

A Study to Assess the Effectiveness of Interventional Package on Knowledge Regarding Prevention of Cervical Cancer among Women of Selected Rural Areas of District Sirmaur, Himachal Pradesh

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Abstract: **Background:** Cervical cancer is one of the most persistent cancers among women worldwide. Cancer is a term used to describe a group of disorders in which malignant cells proliferate and spread uncontrollably. Cervical cells may adhere to other tissues and grow into new tumours, causing damage to those tissues. **Objectives:** to assess the effectiveness of interventional package regarding prevention of cervical cancer among women. **Methodology:** A Quantitative and Pre-experimental design was used; 100 women were selected by using convenient sampling technique from selected study villages Nanu, Dimberand Bhanog. Data was collected by using self-structured knowledge questionnaire/ interview schedule and analysed by SPSS. **Results:** In pre-test, 91(91.0%) women were having inadequate knowledge, 9(9.0%) were having moderately inadequate knowledge and no one was having adequate knowledge whereas in post-test, 40(40.0%) were having adequate knowledge, 54(54.0%) were having moderately adequate knowledge and 6(6.0%) were having inadequate knowledge. The comparison, pre-test mean score i.e. mean knowledge and standard deviation was 12.080 ± 3.8077 and in post-test was 21.920 ± 2.8557 , t-value was 33.792 and p value was $< .001$ it revealed effectiveness of interventional package. There was significant association between pre-test knowledge score with age (in years), educational status, occupational status and monthly income of family (in rupees) at < 0.05 level of significance. **Conclusion:** The study finding concluded that there was significant improvement in post-test knowledge which showed that interventional package are important to raise women awareness about cervical cancer and its prevention.

Keywords: Cervical cancer, Interventional package, Knowledge, Prevention, Women

1. Introduction

Cervical cancer is the world's fourth most prevalent malignancy in women. Cancer is a term used to describe a group of disorders in which malignant cells proliferate and spread uncontrollably. It is possible to die if the spread is not controlled. Cervical cancer is one of the most frequent cancers among women worldwide. The transmission of knowledge through health education is one strategy to reduce the incidence of this malignant condition. Women between the ages of 30 and 45 are the most likely to develop cervical cancer. It can, however, start as early as the age of 18. It is not a contagious disease, although it is caused by a genetic mutation. Cervical cancer is a dangerous disease with a high risk of death.

Objectives

- To assess the pre-test and post-test knowledge of women regarding prevention of cervical cancer.
- To assess the effectiveness of interventional package regarding prevention of cervical cancer among women.
- To find out the association between pre-test score knowledge regarding prevention of cervical cancer among women with selected socio-demographic variable.

2. Methodology

A pre-experimental (one group pre-test post-test) design was used and data was collected from 100 women between the

age group of 25-55 years, who were available at the time of study and willing to participate. The study was conducted in selected rural area (Nanu, Dimber and Bhanog) of district Sirmaur in Himachal Pradesh.

Non-probability Convenient sampling technique was used and self-structured knowledge questionnaire was prepared to collect data. The tool comprised of two sections: section A included questions regarding socio-demographic variables (12 items) like age (in years), age at menarche (in years), marital status, age at marriage (in years), no of children, type of family, educational status, occupational status, monthly income of family (in rupees), family history of cancer, have you ever attend any educational session on cervical cancer, source of information about cervical cancer. Section B included self-structured knowledge questionnaire which consists of 30 knowledge and prevention of cervical cancer

To ensure the validity of tool, it was submitted to 10 experts. The reliability of tool was assessed by using test-retest method and was calculated by Karl Pearson correlation coefficient. Where 'r' value is 0.88.

3. Results

The participants included maximum i.e. 47(47.0%) of women belonged to the age group of 25-35 years, 30(30.0%) in 36-45 years and 23(23.0%) were in the age group of 46-55 years. In aspects of menarche 67(67.0%) women had menarche at the age of 13-15 years, 18(18.0%) in the age of above 15 and 15(15.0%) were in the age of 10-12 years.

