



**A STUDY TO ASSESS THE KNOWLEDGE REGARDING CERVICAL CANCER
AMONG ADOLESCENT GIRLS IN A SELECTED COLLEGE AT KOLLAM**

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ABSTRACT

The research project under took was "A study to assess the knowledge regarding cervical cancer among adolescent girls in a selected college at Kollam." The objectives of the study were to assess the knowledge regarding cervical cancer among adolescent girls in a selected college at Kollam, to find out the association between the knowledge regarding cervical cancer among adolescent girls and selected demographic variables such as age, education, age at menarche, religion, residence, type of family, family history of cancer and source of information, non-experimental survey design was adopted for this study. The study was conducted among 100 adolescent girls who were studying in Bishop Benziger College of Nursing at Kollam. In order to assess the knowledge of adolescent girls regarding cervical cancer, the study sample was selected by non-probability convenient sampling technique. The tool used for data collection consisted of demographic proforma and structured questionnaire basic introduction of the study was given to the subjects. The analysis of the data was based on the objectives of the study using descriptive and inferential statistics. The findings of the present study revealed that there was significant association between knowledge and demographic variables like education, age at menarche, religion, residence, type of family. There is no significant association between age, family history of cancer and source of information. Based on the findings the investigator has drawn implications which were of vital concerns in the field of nursing practice, nursing administration, nursing pattern, nursing education for future development.

KEYWORDS: Assess structured questionnaire, cervical cancer, and adolescent girls.

INTRODUCTION

Cancer is a large group of diseases that can start in almost any organ or tissue of the body when abnormal cells grow uncontrollably, go beyond their usual boundaries to invade adjoining parts of the body and/or spread to other organs. The latter process is called metastasizing and is a major cause of death from cancer. A neoplasm and malignant tumor are other common names for cancer. Cancer is the second leading cause of death globally, accounting for an estimated 9.6 million deaths, or one in six deaths, in 2018.^[1]

Cervical cancer develops in a woman's cervix (the entrance to the uterus from the vagina). Almost all cervical cancer cases (99%) are linked to infection with high-risk human papillomaviruses (HPV), an extremely common virus transmitted through sexual contact. Although most infections with HPV resolve spontaneously and cause no symptoms, persistent infection can cause cervical cancer in women. Cervical cancer is the fourth most common cancer in women.^[2]

The incidence and mortality of cervical cancer can be reduced by screening women for precancerous lesion and by administration of human papilloma virus vaccine to adolescent girls. Knowledge of the women about cervical cancer and awareness about its prevention are the key factors that determine their utilization of screening services. Vaccination with HPV vaccine confers protection against cervical cancer. Also screening for precancerous lesions reduces the incidence and mortality from cancer cervix. Although cytology based screening program using Pap smears have been found to be effective in developed countries. Hence the significance of the study is imperative that adolescents gather adequate knowledge on cervical cancer for the success of any program to control the disease. Wide and effective spreading of awareness about the disease among adolescents must form an integral part of public health policy of government.^[3]

STATEMENT OF THE PROBLEM

"A study to assess the knowledge regarding cervical cancer among adolescent girls in a selected college at Kollam".

OBJECTIVES

The objectives of the study were:

- To assess the knowledge regarding cervical cancer among adolescent girls in a selected college at Kollam.
- To find out the association between the knowledge regarding cervical cancer among adolescent girls and selected demographic variables such as age, education, age at menarche, religion, residence, type of family, family history of cancer and source of information.

Cervical cancer

It is a type of cancer that occurs in the cells of the cervix- the lower part of the uterus that connects to the vagina.

Adolescents

In this study it refers to transitional stage of physical and psychological development that generally occurs during the period from puberty to legal adulthood.

OPERATIONAL DEFINITIONS**Assessment**

In this study, it refers to estimate the knowledge regarding cervical cancer among adolescent girls.

Knowledge

In this study, knowledge refers to the scores obtained by respondent to the items in the structured questionnaire regarding cervical cancer among adolescent girls.

SEARCH METHODOLOGY

Research approach	: Quantitative research
Research design	: Non-Experimental survey design
Variables	Dependent variable: knowledge regarding cervical cancer among adolescent girls. Demographic variables: age, education, age at menarche, religion, residence, type of family, family history of cancer, source of information.
Setting of the study	: Virtual setting through Google form.
Population	: Adolescent girls who were studying in 1st and 2nd year Bsc Nursing in Bishop Benziger College of Nursing, Kollam.
Sample	: Adolescent girls studying in 1st and 2nd year Bsc Nursing
Sample Size	: 100 adolescent girls studying in 1st and 2nd year Bsc Nursing in Bishop Benziger College of Nursing, kollam.
Sampling Technique	: Non-probability convenient sampling technique

RESULTS AND DISCUSSION

Section A: Description of knowledge regarding cervical cancer among adolescent girls.

