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RESEARCH ARTICLE

“EFFECTIVENESS OF VIDEO-ASSISTED TEACHING PROGRAMME (VATP) ON KNOWLEDGE REGARDING BREAST SELF-EXAMINATION AMONG PHARMACY GIRL STUDENTS AT A SELECTED PHARMACY COLLEGE”

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Key words:-

Video-Assisted Teaching Programme, Knowledge, Breast Self-Examination, and Pharmacy Student.

Abstract

Background: Breast cancer is a significant public health concern world wide, affecting millions of women each year. According to the World Health Organization (WHO), early detection plays a crucial role in reducing mortality rates associated with breast cancer. One of the most cost-effective and accessible methods of early detection is Breast Self-Examination (BSE). BSE is a simple, non-invasive screening method that enables women to detect any abnormal changes in their breasts at an early stage, potentially leading to timely medical intervention. Innovative teaching strategies such as Video-Assisted Teaching Programs (VATP) have emerged as effective tools in improving health-related knowledge.

Objectives: This study evaluated the effectiveness of a Video-Assisted Teaching Programme (VATP) on knowledge regarding Breast Self-Examination among pharmacy girl students at a selected pharmacy college.

Methods: A quantitative research approach with a pre-experimental, one-group pre-test post-test design was utilized. A sample of 60 pharmacy girl students was selected using convenience sampling. Data were collected via a structured knowledge questionnaire before and seven days after the VATP intervention.

Results: Descriptive and inferential statistics were used for data analysis. The findings revealed a statistically significant increase in the mean knowledge score from the pre-test (8 at $p < 0.05$) to the post-test (16.22 at $p < 0.05$). The post-test scores demonstrated that the VATP markedly enhanced the students' understanding of BSE indications, techniques, and visual assessment parameters.

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Conclusion: Overall, the study concludes that formal education plays a significant role in imparting knowledge among pharmacy girl students. The Video Assisted Teaching Programme is a highly effective educational

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intervention for improving BSE knowledge. The findings highlight the importance of strengthening educational interventions within academic institutions to further enhance students' knowledge and awareness.

Introduction:-

International groups have suggested that breast self-examination programs may benefit specific populations in low-resource countries; however, this idea also remains under consideration. Despite studies refuting the utility of breast self-examination, proponents and breast cancer awareness organizations continue to encourage the controversial practice and seek to educate the public on proper implementation. Breast cancer remains the most prevalent malignancy among women and is a leading cause of cancer-related mortality. Early detection continues to be essential in reducing morbidity and mortality associated with the disease. Breast Self-Examination (BSE) was once promoted as a simple, cost-effective, and non-invasive method for early identification of breast abnormalities. However, current medical evidence does not strongly support the effectiveness of routine breast self-examination in reducing mortality rates. As a result, most medical organizations no longer recommend its universal implementation as a primary screening tool. Instead, emphasis is placed on breast awareness, regular clinical examinations, and mammographic screening as evidence-based strategies. Healthcare professionals play a crucial role in educating women about appropriate screening methods, guiding them toward informed decisions, and promoting early detection practices supported by current scientific evidence.

Micah M. Pippin; Roxanne Boyd:-

Breast cancer is one of the leading causes of morbidity and mortality among women worldwide. According to global health statistics, early detection plays a crucial role in improving survival rates and treatment outcomes. Among the various screening methods available, Breast Self-Examination (BSE) is a simple, cost-effective, and non-invasive technique that allows individuals to detect any unusual changes in their breast tissue. Despite its importance, studies indicate that awareness and practice of BSE remain inadequate, especially among young women, including healthcare students.

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In the context of self-examination, the discussion of breast anatomy should focus on gross and superficial components with attention to associated lymphatics and with an understanding of variability among individuals, age groups, stages of development, and timing within menstrual and gestational cycles. Breast self-examination (BSE) is a simple, monthly practice where women visually and physically check their breasts for any changes, like lumps or skin alterations, to promote early breast cancer detection.



Materials and Methods:-

Study Design: A quantitative research approach with a pre-experimental, one-group pre-test post-test design was utilized for the present study.

Pre Test	Treatment	Post Test
Assessment of Knowledge	Video- Assisted Teaching Programme	Assessment of Knowledge
O1	X	O2

Study Setting:-

The study was conducted at a selected private pharmacy college. The reason for selection was the easy access of the location and the administrative approval for conducting the study.

Population: Girl students studying in B Pharmacy were selected for the study.

Inclusion criteria:

Female students who were present on the day of data collection.

Female students who voluntarily consented to participate in the study.

Female students who could understand, read and write English.

Exclusion criteria:

Female students who had previously attended a formal workshop or seminar on BSE within the last six months.

Students with a known personal history of breast malignancy or undergoing active breast treatments.

Sample Size: The total sample size is 60 female students of B. Pharmacy.

