



A STUDY TO ASSESS THE EFFECTIVENESS OF HEALTH AWARENESS PROGRAMME ON KNOWLEDGE REGARDING HUMAN PAPILLOMA VIRUS VACCINE FOR CERVICAL CANCER AMONG ADOLESCENT GIRLS OF SELECTED SCHOOLS OF SASARAM.

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ABSTRACT

Genital human papillomavirus (HPV) infection is a common infection and is primarily transmitted by sexual contact. It is the most common sexually transmitted infection with around 630 million people already infected and approximately 6 million people being infected each year. The prevalence of HPV increases with age from 14 to 24 years and then declines. Up to 80% of women will acquire an HPV infection in their lifetime. The cumulative risk of acquiring cervical HPV infection in women with only one sexual partner is 46% at 3 years after the first sexual encounter. In 2005 there were about 500,000 cases of cervical cancer 260,000 related deaths worldwide. As per an estimate, the global burden of cervical cancer by year 2050 will be more than 1 million new cases every year. The studies have shown that women's awareness regarding HPV is low, especially in adolescent girls.

OBJECTIVE

- To assess knowledge regarding HPV for cervical cancer among adolescent girls.
- To assess the effectiveness of health awareness programme on knowledge regarding HPV for cervical cancer among adolescent girls.
- To find out the association between knowledge scores with selected socio-demographic variables among adolescent girls.

MATERIALS AND METHODS

The research approach used in the present study is quantitative research approach and the research design is one group pre-test and post-test design is chosen for conducting the study, where there is no randomization and control group. In this design all the subjects were selected by convenience sampling technique and were given a pre-test and then post-test were conducted after they receive an intervention. The setting of the study were selected schools of Sasaram. The target population comprises of all the adolescent girls. The accessible population in this study are all the adolescent girls who are studying in 9th, 10th, 11th or 12th std in selected schools of Sasaram. Structured questionnaire was prepared containing a set of questions, were asked by the sample. The investigator collected the data from the 30 adolescent girls.

RESULTS

Nearly 53% of the adolescent girls are of the age group 11-15years, 46% of the age group 15 - 17 years and no girls are above 18 years. About 60% of the girls are in 9th std, 40% are in 10th std and no girls in 11th or 12th std. Approx. 76% of the adolescent girls having Rs 15,000-20,000 family income, 16% girls having Rs 20,001-30,000 family income and 6% girls having family income above Rs 30,001. About 30% of the adolescent girl's mothers are not having any formal education, 23% are having diploma, 16% of them are graduated, no mothers are post graduated and 30% are having other qualification. About 10% of the adolescent girl's fathers are not having any formal education, 6% are having diploma, 30% of them are graduated, 3% are post graduated and 50% are having other qualification. About 86% of the girls are Hindu, 10% girls are Muslim and no girls are Christian or any other religion. Approx. 56% of the adolescent girls have previous information from their parents, 30% have previous information from teachers and 10% have previous information from social media. The mean score of concepts of HPV vaccine for cervical cancer is raised from 9.83 (SD = 2.04) in pre-test to 14.90 (SD = 2.29) in post-test. The t test computed between the pre-test and post-test knowledge of primigravida mothers ($t = 9.04$) was highly significant at 1% level

CONCLUSION

The obtained findings of the study led to the following conclusions:

- Deficit of knowledge regarding HPV vaccine for cervical cancer existed in varying degree of adolescent girls in all the learning need area.
- The Health Awareness Programme utilized in this study was effective in imparting the knowledge of HPV vaccine and cervical cancer.

