme on Knowledge regarding Breast Self-examination among BSc Nursing 2nd Year Students of MMINSR, SKIMS, Soura

Diksha Kumari[1], Munira Kachroo[2], Khurshida Akhtar[3]

[1]MSc Student, [2]Principal & Guide, [3]Tutor & Co-guide, Mader-e-Meharban, Institute of Nursing Sciences and Research, SKIMS, Soura, Srinagar, Jammu and Kashmir, India.
DOI: https://doi.org/10.24321/2348.2133.202215

I N F O

Corresponding Author:
Diksha Kumari, Mader-e-Meharban, Institute of Nursing Sciences and Research, SKIMS, Soura, Srinagar, Jammu and Kashmir, India.
E-mail Id:
dikshabhagat0306@gmail.com
Orcid Id:
https://orcid.org/0009-0000-2662-1225
How to cite this article:
Kumari D, Kachroo M, Akhtar K. Effectiveness of Video-assisted Teaching Programme on Knowledge regarding Breast Self-examination among BSc Nursing 2nd Year Students of MMINSR, SKIMS, Soura. Ind J Holist Nurs. 2022;13(4):8-13.

Date of Submission: 2022-10-08
Date of Acceptance: 2022-10-23

A B S T R A C T

Background: The goal of breast self-examination for women is to notice changes in the breast that should be brought to the attention of physicians for further evaluation. These include breast lumps, changes in breast shape, size, or contour, and colour of breast and nipple.

Objectives: To assess the pre-test and post-test knowledge level regarding breast self-examination among BSc Nursing 2nd year students of MMINSR, SKIMS, Soura, to compare pre-test and post-test knowledge scores regarding breast self-examination among BSc Nursing 2nd year students of MMINSR, SKIMS, Soura, and to determine the association of pre-test knowledge scores regarding breast self-examination among BSc Nursing 2nd year students with selected demographical variables.

Methodology: Pre-experimental one-group pre-test post-test design was used. The setting chosen for the present study was MMINSR, SKIMS, Soura, Srinagar, Kashmir. The current study included 50 BSc Nursing 2nd year students selected by purposive sampling technique. A self-structured questionnaire was used.

Results: The pre-test showed that 62% of participants had moderate knowledge, 38% had inadequate knowledge, and none of the subjects had adequate knowledge. The post-test revealed that 86% had adequate knowledge, 14% had moderate knowledge, and none of the study subjects had inadequate knowledge.

Conclusion: Pre-test findings concluded that the study subjects had moderate knowledge regarding breast self-examination. So, there was a need to make them aware by educating them regarding breast self-examination.

Keywords: Knowledge, Breast self-examination, Video-assisted Teaching Programme, BSc Nursing 2nd Year Students

Introduction

Breast is a symbol of feminity, beauty, sexuality and motherhood. So any disease associated with breasts, most commonly cancer of the breast, is a life-threatening disease as it affects the organ intimately associated with self-image, and reproductive and nurturing capacity.[1] Breast cancer is a leading type of cancer worldwide. In 2020, there were 2.3 million women diagnosed with breast cancer and 685000 deaths globally. Epidemiological studies have shown that the global burden of breast cancer is expected to cross almost 2 million by the year 2030.[2] In concern to women's health, breast carcinoma is considered to be emerging as a leading type of cancer next to cervical cancer in women. Breast cancer is the second leading cause of death among women. According to current studies, 226 confirmed cases of breast cancer among women were recorded for the Sher-I-Kashmir Institute of Medical Sciences Soura, Srinagar. Approximately 66% of breast cancer patients were having local-stage breast cancer, 28% have a regional stage, and 6% have distant (metastatic) diseases.[3] The minimum and maximum ages of the cases were 19 years and 78 years respectively. With the increase in age, there is an increase in breast cancer incidence. Current trends point out that a higher proportion of the disease occurs at a younger age in Indian women, as compared to the west.

