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# EFFECTIVENESS OF VIDEO ASSISTED INSTRUCTION ON KNOWLEDGE AND ATTITUDE REGARDING EARLY DETECTION AND PREVENTION OF CERVICAL CANCER THROUGH VIA/VILI AMONG SELECTED WOMEN RESIDING AT SAMAYANALLUR, MADURAI

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### ABSTRACT

**Aim and objective:** The study was aimed at assessing the knowledge and attitude on early detection and prevention of cervical cancer through VIA/VILI among selected women. **Methodology:** A quantitative approach pre experimental – one group pre test and post test design was used in this study. A sample size of 60 women selected by Non probability purposive sampling technique was used to collect the samples. The modified Ludwig Von Bertalanffy (1968) theory was adopted for this study. The tool used for this study was structured knowledge and attitude questionnaire on early detection and prevention of cervical cancer through VIA/VILI. Video assisted instruction on early detection and prevention of cervical cancer through VIA/VILI given to the subjects. **Results:** The findings of the study reveals that the calculated 'value (9.21) at  $P < 0.05$ . The mean post test score of knowledge and attitude on early detection and prevention of cervical cancer through VIA/VILI among women after video assisted teaching will be significantly higher than their mean pre test score of knowledge and attitude. **Conclusion:** Cervical cancer is the second most common malignancy in women worldwide, and it remains a leading cause of cancer-related death for women in developing countries. Community health nurse plays important role in public health can effectively guide women for the early diagnosis and treatment of cervical cancer. The findings of the study revealed that video assisted teaching on early detection and prevention of cervical cancer through VIA/VILI was effective on increase the knowledge and attitude among women.

### INTRODUCTION

**“Every woman is the author of her own health or disease”.**

Women play an essential role in maintaining

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family and community health. Over the past hundred years, despite this changing view of the role of women in the family, and not discounting men's contributions to childcare and household chores, women still maintain the primary responsibility for care of the children and household. Cancer is one of the frequently talked about and most feared diseases that falls under the genre of



lifestyle diseases that have evolved, rather rapidly, in the past two decades. Cancer is a generic term for a large group of diseases that can affect any part of the body. When cancer starts in the cervix, it is called cervical cancer. Cervical cancer develops from cell changes caused by virus that is called human papillomavirus (HPV). Visual inspection of the cervix as a screening tool for low resource settings, despite its limited specificity, since it is economical and provides immediate results. Visual inspection can be performed with acetic acid (VIA) or Lugol's iodine (VILI). These procedures are also referred to as Visual Inspection with Acetic Acid (VIA) or Visual Inspection with Lugol's Iodine (VILI). So hence assessing the effectiveness of video assisted instruction on early detection and prevention of cervical cancer through VIA/VILI [1,-4].

### RESEARCH METHODOLOGY

A quantitative research approach has been used for this study. The research design used for this study is Pre experimental design. The research setting for the study was conducted at selected rural area in Samayanallur. It is under the control of deputy directorate of health service (DDHS). Primary health centre is situated in the Samayanallur and it is 30 bedded hospitals. 6 sub centres is under the control of this primary health centre. Sathyamoorthi nagar is selected area in Samayanallur, Madurai. The Video assisted teaching on knowledge and attitude regarding early detection and prevention of cervical cancer through VIA/VILI which consists of explanation and demonstration with video assisted teaching regarding definition of cervical cancer, risk factors, signs and symptoms, screening of cervical cancer, prevention and treatment of cervical cancer. Personal data sheet on the demographic characteristics Age, level of education, occupation, marital status, parity, income, family size, religion, source of information and willingness of the procedure.

The level of knowledge was assessed using self structured questionnaire and the level of attitude was assessed using likert scale devised by the investigator. Both descriptive and inferential statistics were used for analysis

The content validity of the data collection tool

and intervention tool was ascertained with the expert's opinion in the following field of expertise,

The tool was validated by 4 experts including 3 from the community health nursing departments and one director of preventive and social medicine, and one expert from department of obstetric and gynaecology, primary health centre, Samayanallur, Madurai. Experts were requested to judge the items for the clarity, relevance, comprehensiveness and appropriateness of the content. Appropriate modifications were made in each part as per the suggestions given by the experts. The above table reveals that the calculated 't' value (22.62) was higher than the table value at 0.05 level of significance. Thus the inferential statistical method proved that the difference in the mean scores showed a significant change as increase knowledge among women. Thus video assisted teaching was effective in increase the knowledge among women.