INTRODUCTION

Human Papilloma Virus (HPV) vaccination can lead to substantial reductions in the incidence of HPV infection and HPV-related diseases, including anogenital cancers and genital warts. The introduction and licensing of the quadrivalent HPV vaccine in 2006 and the subsequent licensing of the bivalent vaccine in 2008 created opportunities to counter the existing HPV disease burden. Given the high rates of HPV infection that occur shortly after the initiation of sex and the vaccine's ability to prevent infection only prior to exposure, HPV vaccination has been vaccination with either the bivalent or quadrivalent vaccine has been recommended by the centres for Disease Control and Prevention's (CDC's) Advisory committee for Immunization Practices (ACIP) for adolescent females ages 11-12, with catch-up vaccination for young women 13-26 years of age. However, four years post vaccination licensure, at least half of the target population of adolescent females had not initiated HPV vaccination. Various studies have assessed predictors of HPV vaccination initiation and completion. The CDC reported most recently that poverty was not a factor in HPV vaccination initiation. On the other hand, poverty status and minority group membership were found to be associated with lower HPV vaccine completion rates. Other studies have shown conflicting results for the significance of socio-demographic factors in HPV vaccination initiation (e.g., parental education level, income level insurance status). Other factors that been evaluated as predictors of vaccine acceptance, include maternal attitudes, such as: knowledge of HPV, perception of daughter's risk for HPV acquisition, belief in vaccination benefits, degree of concern about vaccine side effects, child's age, social influences, concern regarding post-vaccination sexual disinhibition, physician's recommendation, and parent's personal exposure to HPV infection. In light of the morbidity and mortality associated with HPV disease as well as the disproportionately high HPV disease burden in minority and uninsured women within the United States, it is pivotal that we continue to evaluate factors related to HPV vaccine initiation and completion. Understanding the current trends of vaccination and continuing to re-evaluate predictors of vaccination and non-vaccination allows for the development of more effective strategies designed to increase rates of HPV vaccination and reduce future health disparities. Genital human papillomavirus (HPV) infection is a common infection and is primarily transmitted by sexual contact. It is the most common sexually transmitted infection with around 630 million people already infected and approximately 6 million people being infected each year. The prevalence of HPV increases

with age from 14 to 24 years and then declines. Up to 80% of women will acquire an HPV infection in their lifetime. The cumulative risk of acquiring cervical HPV infection in women with only one sexual partner is 46% at 3 years after the first sexual encounter. Majority of HPV infections are transient and subclinical and undergo subsequent clearance by the immune system. Persistence of infection results in development of anogenital warts as well as precancerous lesions and cancers of the anogenital tract and oropharynx. Anogenital warts are very common in sexually active adolescents and young adults with an annual incidence rate ranging from 182 to 229/100,000 population in developed countries such as USA, UK, and France. Precancerous lesions associated with HPV infection may [involve the cervix cervical intraepithelial neoplasia or cervical intraepithelial neoplasia or (CIN) and adenocarcinoma in situ (AIS), vagina ([vaginal intraepithelial neoplasia or vaginal intraepithelial neoplasia (VAIN)], vulva [vulvar intraepithelial neoplasia or vulvar intraepithelial neoplasia (VIN), or anus (anal intraepithelial neoplasia or AIN). Among the HPV-induced cancers, cervical cancer tops the list followed by cancer of the vagina, vulva, penis and anus and a subset of head and neck cancers. In 2005 there were about 500,000 cases of cervical cancer 260,000 related deaths worldwide. As per an estimate, the global burden of cervical cancer by year 2050 will be more than 1 million new cases every year.

MATERIAL AND METHOD

2.1 STUDY DESIGN, STUDY POPULATION AND SETTING

This descriptive study was performed on Human Papilloma Virus Vaccine for cervical cancer. This study was performed in Rama Jain Girls Higher Secondary (+2) School, Sasaram, Rohtas. From the survey, all students who are studying in 9th, 10th, 11th or 12th were included.

2.2 ELIGIBILITY CRITERIA

The study subject includes adolescent girls who are studying in 9th, 10th, 11th or 12th std and who meet our inclusion criteria. The adolescent girls lie in the age group of 11-21 years.

2.3 REVIEW OF LITERATURE

A descriptive study was conducted to assess the knowledge levels of adolescence girls about human papilloma virus and its vaccine. Five hundred and one adolescent girls aged between 13 and 18 years who presented to the gynaecology outpatient clinic between March 2012 and March 2013 were asked to answer the questions of the questionnaire about HPV and HPV vaccine. The “Participant Information Form” and “HPV Information Assessment Form” were used by examination of the related literature by the investigators. Descriptive statistics were shown with mean, standard deviation, number and percentage values. In our study, it was found that the adolescent girls who constituted our study group had insufficient information about HPV and HPV vaccine.

A study was conducted to evaluate the understanding and acceptance of the HPV vaccination in an underserved population among adolescents in New York City. We aimed to evaluate the understanding and acceptance of the HPV vaccination in an underserved population among adolescents in New York City. A questionnaire was distributed to adolescents at health clinics affiliated with a large urban hospital system to determine knowledge pertaining to sexually transmitted diseases and acceptance of the HPV vaccine. Surveyed adolescents demonstrated a marginal willingness to receive the HPV vaccine and a lack of awareness of personal risk for acquiring HPV.

