Study to Assess the Knowledge Regarding Cervical Cancer and HPV Vaccine Among Adolescent Girls Studying in Akkamahadevi Women's Arts, Sciences and Commerce Colleges, Bagalkot.

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ABSTRACT

Cervical cancer is a growth of cells that starts in the cervix. The cervix is the lower part of the uterus that connects to the vagina. Various strains of the human papillomavirus, also called HPV, play a role in causing most cervical cancers. HPV is a common infection that's passed through sexual contact. When exposed to HPV, the body's immune system typically prevents the virus from doing harm. In a small percentage of people, however, the virus survives for years. This contributes to the process that causes some cervical cells to become cancer cells. Risk of Cervical cancer can be reduced through periodic screening and vaccination which protects against HPV infection. When cervical cancer happens, it's often first treated with surgery to remove the cancer. Other treatments may include medicines to kill the cancer cells. Options might include chemotherapy and targeted therapy medicines. Radiation therapy with powerful energy beams also may be used. Sometimes treatment combines radiation with low-dose chemotherapy. The dates of the descriptive study were July 21, 2024, to Aug 22, 2024. Using the stratified random sample procedure, 120 study participants were chosen. The research was carried out in Akkamahadevi women's arts, science and commerce college, Bagalkot. The study involving 120 adolescent girls. Data were collected with a structured questionnaire and variables including socio demographic characteristics, knowledge of cervical cancer and HPV vaccination.

Introduction

Cervical cancer **is cancer that starts in the cells of the cervix**. The cervix is the lower, narrow end of the uterus (womb). The cervix connects the uterus to the vagina (birth canal). Cervical cancer usually develops slowly over time. Cervical cancer, the fourth most common cancer among women worldwide, is caused almost

Entirely by human papillomavirus (HPV). High-risk types of HPV can lead to cervical intraepithelial lesions which, over time, can progress to cervical cancer[1]. In the United States and other developed countries, most screening and early detection efforts involve HPV testing and Papanicolaou (Pap) smears. HPV testing identifies exposure to both low- and high-risk types of HPV, whereas Pap smears identify abnormal cytology[2].

Cervical cancer is a largely preventable disease. Primary prevention and screening are the most effective modalities for decreasing the healthcare burden and mortality attributable to cervical cancer. Since 2006, HPV vaccination has been available to prevent cervical cancer. Interprofessional team members must educate young female patients (ideally, prior to initiating sexual activity) and their families about this highly effective vaccine. This activity details primary prevention strategies, screening guidelines, diagnostic evaluations, current staging, and specific treatment modalities for invasive cervical cancer[3].

Objectives:

- To assess the knowledge regarding cervical cancer and HPV vaccines among adolescent girls studying in Akkamahadevi women's arts, sciences and commerce
- To find out association between the knowledge regarding cervical cancer and HPV vaccines with their selected socio demographic variables.

Materials and Methods

For the study, a descriptive survey design was adopted. In Akkamahadevi women's arts, sciences and commerce college, Bagalkot, India.120 Adolescent girls provided samples using a straightforward random approach. A conventional, Multiple-choice questionnaire was used to gather information about Knowledge of cervical cancer. Both descriptive and inferential statistics were employed to analyze the gathered data.

Source of data- The present study collected data from Adolescent girls.

Research Approach-. The descriptive research methods are developed when the purpose of the research is to describe the prevalence or occurrence of the phenomenon or to estimate the phenomenon's value to society. The main objective of this study is to evaluate the Knowledge of cervical cancer Among Adolescent girls Studying in Akkamahadevi women's college, Bagalkot.

Research Design- All plans designed by a researcher to answer research questions or test research findings are called research design. A descriptive design means the study involved a one-time data analysis on Adolescent girls. The research design represents the population, sample size, variables, data collection tools and methods, and data analysis plan.

Variables

Dependent Variable - Knowledge about of cervical cancer among adolescent girls.

Socio-Demographic Variables- Adolescent Girls sociodemographic traits are among the sociodemographic variables. Age, religion, type of family, education, have you received any information about cervical cancer from anywhere, sources of information, Family history of cervical cancer, previous intervention related cervical cancer .