The above table reveals that the calculated 't' value (9.21) was much higher than the table value at 0.05. Thus video assisted teaching was effective in increase the Attitude among women and the selected women 38 members were practiced cervical cancer screening through VIA/VILI in Samayanallur PHC, Madurai.

The above table revealed that the calculated value  $\chi^2$  at 0.05 level of significance. There was a significant association between the post test level of knowledge and the education. The calculated  $\chi^2 = 15.7$  at  $p=0.026$  level of significance. And there is significant association was found between the post test knowledge and marital status. The calculated value obtained  $\chi^2=17.90$  at  $p=0.034$  level of significance. And there was a significant association between the post test knowledge and the number of children  $\chi^2=29.7$  at  $p=0.011$  level of significance. There was a significant association found between the religions with the post test level of knowledge. The calculated value  $\chi^2=15.98$  at  $p=0.022$  level of significance. There was a significant association found between the parity and the post test level of attitude. The  $\chi^2$  value is 29.7 and the  $P=0.011$  level of significance. In religion also there was a significant association between the post test level of attitude.

### FINDINGS:

**Table 1. Level of Knowledge Regarding Early Detection and Prevention Of Cervical Cancer Frequency and Percentage Distribution of Pre-test and Post Test Level Of Knowledge**

| LEVEL OF KNOWLEDGE | PRETEST   |       | POSTTEST  |        |
|--------------------|-----------|-------|-----------|--------|
|                    | FREQUENCY | %     | FREQUENCY | %      |
| INADEQUATE         | 05        | 8.33% | 02        | 3.33%  |
| MODERATE           | 51        | 85%   | 47        | 78.33% |
| ADEQUATE           | 04        | 6.67% | 11        | 18.33% |

n=60



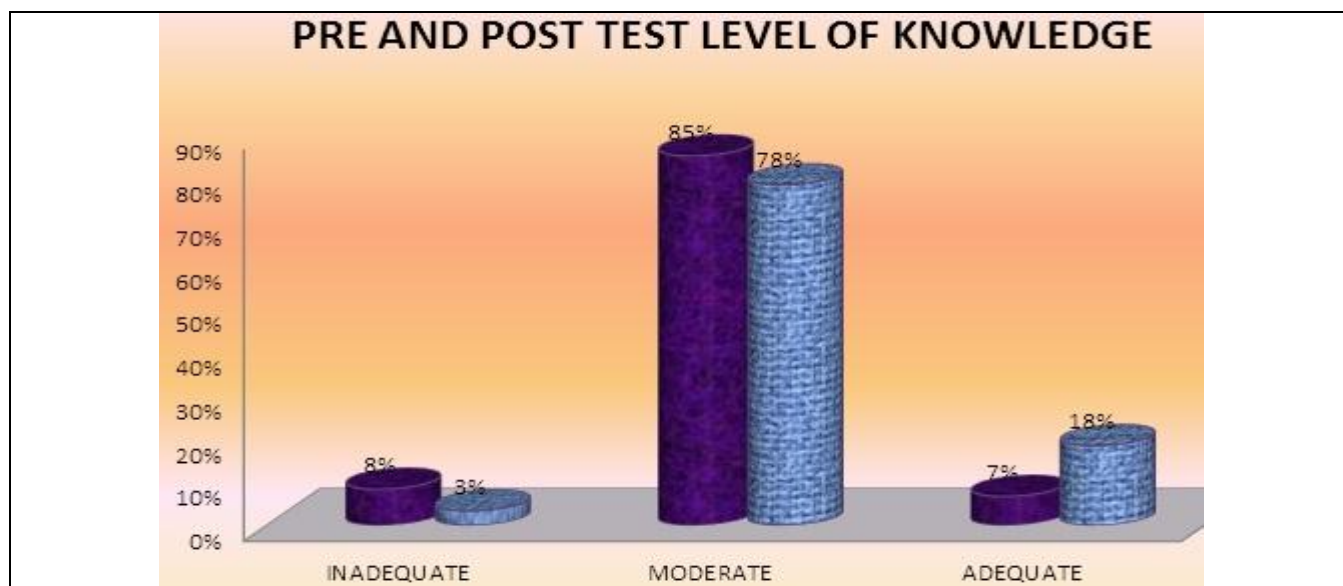


Figure 1. Frequency and percentage distribution of pre and post-test level of knowledge regarding Early Detection and Prevention of Cervical Cancer.

