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A study to evaluate the video assisted teaching regarding cervical cancer among degree students in selected colleges, daund

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Abstract
Cervical cancer is the biggest cause for cancer in women in developing countries. It is the second most common cancer across the world. To an estimated annual global incidence of 5, 00,000 cervical cancers, India contribute 100,000, i.e. 1/5 of the world burden. In India, it is most common in South Indian women and occupies the top rank among the cancers in women in most developing countries constituting 34% of all types of women cancers. The burden of the cervical cancer in India has been taken in the context of the additional problems of the advanced disease at presentation. As mentioned above it implies that, there is a need to protect present and future generation from the consequence of the disease by providing a framework to prevent cervical cancer. The key factor in prevention and treatment of cervical cancer is the awareness about origin, causes, screening and preventable measures of cervical cancer which helps in reducing risk of the occurrence. Many studies show that even the educated class are not aware of the cervical cancer and often link it with the neck. Hence it is very necessary to update the knowledge by educating about this serious disease.

Objectives: 1. to assess the knowledge of degree students regarding cervical cancer. 2. To evaluate the effectiveness of video assisted teaching regarding cervical cancer among degree students. 3. To find the association between knowledge level with selected socio-demographic variables.

Hypotheses: H_{01} - There is no significant difference between pre and posttest knowledge scores regarding cervical cancer among Degree students. H_{02} - There is no significant association between the knowledge levels with selected demographic variables**.**

Methodology: An evaluative approach was used for this study. The research design was Quasi-experimental one group pre-test post-test design. The sample comprised of 60 degree students. The degree students were selected by purposive sampling technique. Data was collected by administering a self-administered knowledge questionnaire before and after the video assisted teaching. The data was analyzed using descriptive and inferential statistics. Paired't' test was used to find the effectiveness of video assisted teaching and chi-square test was used to find the association of pre-test knowledge score with the selected socio demographic variables.

Result: The result of the study showed that the degree students have moderately adequate knowledge regarding cervical cancer and its prevention. The pre-test mean knowledge score was 14.983. There was a marked gain in mean knowledge score after administration of video assisted teaching (23.983). The difference in mean knowledge score was statistically significant at 0.05 level's' $_{(59)}$ = 29.388. There was no significant association between pre-test knowledge scores and selected socio-demographic variables such as age (χ^2=00), religion (χ^2= 11.122), types of family (χ^2=1.408), marital status (χ^2= 00), place of residence (χ^2= 0.051), previous knowledge (χ^2= 4.729), bad habits (χ^2= 00) at 0.05 level of significance.

Conclusion: The findings of this study shows that the video assisted teaching was effective in terms of gaining knowledge on cervical cancer and its prevention among the degree students

Keywords: cervical cancer, degree students, evaluation, video assisted teaching, evaluator approach

Introduction

The changing demographic scenario in India is declining fertility level and increasing life expectancy. Higher incidence of non-communicable diseases, especially cancer is positively associated with the percentage of aged population of the country. The World cancer Report documents that, the cancer rates have set to increase in an alarming rate globally. Cancer rates could increase by 50% new cases for the year 2020.

Cancer may be as old as humankind. The first cause of cancer was identified by the British surgeon Percivall Pott, who discovered in 1775 during the fifteenth century, what might now be considered a cancer-like growth was referred to as a 'scirrus' or 'scar'. Cancer affects people at all ages with the risk for most of the types increasing with the age**.** Cancer has caused about 13% of all human deaths in 2007.

Cancer of the cervix, a very common kind of cancer in women, is a disease in which cancer (malignant) cells are found in the tissues of the cervix. The cervix is the opening of the uterus (womb). It connects the uterus to the vagina (the birth canal). Cancer of the cervix usually grows slowly over a period of time. Before cancer cells are found on the cervix, the tissues of the cervix go through changes in which abnormal cells begin to appear (a condition called dysplasia). Later, the cancer starts to grow and spread more deeply into the cervix and to the surrounding areas.

'Cervical cancer' is the cancer of the mouth of the uterus called 'cervix'. "It is the commonest cancer in India and all sexually active women are at a risk of contracting this disease. But it's mostly seen in women aged between 50 to 55 years.