Maximum i.e. 94(94.0%) women were married and only 6(6.0%) women were widow. Regarding the age at marriage majority i.e. 54(54%) women had marriage at the age of 18-21 years, 34 (34.0%) were in the age of 21-24 years and 12 (12.0%) in the age of >24 years.

Regarding less than half i.e. 37(37.0%) had two children, 27(27.0%) were having 3 or more than 3 children, 21(21.0%) women had 1 child and only 15(15.0%) had no child. Regarding type of family, majority of women i.e. 73(73.0%) belonged to joint family, 25(25.0%) belonged to nuclear family and only 2(2.0%) belonged to extended family. Regarding educational status, 29(29.0%) women had done graduate and above, 26(26.0%) had done secondary education, 22(22.0%) had done higher secondary education, 14(14.0%) had done primary education and 9(9.0%) had no formal education.

Regarding occupation, majority i.e. 57(57.0% were self-employed (farmers), 30(30.0%) were having private job and 13(13.0%) were having Government job. With respect of monthly income of family (in Rupees) less than half i.e. 39(39.0%) were having income ≤10,000, 23(23.0%) were having income >20,000, 20(20.0%) were having income 10,001-15,000 and 18(18.0%) were having income 15,001-20,000). In aspects of family history of cancer, majority i.e. 99(99.0%) were not having any history of cervical cancer and only 1(1.0%) had history of cancer.

Regarding educational session on cervical cancer, majority i.e. 94(94.0%) had not attend any educational session only

6(6.0%) had attend educational session on cervical cancer. Regarding source of information more than half i.e. 56(56.0%) were from mass media (TV, newspaper etc.), 24(24.0%) were from health workers, 18(18.0%) were from family members and only 2(2.0%) were from friends.

Table 1: Mean and Standard deviation of Pre-test and Post-test score on knowledge regarding prevention of cervical cancer among women, N= 100

Sr. No.	Knowledge Score	Mean±SD	Mean Difference	df	t- value	p value
1.	Pre-test	12.080±3.8077	9.8400	99	33.792	.000*
2.	Post-test	21.920±2.8557				

*Significant at the level of p<0.05

Table no. 1 paired t test results shows mean and SD of pre-test and post-test score on knowledge regarding prevention of cervical cancer among women. In pre-test mean and SD was 12.080±3.8077 and in post-test mean and SD was 21.920±2.8557, t-value was 33.792 and p value was .000.

In this study the hypothesis H₁ stated that there will be significant difference in pre-test and post-test mean score on knowledge regarding prevention of cervical cancer at p<0.05 level of significance. The result of the study reveals that there was significant gain in knowledge among women regarding prevention of cervical cancer. Hence null hypothesis was rejected and research hypothesis was accepted.

Table 2: Association between the pre-test knowledge score on knowledge regarding prevention of cervical cancer with selected socio-demographic variables, N= 100

Sr. No.	Variables	Pre-test knowledge score			Chi square	df	p value
		Adequate f (%)	Moderately adequate f (%)	Inadequate f (%)			
1.	Age (In years)				11.153	2	.004
	25-35	0 (0)	9 (9.0)	38 (38.0)			
	36-45	0 (0)	0 (0)	30 (30.0)			
	46-55	0 (0)	0 (0)	23 (23.0)			
2.	Age at menarche (In years)				4.871	2	.088
	10-12	0 (0)	0 (0)	15 (15.0)			
	13-15	0 (0)	9 (9.0)	58 (58.0)			
	>15	0 (0)	0 (0)	18 (18.0)			
3.	Marital status				.631	1	.427
	Married	0 (0)	9 (9.0)	85 (85.0)			
	Unmarried	0 (0)	0 (0)	0 (0)			
	Divorced	0 (0)	0 (0)	0 (0)			
4.	Age at marriage (In years)				.491	2	.782
	18-21	0 (0)	4 (4.0)	50 (50.0)			
	21-24	0 (0)	4 (4.0)	30 (30.0)			
	>24	0 (0)	1 (1.0)	11 (11.0)			
5.	No. of children				8.059	3	.045
	No child	0 (0)	3 (3.0)	12 (12.0)			
	1	0 (0)	4 (4.0)	17 (17.0)			
	2	0 (0)	2 (2.0)	35 (35.0)			
6.	Type of family				1.303	2	.521
	Joint family	0 (0)	8 (8.0)	65 (65.0)			
	Nuclear family	0 (0)	1 (1.0)	24 (24.0)			
	Extended family	0 (0)	0 (0)	2 (2.0)			
7.	Educational status				17.611	4	.001
No formal education	0 (0)	0 (0)	9 (9.0)				

