

1 **“Effectiveness of Video-Assisted Teaching Programme (VATP) on**
2 **Knowledge Regarding Breast Self-Examination Among Pharmacy Girl**
3 **Students at a Selected Pharmacy College”**

4
5 **Abstract:** Breast cancer is a significant public health concern worldwide,
6 affecting millions of women each year. According to the World Health
7 Organization (WHO), early detection plays a crucial role in reducing mortality
8 rates associated with breast cancer. One of the most cost-effective and
9 accessible methods of early detection is Breast Self-Examination (BSE). BSE
10 is a simple, non-invasive screening method that enables women to detect any
11 abnormal changes in their breasts at an early stage, potentially leading to
12 timely medical intervention. Innovative teaching strategies such as Video-
13 Assisted Teaching Programs (VATP) have emerged as effective tools in
14 improving health-related knowledge.

15 Overall, the study concludes that formal education plays a significant
16 role in imparting knowledge among pharmacy girl students. The educational
17 background of the family also reflects a supportive learning environment,
18 although institutional education remains the dominant contributor to
19 knowledge acquisition. The findings highlight the importance of strengthening
20 educational interventions within academic institutions to further enhance
21 students' knowledge and awareness.

22 **Key words:** - knowledge, Pharmacy Girl Students, VATP on knowledge
23 **regarding Breast Self-Examination.**

24
25 **Introduction:** International groups have suggested that breast self-
26 examination programs may benefit specific populations in low-resource
27 countries; however, this idea also remains under consideration. Despite studies
28 refuting the utility of breast self-examination, proponents and breast cancer
29 awareness organizations continue to encourage the controversial practice and
30 seek to educate the public on proper implementation.

31 Breast cancer remains the most prevalent malignancy among women and is a
32 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.

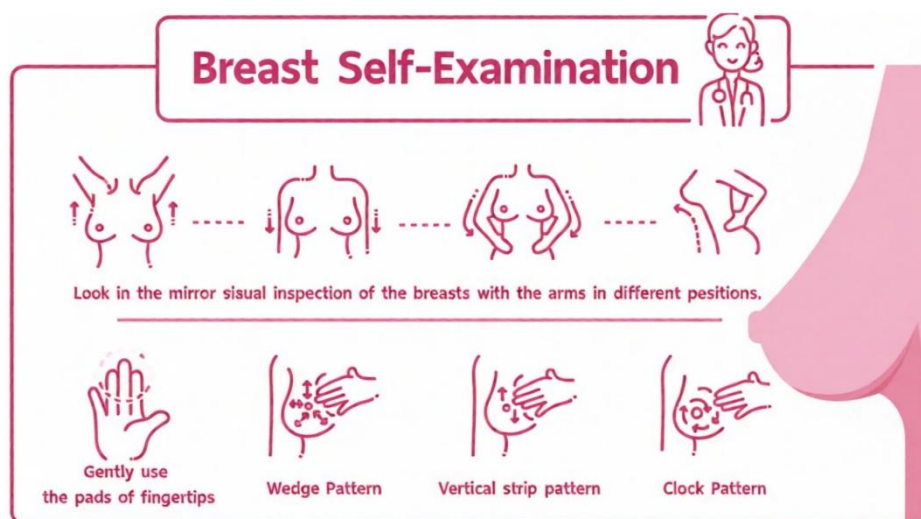
Micah M. Pippin; Roxanne Boyd.

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.



65

66 **Materials and methods**

67 Study Design: The present study pre-experimental one group pre test and post test design was
 68 considered to assess the effectiveness of video assisting teaching programme on the
 69 knowledge regarding breast self-examination among pharmacy students in selected pharmacy
 70 colleges.

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

71

72 **Study Setting**

73 Babulal Tarabai Institute of Pharmaceutical Sciences is a private
 74 institute wing of BT Group situated in village Sironja, Narsinghpur Road,
 75 Sagar (MP). Total 400 students are studying in this institute in B. Pharmacy.
 76 All the students are regular so it is easy to us to select the sample. Most of
 77 students are female age from 17 years to 28 Years.

Population: In this study Pharmacy students from selected pharmacy colleges are the target population.

Sample Size: The total sample size is 60 pharmacy college students studying in Sagar Madhya Pradesh

Sampling Technique: Convenience sampling.

Results & Discussion

Analysis of Overall Pretest Knowledge Score

Analysis of overall pre-test knowledge score of adolescent girls regarding menstrual hygiene 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 pretest level of knowledge

Analysis of pre-test knowledge score of adolescent girls regarding menstrual hygiene 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 pretest and post-test level of knowledge on hygiene.

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 good 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 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 $P=0.001$ that 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 pretest level of knowledge

None of the demographic variables are significantly associated with their pre test level of knowledge.

Association between demographic variables and their pretest 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 posttest level of knowledge.

Age and source of knowledge are significantly associated with their post test level of knowledge.

