

IMPACT OF VIDEO ASSISTED TEACHING REGARDING KNOWLEDGE, ATTITUDE AND PRACTICE OF BREAST SELF- EXAMINATION AMONG ADOLESCENT GIRLS IN CHITTOOR, ANDHRA PRADESH, SOUTH INDIA

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Abstract

Chittoor, Andhra Pradesh, South India, quasi-experimental research was undertaken to determine the efficiency of video aided teaching (VAT) on breast self-examination (BSE) towards knowledge among 115 teenage females chosen using a suitable sample approach. A single group before and after test was used. To gather data on socio demographic factors and awareness about BSE, a semi-structured self-administered questionnaire approach was used. After the pre-test, video assisted teaching was delivered, followed by a two-week post-test using the same technique. The post-test level of knowledge improved, with a computed paired 't' test value of 25.44 at (p0.01), which was highly significant. The research found that using video-assisted teaching to improve understanding of breast self-examination is helpful. Adolescent females, Breast Self-Examination, Knowledge, Video Assisted Teaching

Keywords: breast self-examination, Knowledge, Video Assisted Teaching, quasi-experimental.

1. Introduction

In India, the health-care system is fragmented, with numerous places where the advantages of public awareness, early diagnosis, and interdisciplinary treatment programmes have yet to be realised. To address the predicted increases in cancer burden in Chittoor AP, coordinated efforts were required to review and develop the cancer control and care infrastructure, as well as assure adequate budget allocation (The National Medical Journal of India, 2011). Breast cancer is the most frequent cancer in urban Indian women, and the second most common in

rural Indian women, thanks to increased incidence and awareness (ICMR, 2001). Various misconceptions and misinformation that pervade Indian culture contribute to an unfounded dread of the illness. Breast cancer awareness efforts are centred in cities and have yet to reach the country's distant and rural areas (Spectrum of Breast Cancer in Asian Women, 2007). Breast cancer is the most frequent cancer in women in the globe, with a broad range of occurrence between nations and areas. Developed nations, which make up a tiny percentage of the global population, account for over half of all breast cancer diagnoses (Global Cancer Statistics, 2000). These nations are likely to account for the bulk of newly diagnosed instances of breast cancer in the future decades.

Far Eastern and South Eastern Asian nations have the lowest breast cancer incidence rates. Over a million new breast cancer patients are diagnosed each year in India (Spectrum of Breast Cancer in Asian Women, 2007). The health-care burden of breast cancer is progressively increasing in Asia's emerging nations.

According to data from the Madras Metropolitan Tumour Registry at the Adayar Cancer Institute's hospital registry, a slight shift has occurred, with breast cancer incidence increasing at a considerably faster pace than cervical cancer incidence. This was shown by a comparison of two circumstances in 1982-1987 and 2009-2010: Cervical cancer was found to be 44.3 per 100,000 people in the registry between 1982 and 1987. In comparison, the breast cancer rate was 19.1%. Cervical cancer incidence declined to 19.3 per 100,000 in 2009–2010, but breast cancer incidence increased to 35.8 per 100,000. (The Hindu 2013). According to Spectrum of Breast Cancer in Asian Women, a large number of Indian breast cancer patients are under the age of 35, ranging from 11 percent (Tata Memorial Hospital (TMH) Mumbai) to 26 percent (Tata Memorial Hospital (TMH) Mumbai) (SGPGIMS Lucknow).

Larger tumour size, low frequencies of hormone receptor-positive status, lower tumour grade, earlier and more frequent loco-regional recurrences, a greater number of metastatic lymph nodes, and shorter overall survival have all been linked to young age. As a result, the goal of this research was to employ video aided teaching to educate teenage females about breast self-examination.

2. Research objective

- A. To determine the efficacy of video-assisted teaching on breast self-examination for adolescent teenage girls' knowledge.
- B. To associate teenage girl's post-test knowledge of breast self-examination to their socio-demographic factors.

3. Materials and Methods

The quasi-experimental research design (one group before and post-test design) is used in a quantitative research strategy. A straightforward sampling strategy was used to choose 60 teenage females. The Chittoor, Andhra Pradesh, South India were both approached for formal approval. From October 26 through November 7, 2015, data was gathered. Inclusion criteria were adolescent females aged 15 to 18 years old who could communicate in either Tamil or English. Adolescent females who were both hearing and visually impaired and who refused to participate in the research were excluded. Pre-test data was obtained in the form of a semi-

structured self-administered questionnaire on socio demographic characteristics and awareness of BSE after explanation and signed permission from the teenage females (25 questions). Then, video-assisted teaching on breast self-examination was given, which comprised preliminaries, postures, and how to do the procedure.