Table 1: Frequency and percentage distribution of pre-test score on knowledge regarding cervical cancer.

Score range	Level of knowledge	Frequency	Percentage (%)
0-15	Inadequate knowledge	40	40%
16-23	Moderate knowledge	59	59%
24-30	Adequate knowledge	1	1%

Data in Table 1 shows that 40% had inadequate knowledge, 59% had moderate knowledge, and 1% had adequate knowledge.

Section B: Chi-square test was computed to find out the association between pre-test knowledge regarding cervical cancer among adolescent girls and demographic variables.

Table 2: Association between knowledge and selected demographic variables.

Sl.no	Variables	Knowledge Level			df	Chi square test value	Table value	Level of significance
		Inadequate	Moderate	Adequate				
1.	Age in years 16-18 years	19	29	0	4	4.38	9.48	NS
	19-21 years	16	26	1				
	>21 years	5	4	0				
2.	Education Fist year BSc Nursing	36	17	0	2	37	5.99	S
	2 nd year BSc Nursing	4	42	1				
3.	Age at menarche 10-12 years	20	30	0	4	99.98	9.49	S
	13-15 years	20	29	0				
	>15 years	0	0	1				
4.	Religion Hindu	13	19	0	4	13.43	9.49	S
	Christian	25	36	0				
	Muslim	2	4	1				
5.	Residence Urban	27	12	0	4	22.84	9.49	S
	Rural	13	47	1				
	Others	0	0	0				
7.	Family h/o cancer Yes	5	3	0	2	1.83	5.99	NS
	No	35	56	1				
8.	Source of information Medias	13	22	0	6	12.4	12.59	NS
	Books	17	10	0				
	Magazines	10	27	1				
	Friends	0	0	0				

*S- significant, **NS – not significant

Table 2: The association was computed by using the Chi square test. It was inferred that the present study showed significant association between knowledge and demographic variables like education, age at menarche, religion, residence, and type of family. Regarding education calculated value 37.01 is greater than table value 5.99 at 0.05 level of significance. Regarding age at menarche calculated value 99.98 is greater than table

value 9.49 at 0.05 level of significance. Regarding religion calculated value 13.43 is greater than table value 9.49 at 0.05 level of significance. Regarding residence the calculated value 22.84 is greater than table value 9.49 at 0.05 level of significance. Regarding type of family the calculated value 13.06 is greater than table value 9.49 at 0.05 level of significance. There was no significant association between knowledge and

demographic variables like age, family history of cancer, and source of information. Regarding age the calculated value 4.38 is less than the table value 9.49 at 0.05 level of significance. Regarding family history of cancer calculated value 1.83 is less than the table value 5.99 at 0.05 level of significance. Regarding the source of information the calculated value 12.42 is less than the table value 12.59 at 0.05 level of significance. In short association was found between knowledge and demographic variables like education, age at menarche, religion, residence, and type of family. No significant association was found between knowledge and demographic variables like age, family history of cancer, and source of information.

DISCUSSION

The present study was conducted to assess the knowledge regarding cervical cancer among adolescent girls in a selected college at Kollam.

In order to achieve the objectives of the study non-experimental survey design was adopted. Their subjects were selected by the non-probability convenient sampling. The sample consisted of 100 adolescent girls who were in the age group of 18 to 21 years. The findings of the study had been discussed in relation to objectives and other similar studies.

Objectives of the study

The objectives of the study were:

- To assess the knowledge regarding cervical cancer among adolescent girls in a selected college at Kollam.
- To find out the association between the knowledge regarding cervical cancer among adolescent girls and selected demographic variables such as age, education, age at menarche, religion, residence, type of family, family history of cancer, and source of information.

Discussion of findings with other studies based on objectives

- **To assess the knowledge regarding cervical cancer among adolescent girls in a selected college at Kollam.**

The present study revealed that 40% of adolescent girls had inadequate knowledge, 59% had moderate knowledge and 1% had adequate knowledge regarding cervical cancer in pretest.

The study findings are supported by, a cross-sectional study, conducted in Outpatient Department of Obstetrics and Gynecology to assess knowledge of cervical cancer, screening and preventive measures, during a period from February to March 2017. All women who met study criteria were included and interviewed using revalidated questionnaire about cervical cancer, screening, and prevention. The study findings showed that more than half of the percentage of respondents had knowledge about cervical cancer, screening, and preventive

measures. Most of the women showed positive attitude toward cervical cancer screening, but still there was a gap between perception and their practice.

