# A Study to Evaluate the Effectiveness of Structured Teaching Program on Knowledge Regarding Human Papilloma Virus Vaccination for the Prevention of Cervical Cancer Among Adolescent Girls at Selected Government Higher Secondary School, Durg, Chhattisgarh

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Abstract: The current study aimed to evaluate the effectiveness of structured teaching program on knowledge regarding human papilloma virus vaccination for the prevention of cervical cancer among adolescent girls at selected government higher secondary school, Durg, (C.G.) Quasi-experimental and the research design was one group pretest - posttest design is utilized to achieve the stated. Objectives: To assess the pre-test knowledge score regarding human papilloma virus vaccination for the prevention of cervical cancer. 1. To assess the post-test knowledge score regarding human papilloma virus vaccination for the prevention of cervical cancer. 2. To evaluate the effectiveness of structured teaching program on human papilloma virus vaccination for the prevention of cervical cancer. 3. To find the association between pre-test knowledge score with their selected socio-demographic variables among adolescent girls score regarding human papilloma virus vaccination for the prevention of cervical cancer. Hypothesis: (H1) - There will be significant higher knowledge score of post-test than pre-test regarding human papilloma virus vaccination for the prevention of cervical cancer among adolescent girls of selected government higher secondary school, Durg, (C.G.). (H2) – There will be significant association between the pre-test and post-test knowledge score with their selected demographic variables. Projected Outcome: In the present study research design performed in this study is one group pre-test and post-test research design. The study was based on the Open System Theory-By Bertalanffy and J.W Kenny. Evaluative research approach. For main study Purposive sampling technique was used on 60 samples of structured questionnaire regarding HPV vaccination was adopted to approach the subject, government higher secondary school, Durg, Chhattisgarh. The tool used for data collection consists of socio-demographic variables and knowledge of adolescent girls regarding human papilloma virus vaccination for prevention of cervical cancer. Descriptive and inferential statistics were utilized for the data analysis. The level of significance set for testing the hypothesis was, 0.05 using "ttest".

*Keywords*: evaluation, assess, effectiveness, structure teaching programme, knowledge, cancer, adolescent, school.

#### 1. Introduction

Cervical cancer is a malignant neoplasm arising from cells originating in the cervix uteri. One of the most common symptoms of cervical cancer is abnormal vaginal bleeding, but in some cases, there may be no obvious symptoms until the cancer has progressed. Human papilloma virus (HPV) infection appears to be a necessary factor in the development of almost all cases (90%) of cervical cancer. HPV vaccines effective against the two strains of this large family of viruses that currently causes approximately 70% of cases of cervical cancer. Since the vaccines only cover some of the cancer-causing highvaccination to an advanced stage. Cervical cancer is the fifth most common cancer in humans, the second most common cancer in women worldwide and the most common cancer cause of death in the developing countries. Sexually transmitted human papilloma virus (HPV) infection is the most important risk factor for cervical intraepithelial neoplasia and invasive cervical cancer. The worldwide incidence of cervical cancer is approximately 510,000 new cases annually, with approximately 288,000 deaths worldwide. Unlike many other cancers, cervical cancer occurs early and strikes at the productive period of a woman's life. The incidence rises in 30-34 years of age and peaks at 55-65 years, with a median age of 38 years (age 21-67 years). Estimates suggest that more than 80% of the sexually active women acquire genital HPV by 50 years of age. Hence the advent of a vaccine against HPV has Stirred much excitement as well as debate. Indian women face a 2.5% cumulative lifetime risk and 1.4% cumulative death risk from cervical cancer. At any given time, about 6.6% of women in the general population are estimated to harbor cervical HPV

infection. HPV serotypes 16 and 18 account for nearly 76.7% of cervical cancer in India. Warts have been reported in 2-25% of sexually transmitted disease clinic attendees in India; however, there is no data on the burden of an genital warts in the general communication. By 2030, cervical cancer is expected to kill over 474,000 women per year over 95% of these deaths are expected to be in low- and middle-income countries. HPV immunization programs face several challenges. First, it is not entirely clear who should receive the vaccine and when. Females tend to become infected with HPV soon after they become sexually active, so it makes sense to immunize them at a relatively early age, before they become sexually active. It is not yet known, however, whether they will require booster shots later in life or whether a catch-up immunization campaign for older, sexually active women can reduce cancer rates. The availability of prophylactic human papilloma virus (HPV) vaccines has provided powerful tools for primary prevention of cervical cancer and other HPV-associated diseases. Since 2006, the quadrivalent and bivalent vaccines have each been licensed in over 100 countries. By the beginning of 2012, HPV vaccine had been introduced into national immunization programs in at least 40 countries.