Setting of Study- Setting is the environment in which information is gathered. The current investigation was carried out at Akkamahadevi women's college, Bagalkot. The convenience of the investigator and the availability of Adolescent girls were taken into consideration when choosing the study setting.

Population

Target Population- This study refers to a group of Adolescent girls in Bagalkot

Accessible Population- This study refers to girls, who are in the state of Adolescent and members of Akkamahadevi women's college, Bagalkot, India.

Sample and Sample Size- Subjects drawn from units that make up the study's population constitute a sample. The sample size for this investigation is (n=120). Sample including Adolescent girls Studying in akkamahadevi women's college, Bagalkot, India.

Sample Technique- The sampling technique is the researcher's procedure to select the study samples. The sample for the present study is 120 Adolescent girls who are members of Akkamahadevi women's college, Bagalkot, India. The stratified sampling technique was used to select samples for the present study. The Adolescent girls were selected through stratified sampling method according to duration and who met both the in-sampling technique and the procedure that the researcher adopted in selecting the inclusion and exclusion criteria of the study.

Data Collection Tool- The methods or equipment the researcher employs to measure or observe the important variables in the research problem are known as data collection tools. The data for this study were gathered using a common Knowledge instrument.

Statistical analysis- The methodical arrangement and synthesis of research data, as well as the application of the data to test research hypotheses, constitute statistical analysis. Both descriptive and inferential statistics were used in the analysis of the data. Distributions of percentages and frequencies were used to assess the demographic data. The Adolescent had their scores evaluated using the mean and standard deviation. Adolescent girls Knowledge levels were compared to a set of chosen sociodemographic characteristics using a chi-square test.

Results

Description of socio- demographic characteristic of sample

- Percentage wise distribution of adolescent girls according to their age in years that out of 120 adolescent girls, highest percentage (85%) of adolescent girls are in the age of 18 and above (85%) of adolescent girls are in the age of 14 to 16years and poor percentage (0.84%)**.**

- Percentage wise distribution of adolescent girls according to their religion shows that out 120 adolescent girls, highest percentage (90%) of adolescent girls are Hindu, (9.16%) of adolescent girls are Muslims, (0.84 %) of adolescent girls are Christians.

- Percentage wise distribution of adolescent girls according to their year of study out 120 adolescent girls, highest percentage (100%) of adolescent girls degree students

- Percentage wise distribution of adolescent girls according to their family history of cervical cancer out 120 adolescent girls, highest percentage (100%) of adolescent girl's no history of cervical cancer.

Table 1: Frequency and percentage distribution of socio- demographic variables

Socio-demographic factor	Frequency	Percentage (%)
1. Age		
a) 14-16	01	0.83%
b) 17-18	17	14.16%
c) 18 and above	102	85%
2. Religion		
a) Hindu	108	90%
b) Christian	01	0.83%
c)Muslim	11	9.16%
d)Any other	0	0%
3. Type of family		
a) Nuclear	77	64.16%
b) Joint	43	35.83%
4.Education status		
a) PUC I	0	0%
b) PUC II	0	0%
c) Other degree	120	100%
5. Is their any family history of cervical cancer		
a) NO	120	100%
b) Yes	0	0%
6. Have you received any information about cervical		
a) Yes	20	16.66%
b) No	100	83.33%
7. Sources of information		
a) Mass media, TV	02	1.66%
b) Contact with health personnel	113	94.16%
d) Information from relatives	04	3.33%
e) Any other	01	0.83%

Adolescent girls mean percentage of Knowledge score, mean and SD, show that the overall mean percentage of knowledge score was 14.78with mean and SD of Knowledge 89.8, which are 14.78±89.8.in this study adolescents' girls did not take any information by any other source of information is 0%.

Table 2: Area-wise mean, SD, and mean percentage of Knowledge score

Area	Maximum score	Mean	SD	Mean (%)
Knowledge	**1774**	**14.78**	**89.8**	**73.91**

The results of the study on the relationship between Adolescent girls Knowledge. they chose to analyze indicate that there is a significant association between Adolescent girls Knowledge and socio demographic variables about cervical cancer and age ($\chi2=14.59$; p=0.007), Religion ($\chi2=3.02$; p=0.3886), sources of information ($\chi2=17.55$; p=0.0005), education ($\chi2=0.$; p=1)

Table 3: Association of Knowledge of Adolescent girls with their selected socio-demographic variables.