Table 2. Level of Attitude in Pretest and Post Test Regarding Early Detection and Prevention of Cervical Cancer  
n=60

| LEVEL OF ATTITUDE | PRETEST   |        | POSTTEST  |        |
|-------------------|-----------|--------|-----------|--------|
|                   | FREQUENCY | %      | FREQUENCY | %      |
| POOR              | 11        | 18.33% | -         | -      |
| MODERATE          | 6         | 51.67% | 38        | 63.33% |
| GOOD              | 43        | 30%    | 22        | 36.67% |

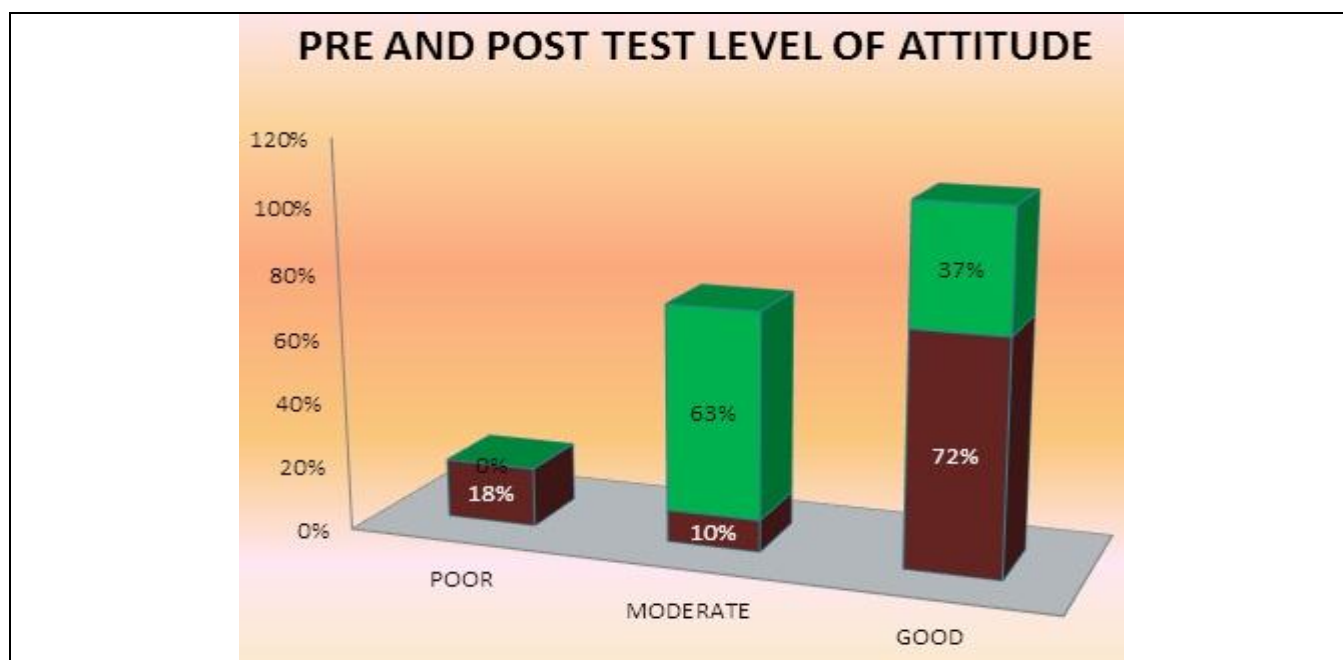


Figure 2. Frequency and percentage distribution of pre and post-test level of attitude regarding Early Detection and Prevention of Cervical Cancer.

**Table 3. Effectiveness of Video Assisted Teaching on Early Detection and Prevention of Cervical Cancer Through Via/Vili.**

| Knowledge       | Pre Test |       | Post Test |      | t value<br>at p<0.05 |
|-----------------|----------|-------|-----------|------|----------------------|
|                 | MEAN     | SD    | MEAN      | SD   |                      |
| Definition      | 1.2167   | 0.66  | 3.28      | 0.98 | 34.57                |
| Risk Factors    | 3.2333   | 1.533 | 7.82      | 2.57 | 32.35                |
| Sign & Symptoms | 1.25     | 1.173 | 3.72      | 1.89 | 31.08                |
| Diagnosis       | 7.766    | 2.695 | 19.67     | 4.11 | 38.62                |
| Presentation    | 1.216    | 0.825 | 7.97      | 2.19 | 34.2                 |
| Overall         | 14.682   | 3.15  | 42.46     | 4.49 | 22.62                |

Paired "T" Test to Assess the Effectiveness of Video Assisted Teaching on Knowledge. \*-P<0.05, significant.

| Attitude | Pre Test |                    | Post Test |                    | t value | P Value  |
|----------|----------|--------------------|-----------|--------------------|---------|----------|
|          | Mean     | Standard Deviation | Mean      | Standard Deviation |         |          |
| Overall  | 15.8     | 4.41               | 20        | 3.03               | 9.21    | p < 0.05 |

Paired "T"-Test to Assess the Effectiveness Of Video Assisted Teaching On Attitude. \*-P<0.05, significant.

