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# Effectiveness of Video Assisted Teaching Programme on Knowledge regarding Breast Self-Examination among Adolescent Girls in selected Higher Secondary Schools at Guwahati, Assam

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**Abstract: Background:** Breast is a very vital organ of a female's body and females are very conscious about it as they will be depressed if they have any disease or illness related to this organ. A breast self-examination helps to understand the normal look and feel of the breast. By regularly examining their breasts women become familiar with their normal feel and thus are more able to detect subtle changes.

**Methodology:** A quantitative research approach was adopted to evaluate the effectiveness of video assisted teaching programme on knowledge regarding breast self-examination among adolescent girls in selected higher secondary schools at Guwahati, assam. 101 adolescent girls were selected using a probability simple random sampling technique from Arya Vidyapeeth Higher Secondary School and Prachya Bharati Senior Secondary School. A self-structured questionnaire was used to assess the knowledge of the adolescent girls on breast self-examination.

**Result:** The results revealed that before administration of the video assisted teaching programme majority 85.1% adolescent girls had moderate knowledge, 10.8% had inadequate knowledge and 4.1% had adequate knowledge regarding breast self-examination and after administration of video assisted teaching programme 100% had adequate knowledge regarding breast self-examination. Knowledge mean is 8.83 and SD is 1.830 in pretest whereas in post test the mean is 19.03 and SD is 1.703. There was a significant relationship between the pretest level of knowledge and socio demographic variables such as course stream, educational qualification and area of residence.

**Conclusion:** Majority of the adolescent girls had adequate knowledge regarding breast self-examination. There was a significant association was found between the knowledge level and demographic variables such as course stream, educational qualification and area of residence.

**Keywords:** Evaluate, Knowledge, Adolescent girls, Breast self-examination.

## I. INTRODUCTION

Breast cancer is third most common cancer following Kaposi's sarcoma and cervical cancer with incidence rate of 22 per 100,000 women. It is recommended that ladies over the age of 20 years perform monthly breast self-examination. Hence, the student researcher finds it more important to give video assisted teaching programme on breast self-examination which will help the adolescent girls about early detection and prevention of breast related diseases.

### A. The Statement of Problem

A study to Evaluate the Effectiveness of Video Assisted Teaching Programme on Knowledge regarding Breast Self-Examination among Adolescent Girls in selected Higher Secondary Schools at Guwahati, Assam.

### B. Specific Objectives

- To assess the level of pre-test knowledge regarding breast self-examination among adolescent girls in selected Higher Secondary Schools at Guwahati, Assam.

- b) To determine the effectiveness of video assisted teaching programme in terms of gain in knowledge scores in post-test regarding breast self-examination among adolescent girls in selected Higher Secondary Schools at Guwahati, Assam.
- c) To find out the association between pre-test knowledge level regarding breast self-examination among adolescent girls with selected demographic variables.

### C. Hypotheses

H<sub>1</sub>: The mean post-test knowledge scores of adolescent girls is significantly higher than the mean pre-test knowledge scores regarding breast self-examination as measured by structured knowledge questionnaire at 0.05 level of significance.

H<sub>2</sub>: There is significant association between the pre-test level of knowledge of adolescent girls regarding breast self-examination with selected demographic variables as measured by structured knowledge questionnaire at 0.05 level of significance.

## II. METHODOLOGY

A quantitative evaluative research approach was considered most suitable for the present study. Pre-experimental one group pre-test post-test research design was adopted for the study. In this study, a probability simple random sampling technique was adopted to select 101 samples for the study. The tools used for the study were demographic variables, structured knowledge questionnaire on breast self-examination. The analysis was done by using descriptive and inferential statistics in terms of frequency distribution, percentage, mean, standard deviation, paired 't' test and chi square.