Sampling Technique: Convenience sampling.

Results and Discussion:-

Analysis of Overall Pre-test Knowledge Score:-

Analysis of overall pre-test knowledge score of adolescent girls regarding Breast Self-Examination is depicted in Table 4.9; shows, pharmacy girls, overall percentage of knowledge on breast self-examination. They are having only 40 percent of knowledge on breast self-examination.

Analysis of pre-test level of knowledge:-

Analysis of pre-test knowledge score of adolescent girls regarding Breast Self-Examination is depicted in Table 4.10; (Figure-4.9) Shows the pharmacy girls level of knowledge on Breast Self-Examination in general 33.33% of girls are having poor knowledge and 66.67% of them having average knowledge and none of them having good knowledge.

Analysis of Overall Post-test Knowledge Score:-

Analysis of overall post-test knowledge score of pharmacy girl students regarding breast self-examination depicted in Table 4.11; Shows, pharmacy girl students, overall percentage of knowledge on breast self-examination by VATP. They are having 81.10 percent of knowledge on breast self-examination.

Analysis of Comparison of Overall Knowledge Score Before and After video assisted teaching programme:-

The finding in Table 4.13 (Figure 4.11) shows the comparison of overall knowledge before and after the administration VATP. On an average, pharmacy girls improved their knowledge from 8 to 16.22 after the administration of VATP.

Analysis of Effectiveness of Structured Teaching Programme:-

Analysis of effectiveness of video assisted teaching programme on girl students regarding Breast Self-Examination depicted in Table-4.14; (Figure-4.12) Shows the effectiveness of the VATP. Considering the overall aspects,

pharmacy girls gained 41.10 percent more knowledge on Breast Self-Examination after the administration of VATP. This 41.10 percent of knowledge gain is the net benefit of this study, which indicates the effectiveness of VATP.

Analysis of Comparison of Pretest and Posttest Level of Knowledge:-

Analysis of comparison of pre-test and post-test level of knowledge on pharmacy girls regarding Breast Self-Examination depicted in Table 4.15; (Figure-4.13) Shows the pre-test and post-test level of knowledge on Breast Self-Examination. Before the administration of VATP, 33.33% of pharmacy girl students are having poor knowledge and 66.67% of them are having average knowledge and none of them are having good knowledge. After the administration of VATP, none of the pharmacy girls are having poor knowledge, 16.67% of them having average knowledge and 83.33% of them having good knowledge. Analysis of pre-test and post-test level of knowledge score on pharmacy girls regarding Breast Self-Examination depicted in Pearson chi-square test/Yates corrected chi square test $P=0.001$, shows the comparison of level of knowledge before and after the administration of VATP.

Analysis of Post-test Level of Knowledge:-

Analysis of pharmacy girl students regarding breast self-examination depicted in Table 4.12; (Figure-4.10) shows the pharmacy girls level of knowledge on Breast Self-Examination none of pharmacy girls are having poor knowledge, 16.67% of them having average knowledge and 83.33% of them having good knowledge after video assisted teaching program.

Association between pretest level of knowledge and their demographic variables:-

The finding in Table 4.14, shows the association between demographic variables and their pre-test level of knowledge. None of the demographic variables are significantly associated with their pre-test level of knowledge. Association between demographic variables and their pre-test level of knowledge was analyzed using Pearson chi square test/Yates corrected chi square test.

Association Between Posttest Level of Knowledge and their Demographic Variables:-

The finding in Table 4.16; (Figure 4.9) shows the association between demographic variables and their post-test level of knowledge. Age and source of knowledge are significantly associated with the post-test level of knowledge with the degree of freedom 2, the χ^2 value of 9.48 and p value at 0.002 and degree of freedom 3, χ^2 value of 7.71 and p value at 0.005 respectively.

Tables and Figures t-test to evaluate the effectiveness of Video Assisted Teaching Programme on knowledge related to Breast Self-Examination of pharmacy girl students.

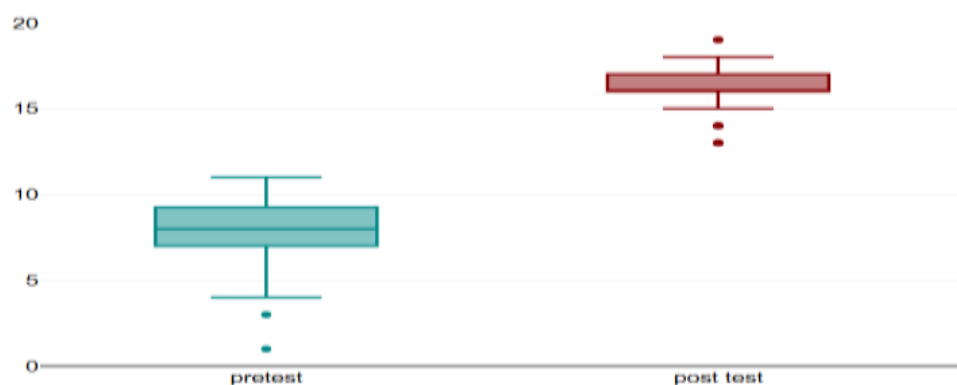
Comparison of Overall Knowledge Score Before and After Video Assisted Teaching Programme:-