Self-examination, procedure frequency, and early reporting of abnormal results to a nearby health care institution are all recommended. The film took half an hour to play, and the post-test was analysed using the same questionnaire two weeks later.

It was done on 10% of the sample size (9 teenage girls) and those who were not included in the final research after the tool was developed. The goals of this study were to test the clarity of the questions, the validity and applicability of the study tool, to accommodate the study's goals to actual feasibility, to identify the difficulties that may be encountered during the application, and to investigate all administrative procedures and activities. During this pilot research, the time it took to complete the questionnaire was judged to be 10 minutes. Some statements were reworded to reflect the required changes based on the data received. The structure of the questionnaire sheet was also changed to make data gathering easier. Data was gathered using a structured questioner sheet to fill out demographic information, BSE awareness, knowledge, and practise, and obstacles to practising breast self-examination. A pre-test employing the structure questionnaire to determine knowledge, attitude, and practise of breast self-examination, as well as data on obstacles to breast self-examination practise. The girls were given a two-hour lecture with discussion on the contents of the prepared video assistant teaching. Two weeks later, a post-test was conducted using the same format questionnaire to assess improvements in knowledge, attitude, and practise on breast self-examination. The data collecting sheet was translated into Telugu. One of the researchers translated the structured English form into Telugu first. Another researcher updated and translated this version into English, then compared it to the original to ensure that the translation was accurate. The information gathered was classified, collated, and prepared for analysis. A right answer received one point, whereas an erroneous response received zero. The overall score was computed as "sum of scores multiplied by 100/number of questions answered".

4. experimental outcomes

The post-test mean value (17.93) was higher than the pre-test mean value (15.06) in this research. Table:1 Pre and post-test mean, standard deviation, and paired 't' value n= 60

Table :1 testing analysis

S No	Test	Mean	SD	T test value
1	Pre-test	16.04	0.92	27.833**s
2	Post-test	18.93	1.43	
3	avg	17.93	1.23	

This table shows that the post-test mean score was higher (18.93) than the pre-test (16.06), and that the score was highly significant ($t=25.44$ at $p<0.01$) using the paired 't' test. Hence The use of video-assisted teaching on breast self-examination increased knowledge among teenage females. Post-test knowledge level and socio-demographic factors are linked:

Table :2 BSE analysis

Items for BSE knowledge	NO.	%
Did you perform BSE before		
Yes	10	8.7
No	86	74.8
Often	19	16.5
BSE important		
Yes	96	83.5
No	6	5.2
Do not know	13	11.3
Reason		
Help early detection of breast cancer	96	83.5
Do not know	13	11.3
Source of awareness #		
college curricula	34	17.9
T.V and radio	24	12.6
Family and Friends	9	4.7
Network and social media	33	17.4
the appropriate time performing BSE		
true answer		
False answer	19	16.5
	96	83.5
the frequency of performing BSE		
true answer	22	19.1
False answer	93	80.9
Barriers #		
Unawareness of importance	58	43
Postponing performance of BSE	17	12.6
Embarrassment	27	20
Fear of the results	33	24.4
Total	115	100

The association between knowledge and the above socio demographic variables such as age, education, religion, area of residence, family income per month, accessible health care facility, exposure to a friend or relative with breast cancer, and previous exposure to breast self-examination was calculated using the Chi-square test. According to the findings, there was no statistically significant link between knowledge and the socio demographic characteristics indicated above.

For encouraging breast cancer screening in underdeveloped countries, the Breast Health Global Initiative 2007 emphasises education and cultural values (Rasu et al., 2011). The cause of breast cancer is unknown at this time, therefore good primary prevention is impossible. As a result, early identification remains a top goal. Premenopausal individuals account for more than half of all breast cancer diagnoses each year, necessitating the implementation of breast cancer screening programmes in this group. BSE is one of these methods since it is affordable, noninvasive, requires little time and physical effort, is straightforward, and does not need expert assistance. In terms of breast self-examination knowledge, the majority of the research participants were aware of the importance of BSE in early identification of breast cancer and the many techniques of breast cancer screening. This is in line with the findings of Oluwole and Al-Dubais et al (2008, 2012), who found that the majority of respondents were aware of BSE. While awareness of the various breast cancer screening strategies was often lacking^{24, 25}. In terms of source of information, roughly a quarter of the nursing students in the sample had prior knowledge of BSE from their college