The table 4.17; shows that the age, the degree of freedom is 2, the χ^2 value is 9.48 and p value is 0.002 that is significant. Sources of knowledge the degree of freedom is 3, χ^2 value is 7.71 and p value is 0.005 that is a significant.

All the age group girls gained more knowledge Association between demographic variables and their pretest level of knowledge was analyzed using Pearson chi square test/Yates corrected chi square test.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE NO
I	INTRODUCTION ➤ Introduction ➤ Background of the study ➤ Need of the study ➤ Statement of the problem ➤ Objective ➤ Operational definition ➤ Criteria ➤ Variables ➤ Conceptual framework of the study ➤ Summary	
II	REVIEW OF LITERATURE	

III	METHODOLOGY ➤ Research Approach ➤ Research Design ➤ Setting Of The Study ➤ Variables Understudy ➤ Population ➤ Sample & Sampling Technique ➤ Sample Selection And Criteria ➤ Development Of Research Tool ➤ Description Of The Tool ➤ Content Validity Of The Tool ➤ Pilot Study ➤ Reliability ➤ Validity ➤ Data Collection Methods ➤ Plan For Data Analysis ➤ Ethical Consideration ➤ Summary	
IV	DATA ANALYSIS, INTERPRETATION	
V	DISCUSSION	
VI	SUMMARY, CONCLUSION, IMPLICATIONS, LIMITATION & RECOMMENDATIONS	
VI I	BIBLIOGRAPHY	
VI II	APPENDICES (A-K)	

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.

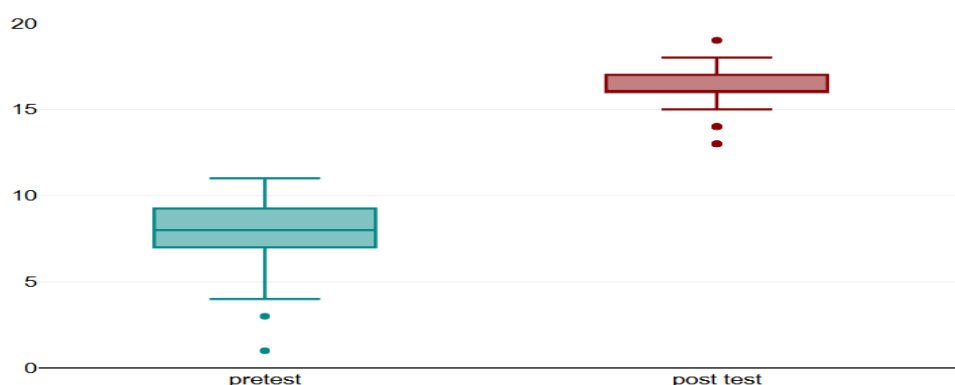
COMPARISON OF OVERALL KNOWLEDGE SCORE BEFORE AND AFTER VIDEO ASSISTED TEACHING PROGRAMME

Table 4.13

Overall Knowledge Score	No. of Pharmacy girls	Pretest Mean±SD	Posttest Mean±SD	Student'S paired t-test
	60	8 ± 2.01	16.22 ± 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%

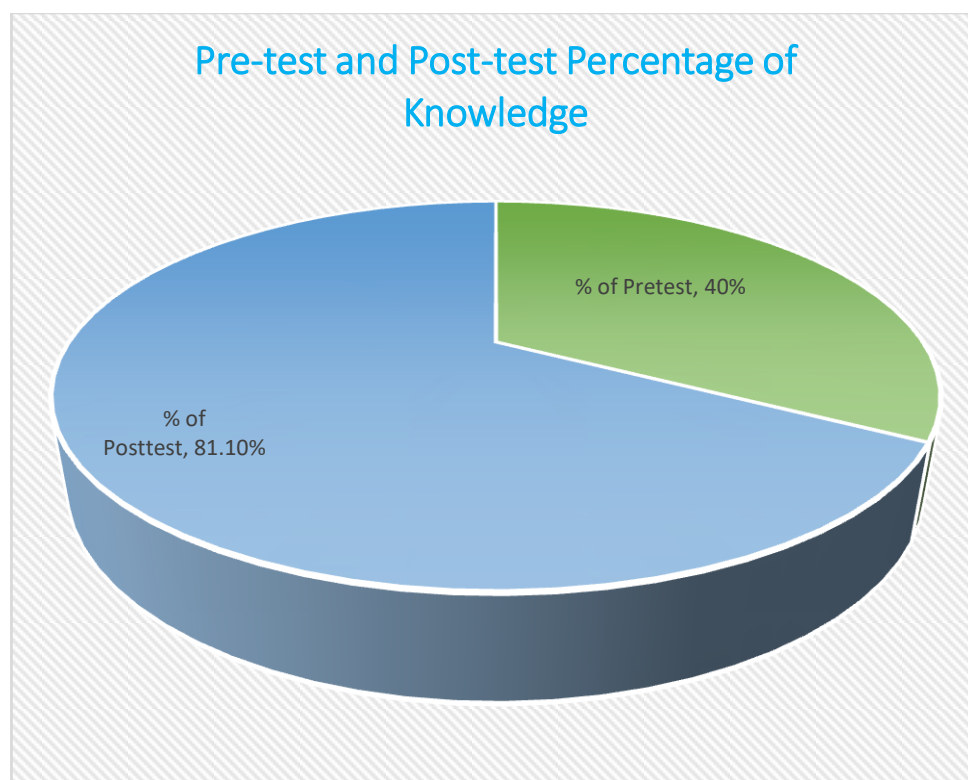


Figure-4.12; Pie graph showing the pre-test and post-test percentage of knowledge

