

A Pre-experimental Study to Assess the Effect of Video Assisted Teaching (VAT) on Attitude, Knowledge and Skill Regarding Breast Self-Examination (BSE) Among Staff Nurses

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Abstract

Breast cancer is the fifth leading cause of cancer deaths after lung, stomach, liver and colorectal cancers. The objective of the study was to assess the effect of video assisted teaching (VAT) on attitude, knowledge and skill regarding breast self-examination (BSE) and to find out the association between knowledge and skills of staff nurses with their selected demographic variables. A pre experimental pretest–posttest research design was employed. One hundred and thirty staff nurses working in selected hospitals of Bhubaneswar, Odisha were included in the study. Subjects were prearranged on the basis of nonprobability purposive sampling. A structured questionnaire was used to collect socio demographic data and to assess knowledge and attitude whereas a checklist was used to assess the skill of the subjects. The result shows that VAT has significantly improved attitude, knowledge and skill of nurses regarding BSE. The study also revealed the presence of statistically significant association between educational qualification and skill of performing BSE. The entire subjects started doing BSE regularly as well as agreed to teach the patients regarding BSE after the implementation of VAT.

Keywords: breast self-examination, staff nurses, video assisted teaching

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INTRODUCTION

Globally, breast cancer is the most common cancer among women, comprising 23% of the female cancers. Breast cancer is also the fifth most common cause of cancer deaths after lung, stomach, liver and colon cancers. The annual worldwide prediction by American cancer society about the severity of breast cancer is terrifying, it reported that 1.3 million and 465,000 women will be diagnosed and die with this disease respectively [1]. Not only the developed countries but the less developed countries also suffer from the mortalities and morbidities inflicted by breast cancer. The reasons could be a change in life style or

lack of awareness about the advancement happened in the arena of cancer.[2] Even though breast cancer rates are low in Asian countries, the incidence of breast cancer in India is rising at an alarming rate and has become the second most common cancer affecting Indian women.[3] In India, it was estimated that 80,000 new breast cancer cases are diagnosed annually and one in every 22 women can be a victim of breast cancer during their life span.[4]

Early screening and detection of breast cancer is important for the good prognosis of cancer management. Here comes the role of Breast Self-Examination (BSE),

where women observe their breast and palpate with the pad of fingers to feel for lumps, distortion or swelling to detect breast cancer.[5] It is vital to perform regular BSE, more preferably once in each month beginning at 20 years of age and continue every month throughout a woman's life time, in order to differentiate the changes from the normal look and texture.

For menstruating women, BSE should be performed on the same day of each month 7–10 days after the first day of the cycle and the same day of every month for pregnant and menopause women.[6,7] Affordability is the main concern existing pertained to cancer diagnosis and management especially in developing and under developed countries.

Early detection and control of cancer will not attain the target unless it reached at the grass root level.[2] Educating the women regarding BSE is highly effective in the early detection of breast cancer as 80% of the clinically diagnosed cases were detected by the women themselves.[8] Added with BSE, health care professional conducted physical examination and mammography can impact great revolution in the early detection of breast cancer [8].

It was reported that 37.7% of the first stage of breast tumors were detected by BSE, 53.8 and 27% by routine physical examination and accidental respectively. The same report further states that breast cancer mortality can be reduced by 18.8–24.4% through regular BSE and physical examination self [8]. Breast cancer affects so many lives today especially in developing countries like India.

So, it is vital for the women to know about the breast cancer, risk factors and early detection methods such as clinical breast examination, breast self-examination and mammography. Here comes the role of

nurses as educator or facilitator in spreading the benefits of BSE among their patients. The nurses, therefore, should have thorough knowledge regarding BSE. In this scenario the researchers conducted this study to assess the knowledge and skill of nurses regarding BSE and the effect of VAT to improve their knowledge and skill.

MATERIALS AND METHODS

This study was conducted with the objectives to assess the effect of video assisted teaching (VAT) on attitude, knowledge and skill regarding BSE and to find out the association between knowledge and skills of staff nurses with their selected demographic variables. A pre experimental pretest–posttest design was employed in this study.

The null hypothesis (H_0) formulated was that there would be no effect of VAT on attitude, knowledge and skill regarding BSE at 0.05 level of significance. After getting the ethical clearance, the study was conducted in selected hospitals of Bhubaneswar, Odisha. One hundred and thirty staff nurses who were available in wards during data collection and who were able to read and write English were included in the study. Subjects who had visual or hearing deprivation and who already attended the similar program were excluded from the study.