A cross-sectional study was conducted to assess the knowledge and awareness about the HPV vaccine among females in four Arab countries and their acceptance to receive the vaccine. This study aimed to investigate the knowledge and awareness about the HPV vaccine among females in four Arab countries and their acceptance to receive the vaccine. A cross-sectional study was conducted in several Arab countries: Jordan, Qatar, the United Arab Emirates (UAE), and Iraq. Knowledge and awareness were assessed using 13 questions. Ethical approvals were given from the four countries. This study revealed poor awareness and knowledge of the participants about HPV and its vaccine among all four countries' participants with relatively better knowledge among participants from the UAE. Poor knowledge and awareness findings in this study were expected, considering the lack of public education campaigns regarding the HPV virus coupled with the absence of the HPV vaccination from the national immunization schedule in three participating countries (Jordan, Qatar, and Iraq). It is recommended that there is a need to provide national educational campaigns about the HPV vaccine to the public in all Arab populations.

A study to assess the awareness and knowledge of HPV vaccine in prevention of cervical cancer among medical students. The main aim of the study is to know the awareness and knowledge of HPV vaccine in prevention of cervical cancer among medical students. The study included 97 medical students (final year) studying in Yenepoya Medical College, Mangalore. It is a cross-sectional questionnaire-based study. The results of awareness and knowledge about the HPV vaccine are interpreted in percentage. However, importantly students had a positive attitude to educate people regarding HPV vaccination and also to clear myths and misconceptions. Medical students should be educated regarding HPV infection, risk factors for causation of cervical cancer, screening methods which are available, HPV vaccines available in India and also about the efficacy and to motivate the society to have a positive attitude towards HPV vaccination by clearing the misconceptions regarding its information.

2.4 ETHICAL APPROVAL

This study was approved by the Institutional ethical committee of Gopal Narayan Singh University, Jamuhar, Rohtas (Bihar) on 15th Feb 2022. Written permission was taken from the school authority also participants gave their consent through their signature on the consent form before initiation of the session. All survey data were stored in accordance with national legislation and institutional policies Confidentiality of student information was maintained.

RESULT

The study was performed on 30 subjects who was studying in 9th, 10th, 11th or 12th std. Participants were assessed on the basis of a structured questionnaire including items such as sociodemographic variables.

