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A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Cervical Cancer, Prevention & It's Treatment among Adoloscent Girls Studying in Selected PU Colleges at Bagalkot

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Abstract | **Original Research Article**

***Background*:** Cervical cancer develops in a woman's cervix. Almost all (99%) cervical cancer cases are linked to infection with high-risk human papillomavirus (HPV), an extremely common virus transmitted through sexual contact. Cervical cancer can affect women of any age, but it is most common in women over the age of 30 years. The long-lasting infection of human papillomavirus (HPV), is responsible for of cervical cancer. Women should be screened for cervical cancer every 5-10 years starting at age of 30 years. Women living with HIV infection should be screened for every 3 years, starting at the age 25 years. Cervical cancer is a global public health problem, which is particularly high burden in many low-income and middle-income countries where some of the barriers are present in cervical cancer screening and its utilization like Socio-economical, Psychological and Socio-cultural factors.

***Aims*:**

1. To assess the level of knowledge of adolescent girls.
2. To evaluate the effectiveness of the structured teaching program.
3. To find out the association between the pre-test knowledge with their socio demographic variable.

***Materials and Methods*:** Study approach for this study was a quantitative evaluative approach. The research design used in pre-test, post-test and control group study. The population associated with this investigation was adolescent girls studying at selected PU College at Bagalkot. Students were 30 adolescent girls included in the study.

***Result*:**

- ✓ The Percentage wise distribution of knowledge of Adolescent girls studying in Govt. PU college were scores revealed that level of knowledge was 16 (53.3%) of students having poor knowledge scores in pre-test, 14 (46.7%) students having moderate knowledge scores and no one students having adequate knowledge scores.
- ✓ In post-test 29 (96.7%) student having moderate knowledge scores, 1 (3.3%) student having adequate knowledge and no one student having poor knowledge scores. This shows the significant difference between mean pre-test scores (11.03) and mean post-test score (16.83) of knowledge regarding prevention of cervical cancer among adolescents' girls.
- ✓ Hence, it's clear that statistically difference is seen in the test.

***Interpretations and Conclusions*:** The findings of the study have certain important implications for the nursing profession such as nursing practices, nursing, education, nursing, research, and nursing administrations.

Keywords: Adolescent girls, Cervical Cancer, Prevention & its treatment, knowledge.

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INTRODUCTION

Cancer is a condition characterized by the abnormal behaviour of certain cells within the body. In a healthy person, cells follow a specific pattern of growth, division, and eventually, natural death, which is essential to maintain proper bodily function. However, in the case of cancer, these cells deviate from this normal behaviour, undergoing uncontrollable and abnormal growth. Among females, cervical cancer is the most commonly diagnosed form [1].

Cervical cancer is a leading cause of death among women in worldwide. But the condition is preventable through regular screening of those at risk.

Although screening facilities are available in India, the incidence and mortality from cervical cancer remains very with many women getting health facility with late stages diseases. According to National Cancer control programmed cancer has become one of the ten leading causes of death in India [2].

"Cervical cancer is cancer that's found anywhere in the cervix, which is the opening between the vagina and the womb" [3].

HPV infections cause most cervical cancers. Getting Pap tests and practicing safe sex are the most important steps you can take to help prevent cervical cancer. Surgery, radiation and chemotherapy are the main treatments. About 14,000 people in the United States receive a cervical cancer diagnosis each year. Women between the ages of 35 and 44 are most likely to receive a diagnosis [4].

MATERIALS AND METHODS

Study Design: Pre-experimental one group pre-test post-test design was used to determine effectiveness of structured teaching programme on knowledge regarding cervical cancer, prevention, & its treatment among adolescent girls of selected PU Colleges at Bagalkot

Setting of the Study: The study was conducted at Govt. PU College for Girls Bagalkot.

Participants: Sample consist 30 adolescent girls studying in PU Ⅰ &Ⅱ year at Govt. PU College Bagalkot.

Sampling Techniques: Simple random sampling technique was used to select the sample. There were 30 students from Ⅰ & Ⅱ year PU students selected by usage of random selection method.