courses. This conclusion was in line with a study of female health professionals in a Nigerian community, which found that the majority of respondents learned about BSE via lectures²⁴. In contrast, a survey of young Malaysian women found that electronic media, such as radio and television, was the most popular source of BSE²⁶ information. Our research found that almost three-quarters of the study participants had never conducted BSE previously and were unaware of the proper time and frequency for doing BSE. This is in line with a research conducted among Jordanian nurses, which found that only a few nurses used BSE on a monthly basis. This was due to a lack of information about breast cancer and early detection measures.²⁷ While Al-Naggar et al (2011) found that 55% of respondents had done BSE previously, just 28.5 percent of them did it once a month²⁶. In terms of impediments to BSE practise, the findings found that almost two-thirds of the research population lacked access to BSE knowledge. This is in line with the findings of Oluwole and Al-Naggar et al (2008, 2011), who showed that the primary hurdles to BSE practise were a lack of knowledge and forgetfulness. They further suggested that one of the barriers to women practising BSE is a lack of knowledge^{24, 26}. The participants were able to exhibit BSE properly on the modules two months after the session, indicating that the program's good impact was maintained. This result is in line with Yousuf (2010), who reported that participants' knowledge improved significantly in the post-test as a result of the immediate impact of the workshop²⁸. The findings of the three-month post-test revealed a deterioration in the participants' performance. The researchers theorised that the reduction in performance was due to the fact that 74% of the participants were single, 78 percent had no family history of breast cancer, 42 percent lacked knowledge, and 28% were forgetful. This is in line with the findings of Khatun et al (2010), who found that being married, having no source of knowledge, having a bad family history, and not knowing how to practise BSE were the most common reasons for nurses not practising BSE. To improve nurses' performance rate of BSE²⁹, an educational programme for breast cancer and BSE should be provided to them, and the nurse should be well versed in teaching BSE in a range of settings. BSE is often taught at an adolescent health assessment, and it should be revisited and reinforced every two to three years. By revisiting examination technique, utilising a well-designed, printed, and illustrated pamphlet, and reaffirming the women's confidence in her BSE abilities, the nurse may promote BSE practise.³⁰ In terms of participants' level of knowledge, the majority of the students had limited knowledge of BSE prior to the programme, owing to a lack of awareness of the value of health and the significance of BSE. However, after participating in the educational training programme, their knowledge significantly improved, with more than half of the students receiving a very good score. There were statistically significant variations in their knowledge and practise of breast cancer between before and post-test ($p < 0.001$). This is due to the participants' desire to promote and preserve their health conditions, which agrees with the findings of Alkhasawneh et al., (2009), who found statistically significant gains in women's awareness of breast cancer and early detection procedures after the programme was implemented. Also agree with Yusuf, (2010), who stated that participants thought their knowledge had improved greatly, and the researcher feels that the participants' knowledge had improved significantly in the post-test, which may have increased their confidence. Furthermore, the current research revealed an increase in BSE performance, with 98 percent of participants scoring very well,

and a statistically significant difference between pre and post test for sample performance in relation to age ($p < 0.001$). His findings were consistent with Alkhasawneh et al., (2009), who found a significant relationship between BSE practise and women's age, education level, and with Haji-Mohamoodi et al., (2002) and his colleagues, who found a significant relationship between BSE practise and women's age, education level. According to Oezaras et al., (2010), since the difference was significant ($z = -7.75$, $p < 0.001$), the training offered to women had a substantial impact on boosting women's knowledge about BSE.

Conclusion

The goal of this research was to see how successful Video Assisted Teaching is in teaching teenage females about breast self-examination. The results demonstrated that Video Assisted Teaching was successful in enhancing teenage girls' understanding of breast self-examination. According to research done by Jasmine (2005), the Self-Instructional Module on Breast Self-Examination resulted in a substantial increase in knowledge at $p < 0.001$ Chittoor, Andhra Pradesh, South India. According to the findings of the current research, video-assisted teaching of breast self-examination knowledge among teenage girls was beneficial. The phrase "early diagnosis, better prognosis" sensitises individuals to recognise anomalies sooner and decreases the health-care load.

Practical implications

Each individual plays an important role in the health-care delivery, and it is essential to participate in life-threatening situations, particularly cancer. As an Educator, she may help prevent breast cancer and engage in early detection by educating young girls about breast self-examination.