**Table 4. Associate the Post test level of knowledge and attitude regarding early detection and prevention of cervical cancer through Via/Vili among selected women with selected demographic variables**

| VARIABLES      |               | In-adequate |   | Moderate |    | Adequate |    | Chi Square | P Value                           |
|----------------|---------------|-------------|---|----------|----|----------|----|------------|-----------------------------------|
|                |               | F           | % | F        | %  | F        | %  |            |                                   |
| AGE            | 35 - 45 Years | 0           | 0 | 24       | 40 | 7        | 12 | 3.000      | 0.223                             |
|                | 46 55 Years   | 1           | 2 | 12       | 20 | 3        | 5  |            |                                   |
|                | 56 -65 Years  | 1           | 2 | 10       | 17 | 2        | 3  |            |                                   |
| EDUCATION      | Formal        | 1           | 2 | 17       | 28 | 7        | 12 | 15.7       | <b>0.026<br/>Signi<br/>ficant</b> |
|                | School        | 0           | 0 | 11       | 18 | 3        | 5  |            |                                   |
|                | Degree        | 0           | 0 | 0        | 0  | 0        | 0  |            |                                   |
|                | No Formal     | 1           | 2 | 18       | 30 | 2        | 3  |            |                                   |
| OCCUPATION     | House Wife    | 1           | 2 | 26       | 43 | 9        | 15 | 4.000      | 0.135                             |
|                | Private       | 1           | 2 | 11       | 18 | 3        | 5  |            |                                   |
|                | Government    | 0           | 0 | 0        | 0  | 0        | 0  |            |                                   |
|                | Business      | 0           | 0 | 9        | 15 | 0        | 0  |            |                                   |
| MARTIAL STATUS | Married       | 1           | 2 | 26       | 43 | 8        | 13 | 17.90      | <b>0.034<br/>Signi<br/>ficant</b> |
|                | Widow         | 1           | 2 | 14       | 23 | 4        | 7  |            |                                   |
|                | Separate      | 0           | 0 | 6        | 10 | 0        | 0  |            |                                   |
|                | Un married    | 0           | 0 | 0        | 0  | 0        | 0  |            |                                   |
| PARITY         | 1             | 0           | 0 | 13       | 22 | 3        | 5  | 29.7       | <b>0.011<br/>Signi<br/>ficant</b> |
|                | 2             | 1           | 2 | 25       | 42 | 6        | 10 |            |                                   |
|                | 3             | 1           | 2 | 3        | 5  | 3        | 5  |            |                                   |
|                | 4             | 0           | 0 | 5        | 8  | 0        | 0  |            |                                   |
| INCOME         | 1-2           | 0           | 0 | 15       | 25 | 3        | 5  | 4.000      | 0.135                             |
|                | 2-3           | 1           | 2 | 15       | 25 | 2        | 3  |            |                                   |
|                | 3-4           | 0           | 0 | 4        | 7  | 3        | 5  |            |                                   |
|                | Less than 5   | 1           | 2 | 12       | 20 | 4        | 7  |            |                                   |
| FAMILY TYPE    | Single Family | 1           | 2 | 29       | 48 | 8        | 13 | 6.000      | 0.199                             |



| VARIABLES                    |                       | In-adequate |   | Moderate |    | Adequate |    | Chi Square | P Value                  |
|------------------------------|-----------------------|-------------|---|----------|----|----------|----|------------|--------------------------|
|                              |                       | F           | % | F        | %  | F        | %  |            |                          |
|                              | Joint Family          | 1           | 2 | 17       | 28 | 4        | 7  |            |                          |
| RELIGION                     | Hindu                 | 1           | 2 | 47       | 78 | 12       | 20 | 15.98      | <b>0.022 significant</b> |
|                              | Muslim                | 0           | 0 | 0        | 0  | 0        | 0  |            |                          |
|                              | Christian             | 0           | 0 | 0        | 0  | 0        | 0  |            |                          |
|                              | Others                | 0           | 0 | 0        | 0  | 0        | 0  |            |                          |
| SOURCE OF INFORMATION        | Media                 | 1           | 2 | 8        | 13 | 3        | 5  | 5.000      | 0.287                    |
|                              | Medical professionals | 0           | 0 | 6        | 10 | 2        | 3  |            |                          |
|                              | Family Members        | 0           | 0 | 9        | 15 | 0        | 0  |            |                          |
|                              | Friends               | 1           | 2 | 3        | 5  | 1        | 2  |            |                          |
|                              | No                    | 0           | 0 | 20       | 33 | 6        | 10 |            |                          |
| WILLINGNESS OF THE PROCEDURE | YES                   | 0           | 0 | 0        | 0  | 0        | 0  | 1.000      | 0.157                    |
|                              | NO                    | 2           | 3 | 46       | 77 | 12       | 20 |            |                          |

\*p<0.05. Significant.