Description of Data Collection:

Section 1: Socio Demographic Factors: Demographic perform consisted of girls are like age, religion, educational status, family monthly income, diet pattern, type of family, pain during menstrual period, duration of menstrual bleeding, age at menarche.

Section 2: Structured Knowledge questionnaire on cervical cancer had 30 items. The subjects were instructed to tick mark (✓) on the space provided towards the correct response. The scoring was done by just counting the correct responses and according to the total score obtained. The highest possible score was 30. It was arbitrarily classified into three levels: [0-10(Poor)], [11-20, (Average)], [21-30, (Good)].

Data Collection: The data was collected from 30\10\2025 to 7\11\2025.The exact time and date planned with college authority and was communicated to the respondents. The investigator approached principal of Govt. PU College for girls at Bagalkot.

VARIABLES:

Variables selected for the present study are:

The present study includes the following variables:

1. **Dependent Variable:** In this study, it refers to the knowledge of adolescent girls regarding Prevention of cervical cancer.
2. **Independent Variable:** In this study it refers to the structured teaching programme on knowledge regarding Prevention of cervical cancer among PUC リ &ル year adolescent girls.
3. **Socio-demographic Variables:** In this study socio-demographic variables refer to Age, Educational status, Family Income, Religion, Type of family, Diet pattern, Duration of menstrual cycle, Marital status, Age at menarche.

Study Area: The research investigation took place at Govt.PU College for Girls at Bagalkot. A total of 30 adolescent girls are enrolled in this study.

Target Group: The target group for this research consists of adolescent girls studying in PU College for girls at bagalkot.

Accessible Population: In this study the accessible population includes adolescent girls aged 15 to 18 years who are studying in PU College for Girls at Bagalkot.

Sample and Sample Size: The study's sample comprised adolescent girls aged between 15 to 18. There are 30 students in the adolescent aged, all enrolled at Govt.PU College for Girls at Bagalkot. The sample size for this study was N=30

Data Collection Tools: Data collection tools refer to methods that researchers employ to observe or gauge significant changes regarding their research inquiries. In this study, a sample and a crafted standardized prepared tool were utilized for data gathering.

Data Collection Method: Data was collected using a demographic performs and structured knowledge questionnaire consisting of 30 questions.

Reliability of the structured knowledge questionnaire was established using KarlPearson's (α=0.05) Pilot study was conducted on 3 selected PU students. The main study was conducted among 30 randomly PU students from 30.10.2025 to 7.11.2025. Following the pre-test, structured questionnaires was administered and post-test was conducted on the 7th day of administration structure questionnaires.

RESULTS

Research indicates that adolescent girls understanding of cervical cancer and its prevention and treatment with their socio-demographic factors. The

level of knowledge was 16 (53.3%) of students were having poor knowledge scores in pre-test, 14 (46.7%) students were having moderate knowledge scores and no one students were having adequate knowledge scores. In post-test 29 (96.7%) students were having moderate knowledge scores, 1 (3.3%) student were having adequate knowledge and no one students were having poor knowledge scores. This shows the significant difference between mean pre-test scores (11.03) and mean post-test score (16.83) of knowledge regarding prevention of cervical cancer among adolescents' girls. Hence, it's clear that statistically difference is seen in the test.

Table 1: Distribution of adolescent girls according to their socio demographic variables

SL No	Sociodemographic Variable	Frequency	Percentage
1	**Age in year**		
	a) 17-18 yrs	29	96.70%
	b) 18&above	1	3.30%
2	**Educational status**		
	a) PUC -1	9	30%
	b) PUC-2	21	70%
3	**Family income in months**		
	a) Below 5000	15	50%
	b) 5001-10000	6	20%
	c) 10001-15000	5	16.70%
	d) Above 15000	4	13.30%
4	**Religion**		
	a) Hindu	20	66.70%
	b) Muslim	6	20%
	c) Christian	2	6.70%
	d) Others	2	6.60%
5	**Diet Pattern**		
	a) Vegetarian	8	26.70%
	b) Non vegetarian	2	6.70%
	c) Mixed	20	66.60%
6	**Type of family**		
	a) Joint family	10	33.33%
	b) nuclear family	19	63.33%
	c) Extended family	1	3.34%
7	**Duration of menstrual bleeding**		
	a) Less than 3days	1	3.34%
	b) 3days -5days	22	73.33%
	c) 5days & above	7	23.33%
8	**Age at menarche**		
	a) Below 12years	1	3.30%
	b) 12-15 years	20	66.70%
	c) 15-18years	4	13.30%
	d) 18 years & above	5	16.70%
9	**Abdominal pain during menstrual period**		
	a) Mild	10	33.3
	b) Moderate	11	36.7
	c) Severe	2	6.7
	d) Not yet all	7	23.3