The survival rate of patients with breast cancer is poor in India as compared to Western countries due to earlier age of onset, late stage of disease at presentation, delayed initiation of definitive management, and inadequate/ fragmented treatment.[4] According to World Cancer Report 2020, the most efficient intervention for breast cancer control is early detection and rapid treatment. Breast cancer is the most common cancer among women worldwide and it accounts for 1/10th of all deaths per year all over the world. Majority of all breast cancer deaths occur in developing countries. Despite advancements and multifold improvements in scientific knowledge, presently there is no known method for the primary prevention of breast cancer. Therefore early detection and treatment of breast cancer, as a secondary preventive measure, seems to be the most effective approach for reducing mortality due to breast cancer and for improving quality of life. There is sound evidence that the recent decline in cancer mortality observed in several countries like North America, Western Europe, and Australia is mainly due to the improvement in early detection and treatment programmes. Breast cancer programmes were organised in many countries at both national and international levels.[5] A number of screening programmes have been developed for the early detection of breast cancer, namely mammography, clinical breast examination, breast self-examination, MRI, CT, USG and various tissue sampling procedures. Among these screening tests, breast self-examination is the simplest and the easiest method for early detection of breast cancer. The International Agency for research of cancer recommends that early detection through screening, particularly for cervical and breast cancers, allows for prevention and successful cure. At present, a simple, private, inexpensive and early intervention for the detection of breast cancer is breast self-examination. Regular breast self-examination can identify any changes in the breast to establish a good prognosis. It has also been recommended by the American Cancer Society since the 1950s as a safe and non-invasive procedure for the early detection of breast cancer.[6] A cross-sectional descriptive study was conducted in Tamil Nadu to assess the knowledge and attitude of 100 college girls towards breast self-examination. The study results showed that most of the girls (84%) had inadequate knowledge and about 48% of girls had a negative attitude towards breast self-examination. This showed that there was a significant need to improve knowledge of the girls.[7]

If the younger groups of females are targeted with accurate information and encouragement, they will learn to examine themselves and detect every minute change early in their later life. As adolescents are plinth of our society, so they need to be educated regarding breast self-examination.

Methodology

A quantitative research approach with pre-experimental one-group pre-test post-test design was selected to carry out this study. Permission was obtained from the concerned authorities of Madre-Meharban Institute of Nursing Sciences and Research, SKIMS, Soura, Srinagar to conduct the final study. Ethical clearance was obtained from Institutional Ethics Committee (IEC) to conduct the study on purposively selected 50 BSc nursing 2nd year students at MMINSR, SKIMS, Soura, Srinagar. A self-structured questionnaire was used as the research tool to get responses from the subjects regarding breast self-examination. Permission was also obtained by taking informed consent individually from each study subject, prior to their inclusion as sample in the study. Privacy, confidentiality, and anonymity were guarded. The study duration was from March 2021 to February 2023.

Data were collected from 50 BSc nursing 2nd year students at MMINSR, SKIMS, Soura, Srinagar from 10th September to 8th October 2022. Assessment of demographic data of study subjects was done through a 7-itemed questionnaire related to their age, place of residence, type of family, occupation of mother, occupation of father, family monthly income, and source of information.

The assessment of knowledge among BSc nursing 2nd year students was done through a self-structured questionnaire. The inclusion criteria was BSc Nursing 2nd-year students of MMINSR, irrespective of gender and who were available during the data collection period. The exclusion criteria was

ISSN: 2348-2133
DOI: https://doi.org/10.24321/2348.2133.202215

BSc Nursing 2nd year students of MMINSR, who were not willing to participate in the study and who were studying in classes of BSc nursing other than the 2nd year.

The scoring criteria for knowledge were categorised into various levels based on the criteria developed by Ahad[8] in her study. If the score was < 50%, it was considered inadequate; if the score was 50-70%, it was considered moderate, and if the score was > 75%, it was adequate.

Results and Discussion

Findings related to Demographic Variables of Study Subjects

Majority (88%) of the study subjects were in the age group of 21-23 years, 12% of participants were 18-20 years old, and none belonged to more than 23 years of age. A higher number of study subjects (74%) were from rural areas. Majority (86%) of the study subjects were residing in nuclear families. Majority (86%) of the study subjects reported their mother to be non-working. Most (70%) of the study subjects reported their father to be a private employee, father of 20% of subjects worked as labourers, and those of 10% were government employees. The family monthly income of majority (76%) was between INR 30,000 and 50,000. The highest percentage of study subjects (42%) had reported mass media as the source of information. These demographic details have been depicted in Table 1. A similar study was conducted on 50 female students at a selected college in Vadodara, Gujarat to evaluate the effectiveness of a video-assisted teaching programme on breast self-examination.[9] The findings of the study revealed that majority (60%) of the female students lived in nuclear families. 55% of them lived in rural areas, remaining 45% lived in urban areas. Regarding the education of the mother, majority (34%) of the mothers had no formal education, 25% of the mothers were graduates, 23% of the mothers had primary education, and 18% of the mothers had completed higher secondary education.