The subjects were selected by using non probability purposive sampling technique. Informed consent was obtained from each participant. The pretest data was collected through a structured questionnaire with 10 enquiries related to socio demographic profile, attitude appraisal with 4 queries, knowledge evaluation with 15 questions and skill assessment based on 10 step check list regarding BSE. VAT was implemented immediately after pretest assessment. Posttest has been done one week after the intervention with the same tool. The data were analyzed by using

descriptive (mean and standard deviation) and inferential (z score, chi square test).

RESULTS

Section I: Socio-Demographic Profile of Subjects

As depicted in Table 1, the highest percentages of the study subjects (51.53%)

were in the age group of 23–25 years. Half of the subjects were G.N.M qualified. Majority of the participants (60.8%) had 1–3 years of experience. Among the total subjects, majority (89.2%) of them belongs to Hindu religion and most of them (82.3%) were unmarried.

Table 1. Description of Subjects Based on Socio-Demographic Characteristics. N = 130.

Demographic Data	n (%)
Age	
20–22 years	16 (12.3%)
23–25 years	67 (51.53%)
>25 years	47 (36.15%)
Qualification	
A.N.M	7 (5.4%)
G.N.M	65 (50%)
B.Sc. Nursing	58 (44.6%)
Years of Experience	
1–3 years	79 (60.80%)
4–6 years	25 (19.20%)
>6years	26 (20%)
Religion	
Hindu	116 (89.2%)
Muslim	2 (1.5%)
Christian	9.2%)
Marital Status	
Married	23 (17.7%)
Unmarried	107 (82.3%)

Section II: Attitude of Nurses Towards BSE

Table 2 demonstrates that entire subjects started doing BSE regularly as well as agreed to teach the patients regarding BSE after implementing VAT. Furthermore, before the implementation itself nurses were thinking that BSE is necessary and were having positive opinion toward BSE.

Section III: Knowledge of Nurses Regarding BSE

Bar diagram in Figure 1 shows that the average knowledge score before VAT (in pretest) was 7.56±2.36 and after VAT (in posttest) was 13.83±1.07 with ‘p’ value <0.05.

Table 2. Attitude of Subjects Regarding BSE. N= 130

Questions	Pre-test [n (%)]	Post-test [n (%)]	z, p value
1. Do you examine your breast regularly?	13 (10%)	130 (100%)	11.29, 0.0001*
2. Are you willing to teach your patient regarding BSE?	109 (83.84%)	130 (100%)	2.18, 0.029*
3. Do you think BSE is necessary?	125 (96.2%)	130 (100%)	0.58, 0.56
4. What is your opinion regarding BSE?	123 (94.61%)	130 (100%)	0.71, 0.47

*p<0.05.

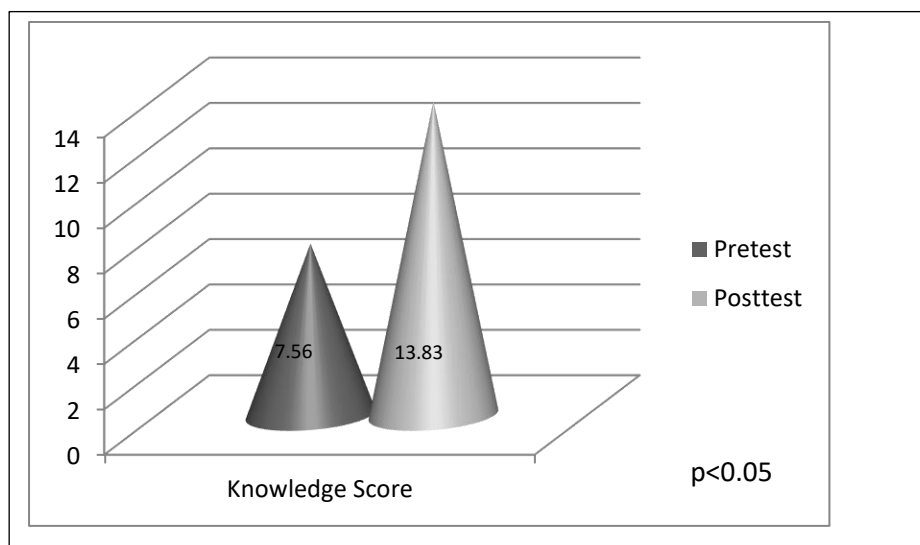


Fig. 1. Average Score of Knowledge Before and After Video-Assisted Teaching (VAT).
N=130.

Section III: Skill of Nurses Regarding BSE

As shown in the bar diagram of Figure 2, the average skill score before intervention

(in pretest) was 6.48 ± 1.85 and after intervention (in post-test) was 8.97 ± 1.03 with ' p ' value < 0.05 .