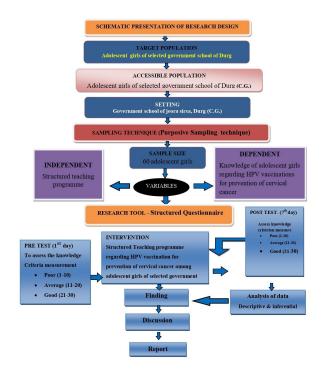


Fig. 1. Methodology

## 2. Result and Discussion

*Organization of Data*: The findings of the study were discussed under the following section.

Section I: Description of socio demographic variables in frequency and percentage.

Section II: Overall analysis of knowledge score regarding human papilloma virus vaccination for the prevention of cervical cancer among adolescent girls of selected government higher secondary school, Durg, (C.G.)

Section-III: Area wise analysis of knowledge score regarding

human papilloma virus vaccination for the prevention of cervical cancer among adolescent girls of selected government higher secondary school, Durg, (C.G.)

Section IV: Paired "t-test" to assess the effectiveness of structured teaching programme on knowledge regarding human papilloma virus vaccination for the prevention of cervical cancer among adolescent girls at selected government higher secondary school, Durg

Section V: Chi-square analysis for association between pre test knowledge regarding papilloma virus vaccination for the prevention of cervical cancer with their selected sociodemographic variables.

SECTION-I: Finding related to socio demographic variables

- 1. It shows that (15.00%) adolescent girls belong to age group 13-14, (61.67%) belong to 15-16 and (23.33%) belong to 17-18 years.
- 2. It shows that maximum 59 (98.33%) adolescent girls were Hindu, 1 (1.67%) were Muslim, 0(0.00%) were Christian & Other's.
- 3. It shows that 12 (20.00%) adolescent girls belong to class 9th -10th, 17(28.33%) adolescent girls belong to class 10th -11th and 31 (51.67%) adolescent girls belong to class 11th -12th.
- 4. It shows that 38 (63.33%) adolescent girls belong to 13–15 years, 14(23.33%), 08 (13.33%) adolescent girls belong to above 15 years.
- 5. It shows that 23 (38.33%) adolescent girls belong to nuclear family, 22 (36.67%) adolescent girls belong to grand -parent family and 15 (25%) adolescent girls belong to nuclear family.
- 6. It shows that 49 (81.67%) adolescent girls family income is <Rs 10000,10 (16.67%) adolescent girls family income is Rs 10000-15000 and 1(1.67%) adolescent girls family income is >Rs 15000.
- 7. It shows that 38 (63.33%) adolescent girls fathers are metric pass, 16 (26.67%) adolescent girls fathers are illiterate and 6(10%) adolescent girls fathers are postmetric
- 8. It shows that 40 (66.67 %) adolescent girl's has family history of cancer, 17 (28.33%) adolescent girls were unknown about family history of cancer and 3(5%) adolescent girl's has no family history of cancer.
- 9. It shows that 31(51.67) adolescent girls received information from Books/ teachers, 26 (43.33%) adolescent girls received information from Media and 3 (5%) adolescent girls received information from friends.
- 10. It shows that 60(100%) adolescent girls belong to rural locality.

SECTION II: Overall analysis of knowledge score regarding human papilloma virus vaccination for the prevention of cervical cancer among adolescent girls of selected government higher secondary school, Durg, (C.G.)

Depicts that among adolescent girl's pre-test knowledge score is 29 (48.33%) were average, 31 (51.67%) were poor and post-test knowledge score is 22 (36.67%) were good, 38 (63.33%).

SECTION–III: Area wise analysis of knowledge score regarding human papilloma virus vaccination for the prevention of cervical cancer among adolescent girls of selected government higher secondary school, Durg, (C.G.)

Reveals that maximum pre-test knowledge score regarding area wise analysis was 40% in preventive measure followed by 57.5% in post-test. Whereas minimum pre-test knowledge score regarding area wise was 22.5% in complication followed by 66% in post-test.

SECTION- IV: Paired "t-test" to assess the effectiveness of structured teaching programme on knowledge regarding human papilloma virus vaccination for the prevention of cervical cancer among adolescent girls at selected government higher secondary school, Durg, (C.G.)

It depicts P<0.001 shows difference in mean pre-test and mean post- test score is highly significant. P<0.02 shows significant difference. It means intervention was highly effective.

SECTION- V: Finding related to Chi square analysis to find out the association between pre-test knowledge score with their selected socio-demographic variables.

Shows the association between pre test level of knowledge of young adults with their socio demographic characteristics such as age, gender, father's education, religion, family monthly income, source of information, locality etc.

Non parametric chi square test has been used to test the association between pretest knowledge score and demographic variables. On applying chi square test significant association (P<0.05) was found between age in years and education, rest all

the association was found in significant (p>0.05).

## 3. Conclusion

On the basis of above findings of the study following conclusion could be drawn- There was deficiency of knowledge in adolescent girls regarding HPV vaccination for prevention of cervical cancer. The structured teaching programme was found to be effective in increasing the knowledge of adolescent girls regarding HPV vaccination for prevention of cervical cancer.

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