Table 2: Distribution & Description of sample according to their emotional well-being status with their socio demographic factors

Level of knowledge	Mean	Standard Deviation	Mean Difference	SD Difference	T value	Table T value	P value
Pre Test	11.03	3.78	5.8	1.11	5.99	3.84	P is < 0.00001*
Post Test	16.83	2.67					

*P <0.05 Significant

Findings related to the significance of the difference between pre-test and post test scores of the knowledge regarding prevention of cervical cancer among adolescent girls shows that, difference between mean pre-test [11.03] and mean post-test [16.83] scores, found to be statistically difference at 0.05 level of significant [t=5.99 (p valve is <0.00001)at the level of significance p<0.05] As Hypothesis H1 states, H1: Mean post-test knowledge scores of adolescent girls of PU college will be significantly higher than the mean pre-test knowledge score among adolescent girls of PU college.

Table 3: Association between levels of pre-test knowledge regarding prevention of cervical cancer with their selected socio demographic variables

SL No	Sociodemographic	DF	Yates Chai square	Table value	P value	Association
1	Age	1	0.0096	3.84	0.9219	Not Association
2	Educational status	1	0.91	3.84	0.33	Not Association
3	Family income	1	1.06	3.84	0.3	Not Association
4	Religion	1	3.88	3.84	0.22	Association
5	Diet pattern	1	0.06	3.84	0.79	Not Association
6	type of family	1	1.07	3.84	0.3	Not Association
7	Duration of menstrual bleeding	1	0.05	3.84	0.81	Not Association
8	Age at menarche	1	0.91	3.84	0.33	Not Association
9	Abdominal pain during menstrual period	1	0.02	3.84	0.87	Not Association

The calculated Chi-square values for the selected Socio-demographic variables of Adolescents girls such as Age (x^2=0.0096 P value= 0.92), Educational status (χ^2= 0.91 P value= 0.33), Family income (χ^2=1.06 P value=0.3), Type of Family (χ^2=1.07 P value =0.3), Diet pattern (χ^2=0.06 P value=0.79), Duration menstrual bleeding (χ^2=0.05 P value=0.81), Age at menarche (χ^2=0.91 P value=0.33), Abdominal pain during menstrual period (χ^2= 0.02 P value=0.87) . There is no significant association found for these variables among adolescent's girls.

DISCUSSION

Discussion is to interpret and describe the significance of the study findings in light of what was already known about the research problem being investigated and to explain any new understanding or insights that emerged as a result of study of the problem. The discussion will always connect to the introduction by way of the research questions or hypotheses posed and the literature reviewed, the discussion clearly explain how study advanced the reader's understanding of the research problem from where left them at the end of review of prior research [5-7].

CONCLUSION

The findings of the study concluded that the students lacked knowledge regarding cervical cancer and structured teaching programme administered by investigator helped them to improve the knowledge on cervical cancer. The effectiveness of structured teaching programme was tested in terms of gain in knowledge and findings showed that it was statistically significant at 0.05 level. The findings of study concluded that the structured teaching programme was effective in improving knowledge of the students' regardless of their any personal charecterstics. All the subjects had gain in knowledge compared to their pretest knowledge scores.

Future Prospect

About 86% of people with cervical cancer worldwide have been tested and know their status. Testing is a essential first step to assessing treatment. The future of cervical cancer student is promising. With more assessable treatments and prevention options. Cervical cancer will continue to be major public health concern in the future. And health education will be important for preventing spread of the disease and help to gain knowledge in students.

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