Sr. No.	Variables	Pre-test knowledge score			Chi square	df	p value
		Adequate	Moderately adequate	Inadequate			
		f (%)	f (%)	f (%)			
	Primary education	0 (0)	0 (0)	14			
	Secondary education	0 (0)	0 (0)	26			
	Higher secondary education	0 (0)	1	21			
	Graduate and above	0 (0)	8	21			
8.	Occupational status						
	Private	0 (0)	4 (4.0)	26 (26.0)		2	.003
	Government	0 (0)	4 (4.0)	9 (9.0)			
	Self-employed	0 (0)	1 (1.0)	56 (56.0)			
9.	Monthly income of family (in rupees)						
	≤10,000	0 (0)	0 (0)	39 (39.0)		3	.006
	10,001-15,000	0 (0)	2 (2.0)	18 (18.0)	12.342		
	15,001-20,000	0 (0)	1 (1.0)	17 (17.0)			
	>20,000	0 (0)	6 (6.0)	17 (17.0)			
10.	Family history of cancer						
	Yes	0 (0)	0 (0)	1 (1.0)	.100	1	.752
	No	0 (0)	9 (9.0)	90 (90.0)			
11.	Have you ever attend any educational session on cervical cancer?						
	Yes	0 (0)	0 (0)	6 (6.0)	.631	1	.427
	No	0 (0)	9 (0)	85 (85.0)			
12.	Source of information						
	Family members	0 (0)	1 (1.0)	17 (17.0)		3	.140
	Friends	0 (0)	0 (0)	2 (2.0)	5.469		
	Health workers	0 (0)	5 (5.0)	19 (19.0)			
	Mass media (TV, Newspaper)	0 (0)	3 (3.0)	53 (53.0)			

Table 2 represents that p value for age (in years), educational status, occupational status and monthly income of family (in rupees) was less than the $p < 0.05$ level of significance and calculated chi-square value is more than tabulated values which indicates that there was significant association between pre-test knowledge score with age (in years), educational status, occupational status and monthly income of family (in rupees) at < 0.05 level of significance regarding prevention of cervical cancer. Hence research hypothesis H_2 was accepted.

4. Conclusion

This study was attempted to evaluate the effectiveness of interventional package on knowledge regarding prevention of cervical cancer among women of selected rural area of district Sirmaur, H.P. The following conclusions were drawn from the findings of the study. Interventional package was an effective method of giving information to the women. Hence, findings of the study revealed that in pre-test, 91(91.0%) women were having inadequate knowledge, 9(9.0%) were having moderately inadequate knowledge and no one was having adequate knowledge whereas in post-test, 40(40.0%) were having adequate knowledge, 54(54.0%) were having moderately adequate knowledge and 6 (6.0%) were having inadequate knowledge. Pre-test knowledge regarding prevention of cervical cancer among women was inadequate and significant improvement in the post-test knowledge which showed effectiveness of interventional package.

5. Implications

1) Nursing Practice

- The professional nurses should have thorough knowledge about cervical cancer. They should be

able to educate the women of all age groups regarding this condition, so as to reduce its occurrence.

- Women should be taught and counselled to adopt healthy lifestyle to improve health outcomes and prevent cervical cancer.

2) Nursing Research

- The findings of the study can be utilized as the baseline data for various studies.
- Various forms of interventional nursing researches can be carried out to increase the knowledge related to cervical cancer and its prevention.

3) Nursing Education

- Health education programme in all settings (hospitals and community) play essential role in imparting knowledge regarding cervical cancer.
- Community health nurse should teach the women regarding prevention of cervical cancer to enhance the awareness in detections of problems.