A study was conducted to assess the awareness of cervical cancer among female students of premier colleges in Kolkata, India. A Knowledge questionnaire was used for survey of the students (N=630), aged 17 to 24 years. The study result showed that only 20% correctly identified cervix cancer as the most prevalent female cancer in India, while 43% were aware of the ages of occurrence. Though 41% thought sexual activity to be associated with cervical cancer, its risk factors, like, smoking, having multiple sex partners, cervical infections, early onset of sexual intercourse, multiple parity were recognized by 29%, 3%, 4%, 13% and 15%, respectively. The researcher concluded that educational stream, standard of the college and family size were significantly associated with knowledge levels and city students were more knowledgeable than those from outside the city. This study provided evidence for wide and effective spreading of awareness about the disease among women must form an integral part of public health policy of government.

- **To find out the association between the knowledge regarding cervical cancer among adolescent girls and the selected demographic variables such as age, education, age at menarche, religion, residence, type of family, family history of cancer and source of information.**

In the case of age, chi square value was 4.38 which is less than the table value at 0.05 level of significance. So there was no association between age and knowledge. In the case of education, chi square value is 37.0 which is greater than the table value at 0.05 level of significance. So there was association between education and knowledge. In the case of age at menarche, chi square value is 99.98 which is greater than the table value at 0.05 level of significance. So there was association between age at menarche and knowledge. In the case of religion, chi square value was 13.43 which is greater than the table value at 0.05 level of significance. So there was association between religion and knowledge. In the case of residence, chi square value was 2.84 which is greater than the table value at 0.05 level of significance. So there was an association between residence and knowledge. In the case of type of family, chi square value was 13.6 which is greater than table value 0.05 level of significance. So there was an association between type of family and knowledge. In the case of family history of cancer, chi square value was 1.83 which is less than the table value at 0.05 level of significance. So there was no association between family history of cancer and knowledge. In the case of source of information, chi square value was 12.4 which is less than the table value at 0.05 level of significance. So there was no association between source of information and knowledge.

The study findings are supported by case-control study which was carried out to determine the risk factors of cervical cancer among patients attending a tertiary care hospital. 273 participants (91 cases and 182 controls) were included. A semi-structured questionnaire was used for data collection procedure. The result showed that marital status (married) was an important risk factor for cervical cancer. People having history of alcohol use were at 4.55 (1.17–17.73) times at risk of developing cervical cancer. Age at menarche of 13–14 years was found to be a significant risk factor of cervical cancer with OR of 2.91(1.18–7.20). At least one abortion was an important risk factor with odds of 2.61 (1.70–18.96). Also, adjusted odds ratio for parity of 3–5 was 3.16 (1.12–8.91) and 5.57 (1.70–18.96) for women having 6 parity when compared to women having parity of less than 3 and was statistically significant. The study concluded that marital status, history of alcohol use, years of age at first coitus, age at menarche and parity as risk factors of cervical cancer.

A case-control study was carried out to assess the sexual risk factors for cervical cancer among rural Indian women. 268 subjects were selected as samples, comprising 134 women with invasive cervical cancer as cases and 134 control women were studied. A multiple logistic regression model was used to analyse the data. The study results showed that the risk factors found to be associated with cervical cancer were early age at first coitus, extramarital sex partners of women and the time interval since first exposure. The study showed that maximum risk in women who reported their first intercourse at 12 years of age, compared to that of women at 18 years (odds ratio [OR] = 3.5, 95% confidence interval [CI]: 1.1-10.9). Increased risk was also seen for women who had extramarital sex relationships (OR = 5.5, 95% CI: 1.5-19.5). Hence the study concluded that the association between early age at first coitus and cervical cancer in women with a low rate of sexual promiscuity.

CONCLUSION

The present study was aimed to assess the knowledge regarding cervical cancer among adolescent girls in a selected college at Kollam. A structured knowledge questionnaire was given to adolescent girls for the pretest. The present study revealed that 40% had inadequate knowledge, 59% had moderate knowledge and 1% had adequate knowledge regarding cervical cancer. The association between the knowledge regarding cervical cancer among adolescent girls and selected demographic variables was computed by chi-square test. The present study showed significant association of knowledge of adolescent girls regarding cervical cancer with education, age at menarche, religion, residence, and type of family with knowledge of cervical cancer (calculated value greater than table value at 0.05 level of significance).

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