## DISCUSSION

The first objective of the study was to assess the pre-test knowledge and attitude of early detection and prevention of cervical cancer through VIA/VILI among selected women residing at selected rural area Madurai.

In this study the knowledge and attitude on early detection and prevention of cervical cancer through VIA/VILI measured by structured questionnaire.

The present study reveals that in pre-test 8.33% of selected women were inadequate; moderate level 85% and 6.67% was adequate level on knowledge. In aspect of attitude on early detection and prevention of cervical cancer through VIA/VILI 51.67% of women were moderate level of attitude, 18.33 % were in poor attitude and 30% were good in attitude.

The pre-test results of the study revealed that out of 60 women, 41(68%) had inadequate knowledge regarding cervical cancer, 19(32%) had moderately adequate knowledge and no one had adequate knowledge. The post-test results showed that, the knowledge of women had increased after the STP. In the post-test 51(85%) women had adequate knowledge and 9(15%) had moderately adequate knowledge regarding cancer cervix. The study concluded that STP improves the knowledge of women significantly which in turn will help early detection and prevention of cancer cervix.

Thus Hypothesis 1 there will be a significant difference between pre-test and post-test knowledge scores and attitude scores, was accepted.

The second objective of the study was to assess the effectiveness of video assisted teaching on knowledge and attitude regarding early detection and prevention of cervical cancer through VIA/VILI among selected women residing at samayanallur, Madurai.

Video assisted instruction was given to women and the effectiveness was evaluated through post test. The

findings reveals that, the pre-test 8.33% of selected women were inadequate; moderate level 85% and 6.67% was adequate level on knowledge. After video assisted teaching the post test level of knowledge on early detection and prevention of cervical cancer through VIA/VILI there is increased level of knowledge 3.33% women were inadequate level of knowledge, 78.33% were on moderate level and 18.33% women were adequate level of knowledge. There was significant difference in percentage of knowledge on early detection and prevention of cervical cancer through VIA/VILI in post test.

Comparing the percentage of pre test and post test level of attitude on early detection and prevention of cervical cancer through VIA/VILI 51.67% of women were moderate level of attitude, 18.33 % were in poor attitude and 30% were good in attitude. After video assisted teaching in post test there is increased level of attitude among the women that 36.67% good and 63.33% were on moderate level of attitude.

The mean post test score of knowledge 42.46 and attitude 42.25 among women after video assisted teaching will be significantly higher than their mean pre test score of knowledge 14.68 and attitude 15.02. Thus the inferential statistical method proved that the difference in the mean scores showed a significant change as increase knowledge and attitude among women. The calculated 't' value for knowledge 22.62 the P value 0.05 ( $P < 0.05$ ), it shows highly significant the calculated 't' value for attitude 9.21 was much higher than the table value at 0.05 ( $P < 0.05$ ). It shows highly significant. In the post test level of knowledge and attitude the calculated 'r' value was 0.432 at  $p < 0.05$  level which showed that there was a positive correlation between post test level of knowledge and attitude regarding early detection and prevention of cervical cancer through VIA/VILI. Thus the inferential





statistical method proved that the difference in the mean scores showed a significant change as increase knowledge and attitude among women. Video assisted teaching was effective in increase the knowledge and attitude among women was accepted.

Thus Hypothesis 2: There will be a significant relationship between knowledge and attitude regarding early detection and prevention of cervical cancer through VIA/VILI was accepted.

The third objective was to determine the associate the post test knowledge and attitude regarding early detection and prevention of cervical cancer through VIA/VILI with selected demographic variables.

In association of post test level of knowledge of early detection and prevention of cervical cancer through VIA/VILI with demographic variables the study shows that there was significant association between post test score of knowledge education, marital status number of children and religion of the individual baseline variables.

In association of post test level of attitude with base line variables, the study result shows that there was

significant association between post test scores of attitude regarding early detection and prevention of cervical cancer through VIA/VILI and age, education, marital status and parity of the women. Thus Hypothesis 3 There will be a significant association between post test knowledge scores and attitude scores with selected demographic variables was proved.

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