Cervical cancer may be present with vaginal bleeding, but

its symptoms may be absent until the cancer is in its advanced stages. Pap smear screening can identify potentially precancerous changes. Treatment of the high grade changes can prevent the development of the cancer. In developed countries, the widespread use of cervical screening programs has reduced the incidence of the invasive cervical cancer by 50% or more. Cervical cancer usually develops slowly over time.

Before cancer appears in the cervix, the cells of the cervix go through changes known as dysplasia, in which cells that are not normal begin to appear in the cervical tissue. Later, cancer cells start to grow and spread more deeply into the cervix and to the surrounding areas.

Despite the known pre-invasive an implementation of cervical screening programs, cervical cancer has remained a major health problem especially in the developing world.

Statement of the Problem

"A Study To Evaluate The Video Assisted Teaching Regarding Cervical Cancer Among Degree Students In Selected Colleges, Daund.

Objectives of the Study

1. To assess the knowledge of degree students regarding cervical cancer.
2. To evaluate the effectiveness of video assisted teaching regarding cervical cancer among degree students.
3. To find the association between knowledge level with selected socio-demographic variables.

Assumptions

The researcher assume that,

1. Degree students will have limited knowledge on cervical cancer.
2. Video assisted teaching is one of the best teaching strategies in imparting knowledge on cervical cancer.

Hypothesis

H_{01} - There is no significant difference between pre and posttest knowledge scores regarding cervical cancer among Degree students.

H_{02} - There is no significant association between the knowledge levels with selected demographic variables**.**

Research design

A Quasi-experimental one group pre-test and post-test design was adopted for the present study to find out the relationship between knowledge score of degree students regarding the cervical cancer. In this study, the sample consisted of 60 degree students. Non-probability purposive sampling technique was used to select the subjects. The self-administered knowledge questionnaire found appropriate. The developed tool was refined and valid by the subject experts, guide.

Description of tool

- **Self-administered knowledge Questionnaire**

Self-administered knowledge Questionnaire is a structured questionnaire which consists of the demographic characteristics and knowledge questionnaire regarding the cervical cancer.

Section A: Demographic characteristics

The first part of the tool consist of 7 items for obtaining information about the selected background factor such as age, religion, type of family, marital status, place of residence, previous information about cervical cancer and habits.

Section B: Self-administered knowledge questionnaire

Questionnaire is adopted to assess the knowledge of degree students regarding the cervical cancer. It consists of 30 items of multiple choice questions. Total score of 30.

For right score – 1
For wrong score – 0

The knowledge level has been arbitrarily divided into three categories based on the structured knowledge questionnaire.

S.N	Category	Score
1	Adequate knowledge	23 – 30
2	Moderately adequate knowledge	15 – 23
3	Inadequate knowledge	0 – 15

Development of teaching plan:

The following steps were adopted to develop the teaching plan

- Development of the content blue print
- Preparation of video assisted teaching
- Establishment of the content validity of video assisted teaching
- Teaching plan

Content of the blues print

A blueprint was prepared as prior to the construction of the self-administered knowledge questionnaire on assessment of knowledge of degree students regarding the cervical cancer. It showed the distribution of items according to the content areas. The items included in the video assisted teaching are:

- Concept and meaning
- Definitions
- Incidence
- Types
- Causes
- Clinical manifestation
- Diagnostic evaluation
- Treatment
- Prevention
- Complications

Development of criteria checklist

A criteria checklist was prepared to develop STP based on the literature review and the opinion of experts. The criteria checklist constructed under broad headings.

- Objectives
- Content (selection, organization, presentation)
- Language
- Audio – visual aids
- Practicability
- Time allotment

A draft of criteria checklist and teaching plan was given to 12 experts for validation.

Preparation of video assisted teaching programme: Video assisted teaching programme was developed by reviewing related literature and considering the opinion of experts. The main objectives that were considered while

preparing video assisted teaching were;

- Understanding level of the sample
- Method of teaching to be adopted
- Simplicity of language and Relevancy of teaching
- Attention span of degree students

Content validity of the video assisted teaching

The initial draft was given to the 12 experts along with criteria checklist. The experts were requested to validate the VAT based on the criteria checklist. The suggestions of experts were incorporated and VAT was modified and finalized with opinion of guide.