Table 4.13

Overall Knowledge Score	No. of Pharmacy girls	Pretest Mean $\pm$ SD	Posttest Mean $\pm$ SD	Student's paired t-test
	60	8 $\pm$ 2.01	16.22 $\pm$ 1.57	t=25 P=0.0001 DF=59, significant

significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.001$

Table 4.11; Shows the comparison of overall knowledge before and after the administration VATP. On an average, pharmacy girls improved their knowledge from 8 to 16.22 after the administration of VATP.



(Figure-4.11); Line graph showing comparison of pharmacy girls pretest and posttest knowledge score on Breast Self-Examination

Table 4.14
Effectiveness of Video Assisted Teaching Programme

Knowledge	% of Pretest	% of Posttest	% of knowledge gain
	40%	81.10%	41.10%

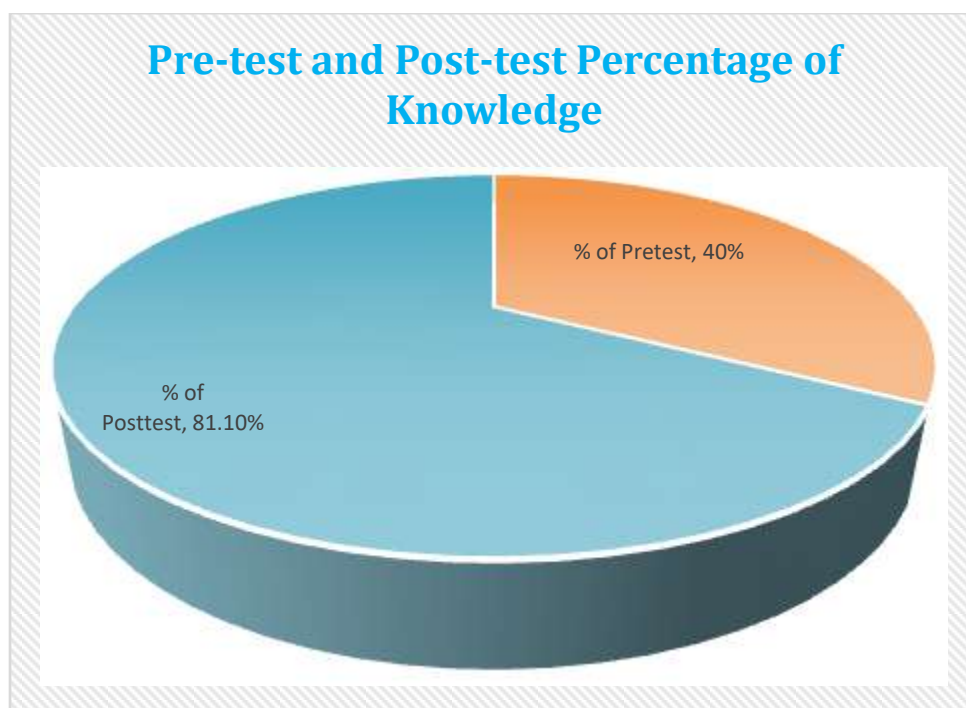


Figure-4.12; Pie graph showing the pre-test and post-test percentage of knowledge

Table- 4.14 (Figure-4.12) Shows the effectiveness of the VATP. Considering the overall aspects, pharmacy girls gained 41.10 percent more knowledge on Breast Self-Examination after the administration of VATP. This 41.10 percent of knowledge gain is the net benefit of this study, which indicates the effectiveness of VATP.

Table 4.15
Comparison of Pretest and Posttest Level of Knowledge

Level of knowledge	Pretest		Posttest	
	N	%	n	%
Good Knowledge	0	0.00%	50	83.33%
Average knowledge	40	66.67%	10	16.67%
Poor knowledge	20	33.33%	0	0.0%