Findings related to the Assessment of Knowledge Level of Study Subjects regarding Breast Self-examination

The findings of the study showed that in pre-test, out of 50 study subjects, maximum subjects (62%) had moderate knowledge, whereas only 38% had inadequate knowledge and none of the study subjects had adequate knowledge as depicted in Table 2. A similar study was conducted by Ahad[8] to assess the effectiveness of a structured teaching programme on knowledge regarding breast self-examination among 50 adolescent girls of a selected school in Srinagar, Kashmir. The findings of the study revealed that maximum (50%) study subjects had inadequate knowledge, 48.75% had moderate knowledge, and only 1.25% had adequate knowledge regarding breast self-examination.

The findings of the study showed that in the post-test, out of 50 study subjects, majority (86%) had adequate knowledge, whereas 14% had moderate knowledge and none of the study subjects had inadequate knowledge as depicted in Table 3. A similar study was conducted among 100 adolescent girls in Chennai, Tamil Nadu in which the effectiveness of video-assisted teaching programme on knowledge regarding breast self-examination was assessed.[7] The findings of this study showed that in post-test, majority (69.5%) of study subjects had highly adequate knowledge, 30.5% had moderate knowledge, and none of the study subjects had inadequate knowledge regarding breast self-examination.

Table 1.Frequency and Percentage Distribution of Study Subjects according to Demographic Variables

(n = 50)

Variables	Options	Frequency	Percentage
Age in years	18-20	6	12.0
	21-23	44	88.0
	> 23	0	0.0
Place of residence	Rural	37	74.0
	Urban	13	26.0
Type of family	Nuclear	43	86.0
	Joint	7	14.0
Occupation of mother	Non-working	43	86.0
	Working	7	14.0
Occupation of father	Govt employee	5	10.0
	Private employee	35	70.0
	Labourer	10	20.0
Family monthly income (INR)	< 30,000	1	2.0
	30,000 - 50,000	38	76.0
	> 50,000	11	22.0
Source of information	Mass media	21	42.0
	Health professional	10	20.0
	Friends	19	38.0

The mean post-test knowledge scores (41.5 ± 3.840) of the study subjects were significantly higher than the mean pre-test knowledge scores (27.38 ± 4.72) at 0.05 level of significance. This indicates that the video-assisted teaching programme was effective in enhancing the knowledge regarding breast self-examination as depicted in Table

ISSN: 2348-2133
DOI: https://doi.org/10.24321/2348.2133.202215

4. In a similar study, the difference between the pre-test knowledge scores and the post-test knowledge scores of study subjects regarding breast self-examination were analysed using the student 't' test.[10] The mean post-test knowledge scores (26.68 ± 2.946) of the study subjects were significantly higher than the mean pre-test knowledge scores (16.5 ± 4.328) (t = 21.7, p = 0.05). This indicated that the video-assisted teaching programme was effective in enhancing knowledge.

Table 2.Frequency and Percentage Distribution of Study Subjects according to Pre-test Knowledge Score

(n = 50)

Knowledge Level	Knowledge Score	Pre-test Knowledge Scores Obtained	
		Frequency	Percentage
Inadequate knowledge	0-24	19	38
Moderate knowledge	25-37	31	62
Adequate knowledge	37-49	0	0

Table 3.Frequency and Percentage Distribution of Study Subjects according to Post-test Knowledge Score

(n = 50)

Knowledge Level	Knowledge Score	Post-test Knowledge Scores Obtained	
		Frequency	Percentage
Inadequate knowledge	0-24	0	0
Moderate knowledge	25-37	7	14
Adequate knowledge	37-49	43	86

Table 4.Comparison between Pre-test and Post-test Knowledge Scores of Study Subjects regarding Breast Self-examination

(n = 50)

Knowledge Score	Mean	SD	Mean Difference	Paired 't Test	p Value	Result
Pre-test	27.38	4.72	14.120	18.724	< 0.001	Significant
Post-test	41.5	3.84				

Table 5.Association of Pre-test Knowledge Score of Study Subjects with their Demographic Variables

(n = 50)

