

# "A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING GARDASIL 9 VACCINE FOR THE PREVENTION OF CERVICAL CANCER AMONG ADOLESCENT GIRLS IN SELECTED INTER COLLEGES AT KANPUR UP"

Abhishek Kushwaha, Aabid Ashraf, Akanksha, Aman Yadav, Anjali, B.Sc. Nursing¹ Faculty of Nursing, Rama University, Kanpur, Uttar Pradesh, India. Mrs. K Jyothisree², Associate Professor, Faculty of Nursing, Rama University, Kanpur, Uttar Pradesh, India. k.jyothisree.rcn@ramauniversity.ac.in

### **ABSTRACT:**

Gardasil Vaccine is a vaccine used to prevent cervical cancer associate with human papilloma virus (HPV) in women, it works by initiating a mild infection to stimulate the body's immune system to produce antibodies to protect against any future infections. A quasi-experimental study was conducted to assess the effectiveness of information booklet on knowledge regarding Gardasil 9 vaccine for the prevention of cervical cancer among adolescent girls in selected inter colleges, at Kanpur, UP. A total 60 samples were collected by using Non-Probability Purposive Sampling Technique through self-structured knowledge questionnaire, the data collected and analysed and descriptive on inferential statistics. The results of the study showed that post-test mean score (21.5) was high when compared to the pre-test mean score at (13.91). The obtained "t" value 17.44 was greater than t-value (2.00) & df 59 which was p<0.05 level which shows significance differences between pretest and post-test level of knowledge hence the formulated research Hypothesis H1 was accepted. The test revealed that there was no significant association of knowledge with selected demographic variables such as Source of information so there were significant with association with, Age group, Religion, Mother qualification, Habits, Age of menarche, Health access, Type of family, Family monthly income, Previous knowledge, but there was no significant withothers elected demographic variables, were found no significant at <0.05 level of significance. The study concluded that Information Book let was effective and improve knowledge regarding Gardasil 9 for the prevention of the cervical cancer among adolescent girls.

### INTRODUCTION

Cervical cancer is the 5th most typical cancer in humans and the second most common cancer in women worldwide. Infection with certain high-risk strains of human papillomavirus (HPV) is a common cause of cervical cancer. It is the common cause of cancer in developing countries. Sexually transmitted HPV is the predominant risk factor for cervical intraepithelial neoplasia and cervical cancer. Cervical cancer is one of the common cancers in Indian women or girls. In India, approximately 365.71 million women aged 15 years and above are at risk of developing breast cancer. It is estimated that approximately 132,000 new cases and 74,000 deaths occur annually in India. The human papillomavirus (HPV) vaccine is a vaccine against specific types of human papillomavirus (HPV). HPV vaccines are available against types two, four, or nine of HPV.

Keywords:
Gardasil9,
cervicalcancer,
Adolescent girls,
Human
papillomavirus,
Information booklet
on prevention of the
cervical cancer.

DOI: 10.5455/jcmr.2024.15.02.17

### **NEED FOR STUDY**

India accounts for about one-fourth of all cervical worldwide, deaths with disproportionately high prevalence among females residing in rural regions and those having lowincome status.  $HP\bar{V}$  is largely asymptomatic, making it difficult to recognize and detect among the general population, which will limit any behaviors modification. Vaccinations may thus provide a solution for prevention. Two different vaccines that have been developed to prevent infection from HPV 16 and 18. Gardasil has been developed that protects against the two high-risk HPV types (types 16 and 18), which cause 70% of cervical cancers in women. It also protects against two low-risk HPV types (types 6 and 11), which 90% of wartPrevention and control should be coordinated to support women's knowledge of primary and seco ndary prevention strategies and their access to tre atment and palliative care. The strategy is importa nt to achieve the World Health Organization's goal of eliminating cancer by 2030. On the basis of above finding and also enormous increase in cervical cancer rates the researcher felt need to improve the knowledge and bring awareness regarding Gardasil 9 vaccine.

### PROBLEM STATEMENT:

"A study to assess the effectiveness of information booklet on knowledge regarding Gardasil 9 vaccine for the prevention of cervical cancer among the adolescent girls selected inter colleges Kanpur UP".