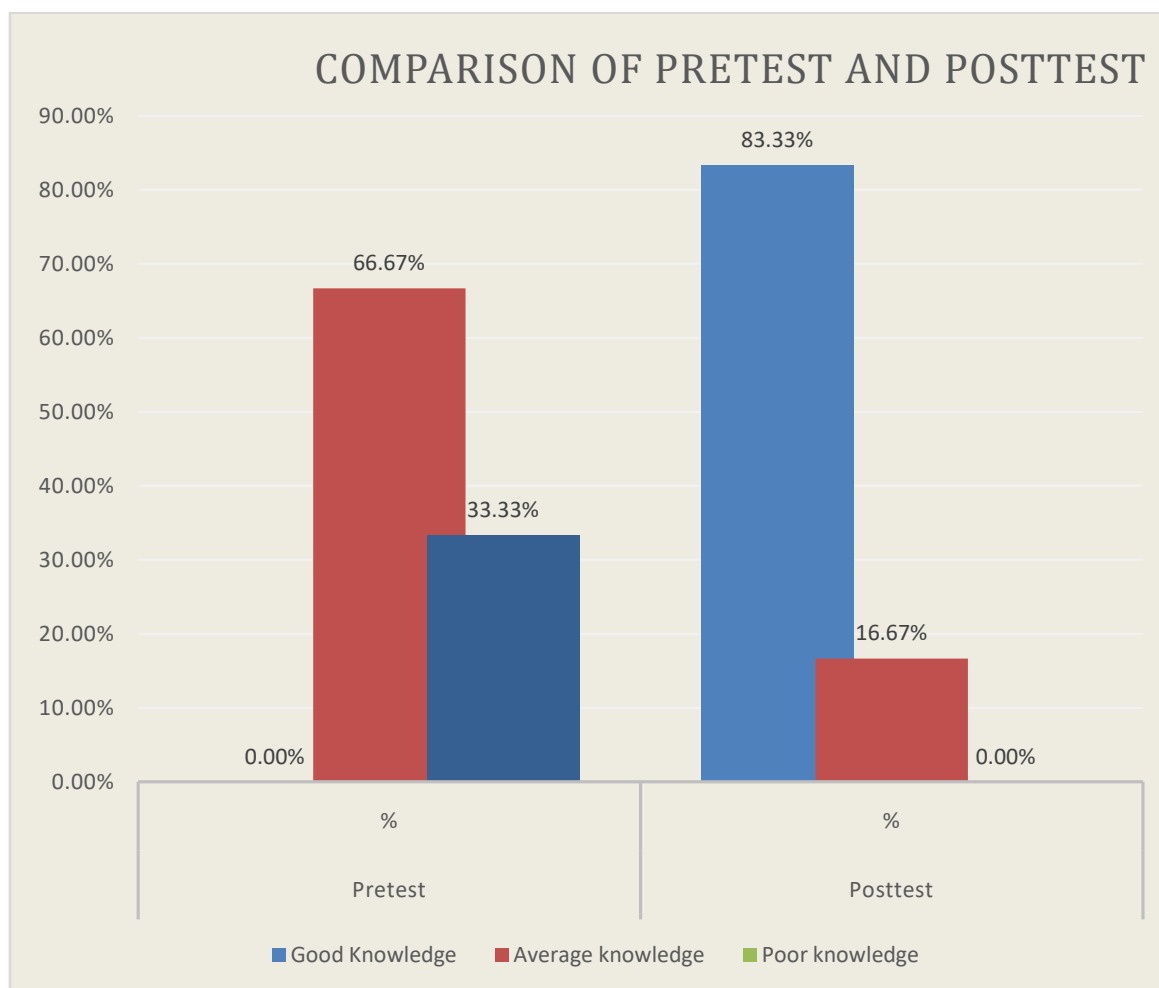


Table 4.15 (Figure-4.13); Cylindrical graph Showing the pretest and post-test level of knowledge on Breast Self-Examination.

Before the administration of VATP, 33.33% of pharmacy girl students are having poor knowledge and 66.67% of them having average knowledge and none of them having adequate knowledge After the administration of STP, none of adolescent girls are having poor knowledge, 16.67% of them having average knowledge and 83.33% of them having adequate knowledge.

Conclusions:-

The present study was conducted to evaluate the effectiveness of a Video-Assisted Teaching Programme (VATP) on knowledge regarding Breast Self-Examination (BSE) among female pharmacy students at a selected pharmacy college. Based on the findings of the study, it was concluded that the majority of the female pharmacy students had inadequate to moderate knowledge regarding breast self-examination in the pre-test. After the administration of the Video-Assisted Teaching Programme, a significant improvement was observed in the post-test knowledge scores. The statistical analysis revealed that the calculated 't' value was higher than the table value at the selected level of significance, indicating that the Video-Assisted Teaching Programme was effective in improving knowledge regarding breast self-examination among female pharmacy students. Hence, the research hypothesis (H_1) was accepted. The study also showed that there was a significant association between post-test knowledge scores and selected demographic variables. Therefore, hypothesis (H_2) was accepted. Thus, it can be concluded that a Video-Assisted Teaching Programme is an effective educational strategy to enhance knowledge regarding breast self-examination among young women. Regular awareness programmes and educational interventions should be conducted in colleges to promote early detection practices and reduce the risk of delayed diagnosis of breast cancer.

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