Description of teaching plan

The video assisted teaching was titled as "Cervical cancer". The teaching was planned for one session. It consist the followed areas

- Concept and meaning
- Definitions
- Incidence
- Types
- Causes
- Clinical manifestation
- Diagnostic evaluation
- Treatment
- Prevention
- Complications

Data collection Procedure

The data collection was carried out for 1 month. Permission was obtained from the principal and the administrator of ST. Jyoti Prasad madyamik and uchha madyamik vidyalay, Daund. The investigator administered the tool to II year degree students who were willing to participate after introducing and explaining the purpose of the study. On I day, the pretest knowledge questionnaire was given to the respondents and knowledge on cervical cancer was assessed. Video assisted teaching regarding cervical cancer was conducted for a period of one hour after pretest. 8th day, the investigator administered posttest and assessed their knowledge on cervical cancer. However the researcher has not faced any difficulty during the data collection process.

Result

Section I: Frequency and percentage distribution of the socio-demographic variables.

Distributions of degree students according to their age group shows that all the respondents 60(100%) were in the age group of 17-18 years. No one has found in the age group of 18-19 years and 19-20 years. The majority of the respondents 41(8.3%) were Hindus, remaining 11(18.3%) were Muslims and 8(13.3%) were Christians.

Distribution of degree students according to their family type shows that majority of them 41(68.3%) were from nuclear family and remaining 19(31.7%) were from joint family. The majority of the respondents 60(100%) were unmarried and no one has married.

Among the respondents majority of them 42(70%) were coming from urban area and remaining 18(30%) were coming from rural area.

Most of the respondents 23(38.3%) were having previous knowledge from journal, remaining 21(35%) were having knowledge from television and 16(26.7%) were from newspaper. The majority of the respondents 60(100%) were not having any bad habits like alcohol consumption, smoking and tobacco chewing.

Section II: Analysis of pre-test and post-test knowledge on cervical cancer among degree students. Pre-test and post-test knowledge scores of respondents. n=60

Table 1

Knowledge Level	Pre-test		Post-test	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Inadequate	39	65%	00	00%
Moderately adequate	21	35%	24	40%
Adequate	00	00%	36	60%

Range, mean, median and standard deviation of pre-test and post-test knowledge score of the degree students on cervical cancer

Table 2

Knowledge	Range	Mean	Median	Standard deviation
Pre test	13-18	14.983	15	1.620752
Post test	22-26	23.983	24	1.44376

Maximum score = 30, n = 60

Area-wise mean, mean percentage, SD, t value of pre-test and post-test knowledge scores and effectiveness of Video assisted teaching. n=60, DF=59, P <0.05

Table 3

Area of questionnaire		Pre-test			Post-test		
		Mean	Mean (%)	SD	Mean	Mean (%)	SD
I	Concept and meaning	2.23	74.43	.427	3.00	100	.000
II	Definition	.12	12	.324	.72	72	.454
III	Incidence	1.90	47.5	.573	2.48	62	.504
IV	Causes	.78	39	.691	1.87	93.5	.343
V	Clinical manifestation	.60	60	.494	.53	53	.503
VI	Diagnostic evaluation	1.82	60.6	.390	2.38	79.3	.490
VII	Treatment	3.23	46.1	.851	5.82	83.1	.390
VIII	Prevention	3.90	48.7	1.100	6.52	81.5	.651
IX	Complications	.40	40	.494	.67	67	.475

Section III: Effectiveness of video assisted teaching on cervical cancer.

The significance of mean difference between pre-test and post-test knowledge score of the degree students regarding cervical cancer.

Table 4

Group	Knowledge	Mean	SD	t-value	P-value	Result
Degree students	Pre test	14.983	1.620752	29.388	0.000	p<0.05 Sig
	Post test	23.983	1.44376			

Maximum score = 30, n = 60, DF=59

Over all area-wise mean, mean percentage, SD, t value of pre-test and post-test knowledge scores and effectiveness of Video assisted teaching. n=60, DF=59, P<0.05