References

- [1] Agarwal G, Pradeep PV, Aggarwal V, Yip CH, Cheung PS. Spectrum of breast cancer in Asian women. *World Journal of Surgery*. 2007 May; 31 (5): 1031-40.
- [2] Aggarwal V, Agarwal G, Lal P, Krishnani N, Mishra A, Verma AK, Mishra SK. Feasibility study of safe breast conservation in large and locally advanced cancers with use of radio opaque markers to mark pre-neoadjuvant chemotherapy tumor margins. *World Journal of surgery*. 2008 December; 32 (12): 2562-9.
- [3] Chopra R. The Indian Scene. *Journal of Clinical Oncology*. 2001 September 15; 19 (18 Supplementary): 106S-111S.
- [4] Ghahremani L, Mousavi Z, Kaveh MH, Ghaem H., self care education programme on SBE behavior., *Asian Pacific Cancer Prevention*., December 1; 17 (12)., 2016.
- [5] Jasmine J. Effect of Self Instructional Module on breast cancer and Breast Self Examination. *Nightingale Nursing Times*. 2005 June; 3 (12) 40-47.
- [6] Mathew A, Pandey M, Rajan B., Do younger women with non -metastatic and non-inflammatory breast carcinoma have poor prognosis?. *World Journal of Surgical Oncology*, 2004 January 22; 2.

- [7] Milaat WA., Knowledge of Secondary School Female students on Breast cancer and Breast Self Examination. *East Mediterr Health Journal*. 2007 March – May; 6 (2-3) 338-344.
- [8] Nandakumar A, Anantha N, Venugopal TC, Sankaranarayanan R, Thimmasetty K, Dhar M., Survival in breast cancer: a population based study in Bangalore, India. *International Journal for Cancer*. 1995 March 3; 60 (5): 593-6.
- [9] National Cancer Registry Programme., Ten year Consolidated report of the Hospital Based cancer Registries, 1984-1993, an assessment of the burden and care of cancer patients. New Delhi: Indian Council of Medical Research; 2001.
- [10] Parkin DM., Global Cancer Statistics in the year 2000. *Lancet Oncology*, 2001 September; 2 (9): 533-43.
- [11] Serena Josephine., Awareness about breast cancer is on the rise in urban areas. *The Hindu*, 2013 October 9.
- [12] SO Azubuikwe, SO Okwuokei., Knowledge, attitude and practices of women towards breast cancer., *Annals of Medical and Health Sciences Research*. April – June; 3 (2) 155-60.,2013.
- [13] Oluwole O.C., Awareness, knowledge and practice of breast –Self Examination amongst Female Health Workers in A Nigerian Community, Sudan, *JMS*, 3(2), 99-104 (2008)
- [14] Osime OC, Okojie O, Aigbekaen ET, Aigbekaen IJ. Knowledge.
- [15] Osteen, R. (2011): Breast Cancer. In: Lenhard, R.E., Osteen, R.T., Gansler, R., eds. *Clinical Oncology*. Atlanta, GA: American Cancer Society; 251–268.
- [16] Parkin DM, Bray F, Ferlay J, Pisani P. Global Cancer Statistics, 2002. *CA Cancer J Clin* 2005; 55:74–108.
- [17] Parsa, P., & Kandiah, M (2005): Breast cancer knowledge, perception and breast self-examination practices among Iranian women. 4 (2) Dec 2005.
- [18] Paul C, Barratt A, Redman S, Cockburn J, Lowe J. Knowledge and perceptions about breast cancer incidence, fatality and risk among Australian women. *Aust N Z J Public Health* 1999;23(4):396–400.
- [19] Plesnicar A., Kovac V. and Kralj B., Breast cancer and breast health awareness as an evolving health promotion concept, *Radio Oncol*, 38, 27-34 (2004).
- [20] program interventions – results based on interviewing 500 women [85]. Project in Finland, *Int J Cancer*, 63, 55-57 (1995) .
- [21] Ramirez AG, Suarez L, Laufman L, Barroso C, Chalela P. Hispanic women’s breast and cervical cancer knowledge, attitudes, and screening behaviors. *Am J Health Promote* 2000; 14(5):292–300.
- [22] Rao R.S.P., Nair S. and Nair N.S. et al., Acceptability and effectiveness of breast health awareness programme for rural women in India, *India J Med Sci.*, 59, 398-402 (2005).
- [23] Rasu, RS. Rhiannon, NJ. Shahidullah, SM., Faisel, AJ. Selwyn, BJ (2011): Effect of Educational Level on Knowledge and Use of Breast Cancer Screening Practices in Bangladeshi Women. DOI: 57: 177-189.