## III. RESULTS

### A. Findings Related to Demographic Data

Table 1: Frequency and percentage distribution of adolescent girls according to their demographic variables  
n=101

| DEMOGRAPHIC VARIABLES                                   | FREQUENCY(f) | PERCENTAGE (%) |
|---|--------------|----------------|
| 1. Age in years   |              |                |
| 14-16 years   | 52           | 51.5           |
| 17-19 years   | 49           | 48.5           |
| 2. Religion   |              |                |
| Hinduism  | 54           | 53.5           |
| Islam   | 45           | 44.5           |
| Christianity  | 2            | 2              |
| 3. Course stream  |              |                |
| Arts stream   | 32           | 31.7           |
| Science stream  | 35           | 34.7           |
| Commerce stream   | 34           | 33.6           |
| 4. Educational qualification                            |              |                |
| Class XI  |              |                |
| Class XII   | 44           | 43.6           |
| 5. Area of residence                                    | 57           | 56.4           |
| Rural   |              |                |
| Urban   |              |                |
| 6. Type of family                                       | 63           | 62.4           |
| Nuclear family  | 38           | 37.6           |
| Joint family  |              |                |
| Extended family   | 57           | 56.4           |
| 7. Family history of breast cancer                      | 32           | 31.7           |
| Yes   | 12           | 11.9           |
| No  |              |                |
| 8. Previous knowledge regarding breast self-examination | 12           | 11.9           |
| Yes   | 89           | 88.1           |
| No  |              |                |
|   | 55           | 54.5           |
|   | 46           | 45.5           |

The data table 1 shows the frequency and percentage distribution of selected demographic variables of the adolescent girls. Majority i.e., 52 (51.5%) adolescent girls were between the age group of 14-16 years. Majority i.e., 54 (53.5%) adolescent girls belong to Hinduism. Majority i.e., 35 (34.7%) adolescent girls were from Science stream. Majority i.e., 57 (56.4%) adolescent girls were from Class XII. Majority i.e., 63 (62.4%) adolescent girls were from rural area. Majority i.e., 57 (56.4%) adolescent girls belong to nuclear family. Majority i.e., 89 (88.1%) adolescent girls did not have family history of breast cancer and majority i.e., 55 (54.5%) adolescent girls had previous knowledge regarding breast self-examination.

### B. Findings related to pre-test and post-test level of knowledge regarding breast self-examination among adolescent girls of Higher Secondary Schools.

Study finding revealed that in pre-test majority 86(85.1%) participants had moderately adequate knowledge, 11(10.8%) had inadequate knowledge and 4(4.1%) had adequate knowledge where as in post-test majority all participants 101(100%) had adequate knowledge regarding breast self-examination.

Table 2: Findings related to effectiveness of video assisted teaching programme regarding breast self-examination among the adolescent girls of Higher Secondary Schools.

| n=101              |       |       |                 |              |     |           |             |
|--------------------|-------|-------|-----------------|--------------|-----|-----------|-------------|
| LEVEL OF KNOWLEDGE | MEAN  | SD    | MEAN DIFFERENCE | t TEST VALUE | df  | 'P' VALUE | INFERENCES  |
| Pre-test           | 8.83  | 1.830 | 10.20           | 50.49        | 100 | 0.001     | Significant |
| Post-test          | 19.03 | 1.703 |                 |              |     |           |             |

\* $p < 0.05$  level of significance

Findings revealed that there is significant difference in pre-test and post-test knowledge score. It depicts that video assisted teaching programme was effective in increasing the knowledge regarding breast self-examination among adolescent girls. Hence, null hypothesis  $H_{01}$  is rejected and research hypothesis  $H_1$  is accepted.

Table 3: Association between pre-test level of knowledge regarding breast self-examination with selected demographic variables.

| DEMOGRAPHIC VARIABLE | PRE-TEST KNOWLEDGE |                     |          | $\chi^2$ VALUE | df | 'P' VALUE | TABULATED VALUE | INFERENCES |
|----------------------|--------------------|---------------------|----------|----------------|----|-----------|-----------------|------------|
|                      | INADEQUATE         | MODERATELY ADEQUATE | ADEQUATE |                |    |           |                 |            |
| 1. Age in years      |                    |                     |          |                |    |           |                 |            |
| a. 14-16 years       |                    |                     |          |                |    |           |                 |            |
| b. 17-19 years       | 7                  | 44                  | 1        | 1.777          | 2  | 0.411     | 5.99            | NS         |
|                      | 4                  | 42                  | 3        |                |    |           |                 |            |
| 2. Religion          |                    |                     |          |                |    |           |                 |            |
| a. Hinduism          | 6                  | 47                  | 1        |                |    |           |                 |            |
| b. Islam             | 5                  | 37                  | 3        | 1.859          | 4  | 0.762     | 9.49            | NS         |
| c. Christianity      | -                  | 2                   | -        |                |    |           |                 |            |
| 3. Course stream     |                    |                     |          |                |    |           |                 |            |
| a. Arts stream       | 8                  | 22                  | 2        |                |    |           |                 |            |