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	0.00%
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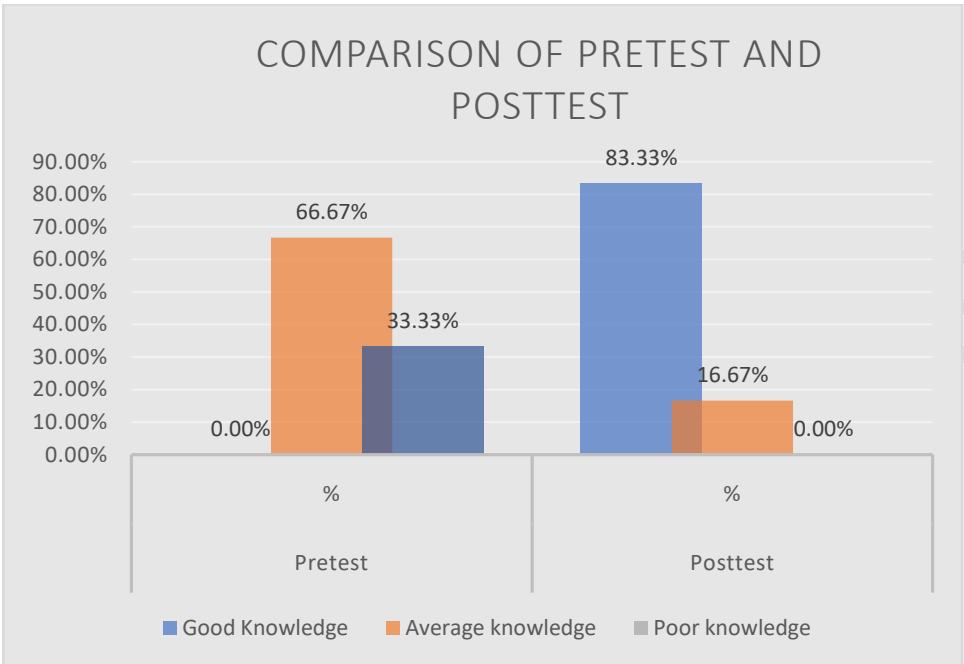


Table 4.15 (Figure-4.13); Cylindrical graph Showing the pretest and post-test level of knowledge on Breast Self-Examination.

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.

Equations

$$1. \quad \text{Mean} = \frac{\sum X}{N}$$

$$2. \quad \text{Mean Score Percentage} = \frac{\text{Mean}}{\text{No.of Scores}} \times 100$$

216

217 3. Karl Pearson's Coefficient of co-relation $r = \frac{\Sigma xy}{\sqrt{\Sigma x^2 \Sigma y^2}}$

218

219 4. Standard Deviation = $\sqrt{\left(\frac{\Sigma x^2}{N}\right) - \left(\frac{\Sigma x}{N}\right)^2}$

220

221 5. Paired 't' test $t = \frac{\bar{d}}{SE(\bar{d})}$

222

223 6. $S = \sqrt{\frac{\Sigma(x_1 - \bar{x}_1)^2 + \Sigma(x_2 - \bar{x}_2)^2}{n_1 + n_2 - 2}}$

224

225 7. Chi Square (χ^2) = $\Sigma \{(O-E) - 0.5\}^2 / E$

226

227 **Conclusions**

228 The present study was conducted to evaluate the effectiveness of a Video-
229 Assisted Teaching Programme (VATP) on knowledge regarding Breast Self-
230 Examination (BSE) among female pharmacy students at a selected pharmacy
231 college.

232 Based on the findings of the study, it was concluded that the majority of the
233 female pharmacy students had inadequate to moderate knowledge regarding
234 breast self-examination in the pre-test. After the administration of the Video-
235 Assisted Teaching Programme, a significant improvement was observed in the
236 post-test knowledge scores.

237 The statistical analysis revealed that the calculated 't' value was higher than
238 the table value at the selected level of significance, indicating that the Video-
239 Assisted Teaching Programme was effective in improving knowledge

regarding breast self-examination among female pharmacy students. Hence, the research hypothesis (H₁) was accepted.

The study also showed that there was a significant association between post-test knowledge scores and selected demographic variables. Therefore, hypothesis (H₂) 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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