

# EFFECT OF INFORMATION EDUCATION COMMUNICATION ON CERVICAL CANCER AND HPV IMMUNIZATION AMONG SELECTED UNDERGRADUATES

By

**\*Arzta Sophia, & \*\*Anusha Mol**

*\*Associate Professor, Christian College of Nursing, Neyyoor, Kanyakumari District, Affiliated to The Tamil Nadu Dr.M.G.R.Medical University, Chennai, Tamil Nadu, India.*

*\*\*B.Sc., Nursing Student, Christian College of Nursing Neyyoor, Kanyakumari District, Tamil Nadu, India.*

## Abstract

*Information education and communication help the undergraduate students to gain knowledge on cervical cancer and its prevention. Cancer is the leading cause of death among women in developing country. Quasi-experimental one group pre-test and post-test design was adopted. 60 undergraduate students were selected by simple random sampling. In the pre-test 3 (5%) had in adequate knowledge, 46 (76.67%) had moderate knowledge 11 (18.33%) had adequate knowledge on cervical cancer and HPV immunization. After the education in the post-test 4 (6.67%) had adequate knowledge, 33 (55%) had moderate knowledge and 23 (38.33%) had adequate knowledge. The pre-test mean score was 11.88 with standard deviation 2. And post-test mean score was 13.28 with standard deviation 3.14. The calculated "t" value 2.52 was statistically significant at 0.05 level. This study explored the knowledge among undergraduates on cervical cancer and HPV immunization.*

**Keywords:** *cervical cancer, human papilloma virus, hpv, immunization, information education.*

## Introduction

Cancer is increasing in both developed and developing countries. In India 6 -29% of women is affected by cervical cancer. Cervical cancer is caused Human Papilloma Virus. A pre-malignant phase occurs in the squamous epithelial cells of the cervical mucous show increasing degree of abnormal change. Identifying these pre-malignant changes will help to screen cervical cytology where by early intervention can save lives and improve the prognosis. Every year 18 cases per lakh women is affected by cancer. The first HPV vaccine became available in 2006. In 2022, 125 countries included HPV vaccine in the routine vaccinations for girls, 47 countries included HPV vaccine for boys. The vaccine available is Gardasil 9. This

vaccine prevents cervical cancer, vaginal cancer, valvular cancer penile cancer, anal cancer, oro pharyngeal cancer and genital warts. The vaccine is administered from 9 years to 45 years. The vaccine is given two dose for 9 to 12 years, three doses for 13 to 45 years. There is an immediate need to develop awareness among nursing students as they are the future nurses who are responsible for educate the public for the betterment of the society. Knowledge regarding cervical cancer and HPV vaccination among nursing students is also important for their individual well being. Thus, we can prevent cervical cancer keeping this in mind this study was conducted.

## Methodology

It is a quasi-experimental quantitative study. A probability simple random sampling technique was used to select the samples. The demographic variables include Age, Diet, Place of living, Age at menarche, duration of menstrual cycle, weight and Family history of Cancer. A structured knowledge questionnaire which consisted of 20 questions related to cervical and HPV vaccination was used to collect the data. Each correct answer was given a score of 1.

The undergraduate students of first year BSc nursing were included. After explaining and getting the consent of the participants data was collected from 60 undergraduate students. The duration of data collection was one week. The collected data were analyzed with SPSS version 20.

## Results

The result of the demographic variables revealed majority of the participants were 57 (95%) above 20 years, 3 (5%) belongs to 18 years, regarding diet majority 57 (95%) were non vegetarian, 3 (5%) were vegetarian. Age at menarche most of them 4 (80 %) were in the age group of 13 - 15 years. Regarding the place of living majority reside in rural area 40 (66.66%), were in urban 20 (33.33%). When considering the age at menarche 49(80%) were in 13 to 15 years. Maximum samples were having the weight of about 46-50 Kg 51(85%). Evaluating the family history of cancer 58(96.66%) did not have a family history, 2(3.33%) had a family history of cancer.

**Table 1. Frequency and percentage distribution of knowledge on cervical cancer and HPV immunization.**

Level of knowledge	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Inadequate	3	5%	4	6.67%
Moderate	46	76.67%	33	55%
Adequate	11	18.33%	23	38.33%

The above table reveals regarding the knowledge on cervical cancer and HPV immunization among undergraduates majority of them had adequate knowledge 23(38.33%), 33(55%) had moderate

knowledge and 4(6.6%) had inadequate knowledge in the post test. In the pre-test 11(18.33%) had adequate knowledge, 46(76.67%) had moderate knowledge and 3(5%) had inadequate knowledge.

**Table 2. Effect of information education communication on cervical cancer and HPV immunization.**

Experimental group	Mean	SD	"t "
Pre-test	11.88	2.92	2.52
Post-test	13.28	3.14	

The above table shows the pre-test knowledge score on cervical cancer and HPV immunization among undergraduates were 11.88 with standard deviation 2.92 and in the post-test, it was 13.28 with SD 3.14. The calculated "t" was higher than the table value at 0.05 level of significance. This infers that information education communication was effective in improving the knowledge of undergraduates on cervical cancer and HPV immunization.

### Discussion

India plans a national drive to vaccinate girls between 9 years and 14 years against human papillomavirus (HPV) that causes cervical cancer, "Our government will encourage vaccination for girls in the age group of 9 to 14 years for the prevention of cervical cancer."

The country records one new case of cervical cancer every four months, and one death every seven minutes.

HPV vaccination is "our best defence" in preventing HPV related cancers. India has an impressive track record in its childhood immunization program. The inclusion of

HPV vaccine into the national immunization schedule will undoubtedly boost the fight against cervical cancer.

The result of the present study revealed that majority of the undergraduates were with 5% inadequate knowledge, 76.6% had moderate knowledge and only 18.33% had adequate knowledge on cervical cancer and immunization. The association between knowledge with their demographic variables shows that there was no significant association with all the variables. This result is consistent with the study done by Nandini Patel, Hirak sparikh they found that over all knowledge regarding cancer was 80%, screening knowledge was 10% and regarding vaccination was 50%.

### Conclusion

This study was undertaken to evaluate and improve the knowledge of undergraduates on cervical cancer and immunization among Bsc nursing students. It has to be reinforced and implemented in proper manner among nursing and non-nursing undergraduates to create awareness and prevent cervical cancer in future.

**Conflict of interest**

The authors have no conflict of interest in the prescribed format.

**Ethical Consideration**

This study was approved and the work was performed according to the guidelines of Ethics Committee of the Christian College of Nursing, Neyyoor, Kanyakumari District.

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**ABOUT THE AUTHORS**

**Dr Arzta Sophia** is currently working as an Associate Professor in Christian College of Nursing Neyyoor, Kanyakumari District Affiliated to The Tamil Nadu Dr.M.G.R.Medical University, Chennai, Tamil Nadu, India. She completed her Master's degree in obstetrics and gynecology nursing in 2006, from Sree Moohambika College of Nursing, Kulasekaram, Tamil Nadu. She also obtained her Doctoral degree in 2018 from The Tamil Nadu Dr. M.G.R University Chennai, India. She has published some research article in Peer Reviewed and Refereed Journal.



**Miss. Anusha Mol** is a B.Sc. (N) Student in Christian College of Nursing, Neyyoor, Kanyakumari District Affiliated to The Tamil Nadu Dr.M.G.R.Medical University, Chennai, Tamil Nadu, India.

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