SI.NO	Socio-demographic variable	chi square	df	P
1	**Age** 14-16 17-18 18 and above	14.59	2	0.0007

2	**Religion** a) Hindu b) Christian c)Muslim d)Any other	3.02	3	0.3886
3	**Type of family** a) Nuclear b) Joint	1.29	1	0.256
4	Education status a) PUC I B) PUC II C)If any other degree	0	2	1
5	**Is there any family history of cervical cancer** a)YES b)NO	infinity	1	<.0001
6	**Have you received any information about cervical cancer from any where** a) YES b) NO	infinity	1	<.0001
7	**Source of information** a)Mass media, TV b)Contact with health personnel c)Information from relatives d)Any other	17.55	3	0.0005

The results pertaining to the correlation between adolescent girls Practice and the chosen socio demographic variables indicate that there is a noteworthy relationship between Adolescent girls practice of BSE and age ($\chi2=2.7$; $p=0.60$), Religion ($\chi2=1.4$; $p=0.96$), Residence ($\chi2=2.2$; $p=0.33$), year of Study ($\chi2=14.24$; $p=0.006$)

In this study association in all the sociodemographic is < 10 poor knowledge ,11-20 Good knowledge. as

Age wise 14 to 16 age groups are 01 is poor knowledge, 17-18 age groups 10 poor knowledge, 18 and above 20 is poor knowledge and 17-18 age group 07 are good knowledge highest 18 and above 82 adolescents have good knowledge.

Religion<10 poor Hindu 73 ,were as Christian 01 , Muslim 10, and 11-20 Good Hindu 35, Muslim 01.

Type of family<10 Poor nuclear family 35, and joint family 33.and 11-20 Good 27 nuclear family having good knowledge 10 is joint family.

Is there any family history of cervical cancer in this 120 adolescents no one history of cervical cancer.

In educational status other degree 63 students have <10 Poor knowledge were as 57 other degree students have good knowledge.

Have you received any information about cervical cancer from anywhere in that 50 adolescents girls are received poor information and 70 not received any information

The source of information through TV, Radio, newspaper<10 poor is 03, contact with health personnel 38, information from relatives 04.and 11-20 Good in that

contact with health personnel 71 adolescents' girls have good information and no one have other any information.

Discussion

This study aims to measure Knowledge of cervical cancer among Adolescent girls studying in Akkamahadevi women's arts, commerce and science college Bagalkot about cervical cancer among Adolescent girls. The discussion highlights the main findings of these study and how those findings compare with findings from similar study conducted on the subject of cervical cancer.

Cervical cancer can be fatal to adolescents without proper screening and vaccination. After Assessing knowledge of adolescents girls on cervical cancer gives a clear conclusion of study aims,

The study conducted by Bogani et al. reported that the incidence of recurrence was 7.46% for patients with HPV persistence at 6 months. The chance of having recurrent HPV infection is highly correlated with 12-month HPV persistence (recurrence risk: 13.1%)[4]. However, a greater risk of recurrence was not correlated with HPV persistence lasting longer than 12 months.

In comparison to women who do not use contraceptive pills, women who have used contraceptive pills for more than 5 years are at a greater risk of getting CC. The International Agency for Research on Cancer (IARC), a division of the World Health Organization[5] (WHO), reported that extended use of the oral

contraceptive pill raised the risk of CC by up to four times. In one study, the risk was raised by 10% with fewer than 5 years of usage, by 60% with 5–9 years of use, and by twice with 10 or more years of use. However, it has been revealed that once women cease using contraceptive pills, their likelihood of developing CC substantially reduces, Following the suggestions for CC screening further decreases the elevated risk of CC brought on by these hormonal risk factors[7].

Conclusion

Cervical cancer is a key strategy to early detection of cancer and subsequently critical for effective treatment and cure of the disease. The findings this study have shown significant low levels of awareness on Cervical cancer among adolescent in Karnataka. region. This pattern may be similar to other rural communities across the region. The need to create awareness and to educate adolescent girls on importance of Cervical cancer as preventive measure of Cervical cancer is paramount.

References

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