Table 5

Areas of Questionnaire		knowledge Scores			test of Significance	
		Mean	Mean %	SD	Paired "t" test	Inference Sd
1	Concept and meaning	.767	25.5	.427	13.923	S
2	Definition	.600	60	.616	7.543	S
3	Incidence	.583	14.57	.850	5.319	S
4	Causes	1.083	54.15	.809	10.377	S
5	Clinical manifestation	-.067	- 67	.686	-.753	NS
6	Diagnostic evaluation	.567	18.9	.593	7.404	S
7	Treatment	2.583	36.9	1.013	19.747	S
8	Prevention	2.617	32.71	1.303	15.554	S
9	Complication	.267	26.7	.733	2.817	S

Section IV: Association of pre-test knowledge score of degree students with selected socio-demographic variables

This section deals with the findings of the association between pre-test knowledge score and selected socio-demographic variables. The mean of the pre-test knowledge score was calculated and found to be 14.983.

To test the association between the knowledge score and socio demographic variables, the following null hypothesis was formulated:

H_{02}: There is no significant association between level of knowledge and selected Socio-demographic variables of degree students.

Chi-square values showing the association between pre-test knowledge score of the degree students and selected socio demographic variables.

Table 6

Sl. No.	Variable	Below mean (<M)	Above mean (>M)	Df	Chi – square value (χ^2)	P-value	Result
1	**Age (years)**						
	a) 17-18	-	-	-	-	-	-
	b) 18-19						
	c) 19-20						
2	Religion						
	a) Hindu	25	16	2	11.122	5.99	P>0.05 NS
	b) Muslim	1	10				
	c) Christian	2	6				
3	**Types of family**						
	a) Nuclear family	17	24	1	1.408	3.84	P>0.05 NS
	b) Joint family	11	8				
4	Marital status						
	a) Married	-	-	-	-	-	-
	b) Unmarried						
5	Place of residence						
	a) Rural	8	10	1	0.051	3.84	P>0.05 NS
	b) Urban	20	22				
6	previous knowledge regarding cervical cancer						
	a) Newspaper	11	5	2	4.729	5.99	P>0.05 NS
	b) Television	7	14				
	c) Journal	10	13				
7	Habits						
	a)Alcohol consumption	-	-	-	-	-	-
	b) Smoking						
	c)Tobacco chewing						
	d) No habits						

NS = Not significant, S = Significance

The calculated chi-square value was (8.774) in age variable which was more than the table value at 0.05 level of significance, showing there is significant association between pre-test knowledge score and age group. But in remaining socio-demographic variables the calculated chi-square value was less than the table value and P > 0.05 hence there was no significant association between pre-test knowledge score and selected socio-demographic variables.

Summary

In the pre-test prior to the administration of video assisted teaching data reflects that, out of 60 respondents 21(35%) had moderately adequate knowledge, 39(65%) respondents had inadequate knowledge and none of the respondents had adequate knowledge. Similarly in the post-test, data shows that 36(60%) of the respondents had adequate knowledge, 24(40%) had moderately adequate knowledge and none of the respondents had inadequate knowledge.

The data reveals that the respondents knowledge scores was high in the post-test (range: 22-26) than that of the pre-test (range: 13-18). It is also evident that the mean post-test knowledge score (23.983±1.44376) was higher than that of the pre-test knowledge score (14.983±1.620752).

It is evident from the data presented that the calculated't' value (t=29.388) was greater than that of the table value. Hence, the null hypothesis was rejected at 0.05 level of significance.

Conclusion

The following conclusions were drawn based on the data analysis:

- All the respondents (100%) were in the age group of 19-20 years. A maximum respondent (68.3%) belongs to Hindu religion. Majority of the respondents (68.3%) from nuclear family. All respondents (100%) were unmarried.
- Most of the respondents (70%) were residency in urban area. Maximum of the respondents (38.3%) had previous information regarding cervical cancer. All the respondents (100%) were not having any bad habits.
- In pre-test knowledge score majority of respondents (65%) had inadequate knowledge on cervical cancer. In post-test knowledge score most of the respondents (60%) had adequate knowledge on cervical cancer.
- The difference between the mean post-test and the mean pre-test scores was found to be statistically significant ('t' $_{(59)}$ = 29.388) at 0.05 level of significance.
- The findings of the study revealed that there is no significant association between pre-test knowledge scores with the selected socio-demographic variables such as religion (χ^2=11.122), types of family (χ^2=1.408), place of residence (χ^2=0.051), previous information regarding cervical cancer (χ^2=4.729).

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