|   |    |    |   |       |   |       |      |    |
|---|----|----|---|-------|---|-------|------|----|
| b. Science stream                                       | 2  | 31 | 2 | 12.35 | 4 | 0.014 | 9.49 | S  |
| c. Commerce stream                                      | 1  | 33 | - |       |   |       |      |    |
| 4. Educational qualification                            |    |    |   |       |   |       |      |    |
| a. Class XI   | 9  | 34 | 1 | 7.676 | 2 | 0.021 | 5.99 | S  |
| b. Class XII  | 2  | 52 | 3 |       |   |       |      |    |
| 5. Area of residence                                    |    |    |   |       |   |       |      |    |
| a. Urban  | 1  | 33 | 4 | 10.46 | 2 | 0.005 | 5.99 | S  |
| b. Rural  | 10 | 53 | - |       |   |       |      |    |
| 6. Type of family                                       |    |    |   |       |   |       |      |    |
| a. Nuclear family                                       | 8  | 47 | 2 |       |   |       |      |    |
| b. Joint family   | 3  | 28 | 1 | 2.686 | 4 | 0.612 | 9.49 | NS |
| c. Extended family                                      | -  | 11 | 1 |       |   |       |      |    |
| 7. Family history of breast cancer                      |    |    |   |       |   |       |      |    |
| a. Yes  | 2  | 10 | - | 0.962 | 2 | 0.618 | 5.99 | NS |
| b. No   | 9  | 76 | 4 |       |   |       |      |    |
| 8. Previous knowledge regarding breast self-examination |    |    |   |       |   |       |      |    |
| a. Yes  | 5  | 47 | 3 | 1.041 | 2 | 0.594 | 5.99 | NS |
| b. No   | 6  | 39 | 1 |       |   |       |      |    |

S\*=Significant at  $p < 0.05$  level of significance NS-Non significant

The overall statistical presentation of data presented on the table 3 shows that there is significant association between knowledge regarding breast self-examination among adolescent girls with demographic variables such as course stream ( $\chi^2$  -12.35 and 'p' value-0.014), educational qualification ( $\chi^2$  -7.676 and 'p' value- 0.021) and area of residence ( $\chi^2$  -10.46 and 'p' value- 0.0005) and there is no association between knowledge regarding breast self-examination among adolescent girls with demographic variables like age, religion, type of family, family history of breast cancer and previous knowledge regarding breast self-examination.

Hence, null hypothesis  $H_{02}$  is rejected and the research hypothesis  $H_2$  is accepted for the demographic variables such as course stream, educational qualification and area of residence. The null hypothesis,  $H_{02}$  is retained for the demographic variables such as age, religion, type of family, family history of breast cancer and previous knowledge regarding breast self-examination.

#### IV. CONCLUSION

The findings revealed that adequate knowledge regarding breast self-examination among adolescent girls. There is an effectiveness of structured teaching programme. There was a significant association between knowledge regarding breast self-examination among adolescent girls in selected Higher Secondary Schools and course stream. There was a significant association between knowledge regarding breast self-examination among adolescent girls and educational qualification. There was a significant association between knowledge regarding breast self-examination among adolescent girls and area of residence.

#### V. RECOMMENDATIONS

Based on the findings of the study the following recommendations are made for further study:

1) The study can be replicated using a large sample to validate the findings on generalization.

- 2) A similar study can be conducted by using comparative approach and comparison can be made between nurses with varying qualifications.
- 3) A study can also be done to assess the practice and attitude of the female students regarding breast self-examination.
- 4) Study can be done with randomization for better result.
- 5) The study can be conducted among different groups in hospital and community settings.
- 6) The study can be conducted using various research design.

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