### **OBJECTIVES OF THE STUDY**

- A. To assess the pre-test knowledge regarding Gardasil 9 vaccine for the prevention of cervical cancer among the Adolescent girls in selected inter college at Kanpur UP.
- B. To evaluate the effectiveness of information booklet on knowledge regarding Gardasil 9 vaccine for prevention of cervical cancer among the adolescent girls in selected inter college at Kanpur UP.
- C. To find out the association between pre-test knowledge scores regarding Gardasil 9 vaccine for the prevention of cervical cancer with their selected socio demographic variables.

## HYPOTHESIS: (It will be tested at 0.05 Level of Significance)

H<sub>01</sub>-There is no significant difference between pre-test and post-test knowledge score regarding Gardasil 9 vaccine for the prevention of cervical cancer among the adolescent girls in selected inter colleges at Kanpur UP.

H<sub>02</sub>-There is no Significance association between pre-test knowledge score on Gardasil 9 vaccine for the prevention cervical cancer among the adolescent girls in selected inter colleges at Kanpur UP.

 $H_1$ - There is a significant difference between pretest and post-test knowledge score among the

adolescent girls in selected inter colleges regarding Gardasil 9 vaccine prevention for the cervical cancer with their selected sociodemographic variables.

 $H_2$ - There is a significant association between pretest knowledge score regarding Gardasil 9 vaccine for the prevention of cervical cancer with their selected socio demographic variables.

### METHODS AND MATERIALS:

### **RESEARCH APPROACH-**

The research approach used for the present study was quantitative evaluative research approach

### **RESEARCH DESIGN-**

The research design used in the study was quasiexperimental one group pre-test post-test without control research design.

### **VARIABLES**

### Independent-Variable

In the present study, independent variable was informational booklet on Knowledge regarding Gardasil 9 vaccine for the prevention of cervical cancer.

### Dependent Variable

In the present study, dependent variable was level of knowledge regarding Gardasil 9 vaccine for the prevention of cervical cancer among adolescent girls.

### Demographic variables

In this present study Socio-Demographic were Age, Religion, Mother Qualification, Type of Family, Age of Menarche, Habits, Health Access, Family Monthly Income, Previous Knowledge, and Source of Information.

### **POPULATION**

The population of present study was adolescent girls.

### TARGET POPULATION

The target population of present study was adolescent girls at selected inter colleges at Kanpur, UP.

### ACCESSIBLE POPULATION

Accessible population of present study was adolescent girls who are studying at Jawaharlal Nehru inter college, Kanpur UP.

### SAMPLE

The sample used for this study was adolescent girls who are meeting the inclusion criteria.

### SIZE

The sample size of this study was 60 adolescent girls.

### SAMPLING TECHNIQUE

In this study Non-Probability Purposive Sampling Technique was used to select the sample.

### Inclusion Criteria:

The study includes the adolescent girls in inter colleges at Kanpur

- A. Adolescent girls who are between 10 to 19 years of age.
- B. Adolescents girls who are willing to participate.
- C. Adolescents girls who did not take vaccine.

### **Exclusion Criteria:**

A. Adolescent girls who are not available at the time of data collection.

B. Adolescent girls who had taken cervical vaccination

C. Adolescent girls who knew about cervical cancer vaccine

### METHODS OF DATA COLLECTION

A Self-structured knowledge questionnaire was prepared to assess the effectiveness of information booklet on knowledge regarding Gardasil 9 vaccine for the prevention of cervical cancer among adolescent girls at selected inter colleges, Kanpur IIP

### **DEVELOPMENT AND DESCRIPTION OF TOOLS-**

A tool was developed to Jawahar Lal Nehru Inter Colleges Kanpur UPas well as to assess the effectiveness of information booklet on knowledge regarding Gardasil 9 vaccine for the prevention of cervical cancer among adolescent girls in selected inter colleges at Kanpur UP.

### TOOL CONSIST OF TWO SECTIONS:

Section A: Socio-Demographic variables.

Section B: Self -Structured knowledge questionnaire.

### **RESULT AND FINDINGS**

### SECTION A:

The major findings of the present study were:

- Majority of adolescent girls 56.66% (34) were in the age group of 13-15yrs.
- Majority of adolescent girls 90% (54) were from Hindu religion.
- Majority of adolescent girls 60% (36) were in the primary mother qualification.
- Majority of adolescent girls 61.67% (37) were in the Rs10k-15k monthly income.
- Majority of adolescent girls 50% (30) were in the nuclear type of family.
- Majority of adolescent girls 81.66% (49) were having previous knowledge.
- Majority of adolescent girls 54.54% (6) were in the mass media sources of information.
- Majority of adolescent girls 33.33% (20) were in the age 13year of menarche.
- Majority of adolescent girls 96.66% (58) were in the habits.
- Majority of adolescent girls 86.66% (52) were in the private hospital health access.