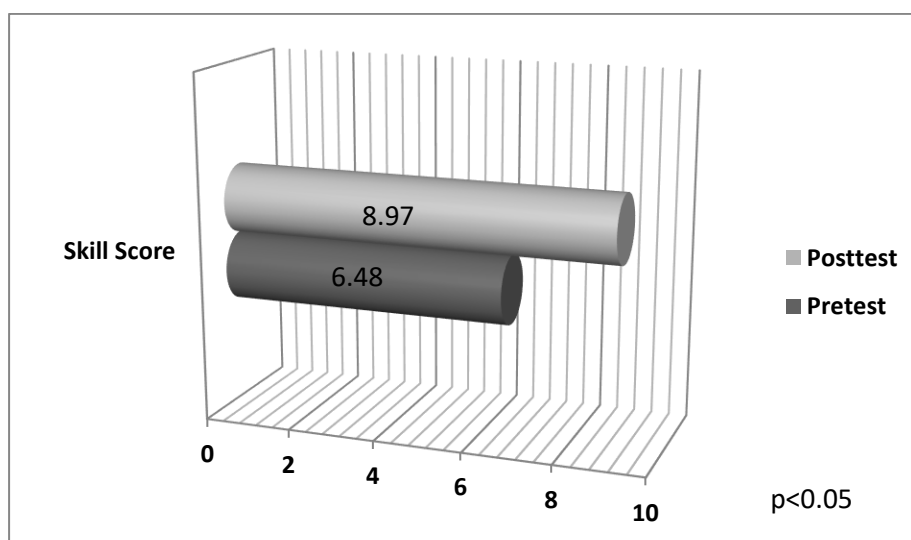


Fig. 2. Average Skill Score Before and After Intervention (VAT). N=130.

Section-IV: Association of Knowledge and Skills With Selected Demographic Variables

Table 3 shows that there was no significant association of knowledge level

and skill with selected demographic variables except educational qualification. Statistical evidence shows that there was a significant association between educational qualification and skill of performing BSE.

Table 3. Association Between Knowledge and Skill of Staff Nurses With Their Selected Demographic Variables. N=130.

Variables	Knowledge x ² , df, p	Skill x ² , df, p
Age	3.24, 2, 0.19	1.72, 2, 0.43
Qualification	2.08, 2, 0.35	4.75, 2, 0.09*
Years Of experience	4.24, 2, 0.12	2.56, 2, 0.27
Marital status	1.09, 2, 0.29	0.6, 2, 0.80

*p<0.05.

DISCUSSION

BSE is a screening technique in which the breast tissue and surrounding areas are examined and palpated with finger pad to detect abnormal changes. This study was conducted to assess the effect of video assisted teaching on attitude, knowledge and skills regarding BSE among staff nurses of selected hospitals of Bhubaneswar, Odisha. In current study, the result shows that VAT had improved the attitude of nurses toward BSE and which is supported by the study conducted by Muttappallymyalil et al.[9] and was reported that 83% of the nurses were teaching the patients about BSE and 90% of them had a positive attitude toward BSE. On the other hand, Cavdar et al.[10] reported that most female physicians and nurses (65 and 70%, respectively) believed that BSE was unnecessary, which was contradictory to our findings. The entire subjects of our study started doing BSE regularly as well as agreed to teach patients regarding BSE after VAT.

In this study, 7.56 were the pretest knowledge mean score and had improved to 13.83 after the implementation of VAT. Bala and Hemant Gameti[11] came forward with similar finding in their study that demonstrated significant increase in knowledge regarding BSE after 3 months of intervention by using video slides on LCD and flip charts. Aylaakka et al.[12] also showed that the mean score of students improved from 15.4±10.7 to 38.0±8.7 after a teaching session regarding BSE. Chan et al[13] showed, in his pre

experimental study at Hong Kong among 777 women, that 93.3% of them were willing to practice BSE and 92% acquired adequate knowledge after intervention. These findings are in accordance with the present study results.

In their study, Holtzman and Celentano^[14] found no association between age and BSE. In addition, Smith et al.^[15] also reported that there was statistically significant association between age and BSE. The present study revealed that there is no significant association of age, years of experience and marital status with knowledge and skill regarding BSE. On the other hand, it shows the presence of a significant association between educational qualification and skill. With these findings the study emphasis the importance of continuing staff education and appraisal programs to ensure the quality of nursing care and to enhance the standards of nursing profession.

CONCLUSION

The results indicate that the VAT can improve the attitude, knowledge and skill of nurses regarding breast self-examination. This study concludes that video assisted teaching can be implemented not only in BSE but also for other continuing nursing education program.

ACKNOWLEDGEMENT

The authors would like to acknowledge to staff nurses for their selfless help in completing the study. This study had no

financial support from any individuals or organizations.

The authors have no conflicts of interest.

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