Variables	Options	Adequate Knowledge	Moderate Knowledge	Inadequate Knowledge	Chi-square Test	df	p Value	Result
Age in years	18-20	0	4	2	0.063	1	0.802	Non-significant
	21-23	0	27	17				
	> 23	0	0	0				
Place of residence	Rural	0	22	15	0.390	1	0.532	Non-significant
	Urban	0	9	4				

ISSN: 2348-2133
DOI: https://doi.org/10.24321/2348.2133.202215

Type of family	Nuclear	0	27	16	0.082	1	0.775	Non-significant
	Joint	0	4	3				
Occupation of mother	Non-working	0	28	15	1.266	1	0.266	Non-significant
	Working	0	3	4				
Occupation of father	Govt employee	0	2	3	1.249	2	0.536	Non-significant
	Private employee	0	23	12				
	Labourer	0	6	4				
Family monthly income (INR)	< 30,000	0	1	0	4.346	2	0.114	Non-significant
	30,000 – 50,000	0	26	12				
	> 50,000	0	4	7				
Source of information	Mass media	0	13	8	3.155	2	0.206	Non-significant
	Health professional	0	4	6				
	Friends	0	14	5				

Association of Study Subjects and Selected Demographic Variables

The present study showed that there was statistically no significant association between pre-test knowledge scores of study subjects and selected demographic variables like age in years (p = 0.802), place of residence (p = 0.532), type of family (p = 0.775), occupation of mother (p = 0.266), occupation of father (p = 0.536), family monthly income (p = 0.114), and source of information (p = 0.206) as depicted in Table 5. A similar study was conducted by Avci[11] to evaluate the effectiveness of the video-assisted teaching programme on 50 teachers in Belgium. The study results revealed that there was no significant association of pre-test knowledge score with selected demographic variables like age, place of residence, educational standard, family income per month, previous knowledge of breast self-examination, and source of information.

Conclusion

Based on the findings of the study, the following conclusions were drawn:

- Pre-test findings showed that the study subjects had moderate knowledge regarding breast self-examination. It may be due to a lack of proper previous exposure and education regarding breast self-examination. Thus health education programme is required to enhance their knowledge of this topic.
- There was an improvement in the knowledge of study subjects after the implementation of the video-assisted teaching programme regarding breast self-examination which was evident from their post-test knowledge. Thus video-assisted programme was effective in imparting education.
- No significant association was found between pre-test knowledge and the variables which indicates that these variables probably have no effect on their knowledge.

Sources of Funding: None

Conflicts of Interest: None

References

1. Bailey T. Nurse's role in promoting breast awareness. Nursing Standards; 2020.
2. Agarwal N, Suneja A. Female breast: gynaecologist viewpoint. New Delhi: Jaypee Brothers Medical Publishers; 2000.
3. Wani SQ, Khan T, Teeli AM, Khan NA, Wani SY, Hassan A. Quality of life assessment in survivors of breast cancer. J Cancer Res Ther. 2012;8:272-6. [PubMed] [Google Scholar]
4. Boyle P, Howell A. The globalization of breast cancer. Breast Cancer Res. 2010;12:S7. [PubMed] [Google Scholar]
5. Murthy NS, Chaudhry K, Nadayil D, Agarwal UK, Saxena S. Changing trends in incidence of breast cancer: Indian scenario. Indian J Cancer. 2009;46(1):73-4. [PubMed] [Google Scholar]
6. Rani UJ, Swarna S. Effectiveness of planned health teaching programme regarding breast self-examination among post graduate students in Padmavathi Mahila University at Tirupati, Andhra Pradesh. Nightingale Nurs Times. 2006;5(2):21-3.
7. Jacob TC, Penn NE. The need and value of breast self-examination. J Natl Med Assoc. 1988 Jul;80(7):777-87. [PubMed]

8. Ahad R. A study to assess effectiveness of structured teaching programme on knowledge regarding breast self examination among adolescent girls of selected schools of Srinagar Kashmir, India. Int J Community Med Public Health. 2015 Aug;15415.
9. Jasmin J. Effect of STP on breast cancer and BSE. Nightingale Nurs Times. 2010 Jun;3(1):12.
10. Mary P, Brenda K. Breast self-examination and experimental study. The Regents of the University of Michigan. 2012;4(1):10-2.
11. Avci IA. Factors associated with breast self-examination practices and beliefs in female workers at a Muslim community. Eur J Oncol Nurs. 2008 Apr;12(2):127-33. [PubMed] [Google Scholar]

ISSN: 2348-2133
DOI: https://doi.org/10.24321/2348.2133.202215