### **SECTION B**

Distribution of adolescent girls in inter college according to their Pre-test and Post-test level of knowledge Gardasil 9 vaccine for the prevention of cervical cancer, n=60

S. No.	Level of knowledge	Pre-test		Post-test		
		F	%	F	%	
1.	Inadequate knowledge (0-14)	38	63.33%	00	00%	
2.	Moderate knowledge (15-22)	22	36.67%	18	30%	
3.	Adequate knowledge (23-30)	00	00.00%	42	70%	
	Total	60	100.00%	60	100.00%	

### **SECTION C**

Comparison of Pre-test and Post-test level of knowledge regarding Gardasil 9 vaccine for the prevention of cervical cancer among adolescent girls in inter colleges.

n=60

S. No	Knowledge Level	Mean	Mean Deference	Mean Percentage %	Standard Deviation
1	Pre-test	13.91		23.18%	4.43
			7.59		
2	Post-test	21.5		35.83%	4.09

### **SECTION D**

Effectiveness of information booklet on knowledge regarding gardasil9 vaccine for the prevention of cervical cancer among adolescent girls in inter colleges.

Table-2: Frequency, Mean, Mean Difference, Paired "T" Test of Self-Structured Questionnaire

S.no	Knowledge level	Mean	Mean difference	Standard Deviation	Paired "t" value	Level significance	of
1	Pre-test	13.91	7.59	4.43	17.44	0.05	
2	Post-test	21.5		4.09			

# Association between the level of pre-test knowledge score the selected demographic variables of adolescent girls

The result shows the association between the level of pre-test knowledge score with selected demographic variables like age group, religion, mother education, family monthly income, type of family, previous knowledge, health access, habits, age of menarche, but there was no significant with source of information. Here calculated value of chi- square was less than table value at 0.05 level of significance. So, there were significant association with, age group, religion, mother education, family monthly income, type of family, previous knowledge health access, habits, and age of menarche but there was no significant with other selected socio- demographic variable. Hence, positive hypothesis (h2) was accepted and null hypothesis (h02) was rejected.

### CONCLUSION

On the basis of findings of the study following conclusion were drawn. In the pre-test knowledge based on selected inter colleges at Kanpur UP regarding Gardasil 9 vaccine for the prevention of cervical cancer so that among adolescent girls in college 38(63.33%) had inadequate inter knowledge 22(36.67%) had moderate knowledge and one had adequate knowledge in pre-test and 42(70%) had adequate knowledge18(30%) had moderate knowledge and no one had inadequate knowledge in Post-test. It was inferred that, most of the adolescent girls in inter college had moderate knowledge in Pre-test and most of had adequate knowledge in Post-test.

### **REFRENCES**

1.Schiffman M, Castle PE, Jeronim J, Rodrigue AC, Wacholde S. Human papillomavirus and cervical cancer. Lancet. 2007; 370:890-907.

2.WHO/ICO Information Centre on HPV and Cervical Cancer (HPV Information Centre). Summary report on HPV and cervical cancer statistics in India 2007. [Last Assessed on 2008 May 1]

from: http://www.who.int/hpvcentre.

3. World Health Organization (December 2022). "Human papillomavirus vaccines: WHO position

paper (2022 update)". Weekly Epidemiological Record. 97 (50): 645- 672. hdl:10665/365351.

4.Kash N, Lee MA, Kollipara R, Downing C, Guidry J, Tyring SK (April 2015). "Safety and Efficacy Data on Vaccines and Immunization to Human Papillomavirus". Journal of Clinical Medicine. 4 (4):614633. doi:10.3390/jcm4040614. PMC 4470159. PMID 2 6239350. S2CID 14149551.

5.N. Taneja, B. Chawla, A.A. Awasthi, K.D. Shrivastav, V.K. Jaggi, R. Janardhanan, Knowledge, attitude, and practice on cervical cancer and screening among women in India: a review, Cancer Control 28 (2021 Apr 29) 10732748211010799

6.Farhath, Seema et al. "Cervical cancer: is vaccination necessary in India?" Asian Pacific journal of cancer prevention: APJCP 14 4 (2013): 2681-4

7.Bhatla, Neerja, et al. "Cervical cancer prevention efforts in India." Indian Journal of Gynecologic Oncology 19.3 (2021): 41.