3.1 STUDY SUBJECT CHARACTERISTICS

a) Age

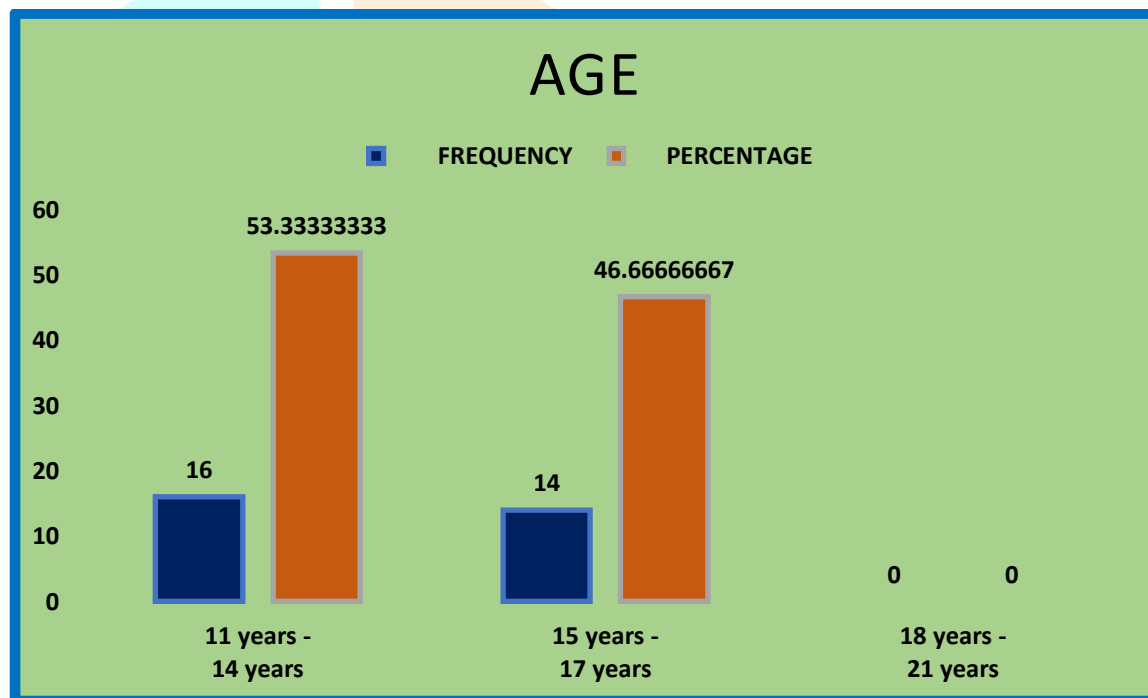


CHART 1.1

Study subjects were selected from different sociodemographic variables. Out of 30 adolescent girls, the frequency of the majority of adolescent girls lies in the age group of 11 – 14 years i.e., 16 adolescent girls (53.33 %) whereas 14 adolescent girls(46.66%)come under age group 15-17 years of age and no girls are above 18 years. The data is depicted in chart 1.1 above

b) Educational status

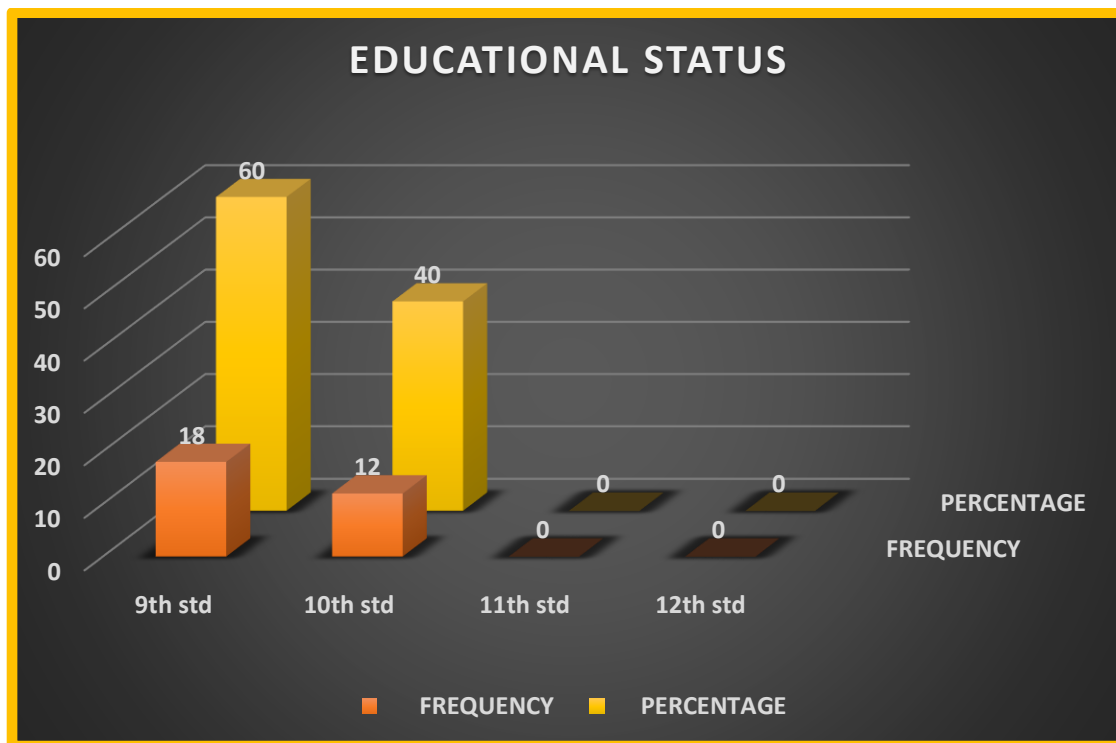


Chart 1.2

Study subjects were selected from different sociodemographic variables. Out of 30 adolescent girls, the frequency of the majority of adolescent girls in 9th std i.e., 18 adolescent girls(60%) whereas 12 adolescent girls (40%) in 10th std and no adolescent girls in 11th or 12th. The data is depicted in chart 1.2 above.

c) Family income

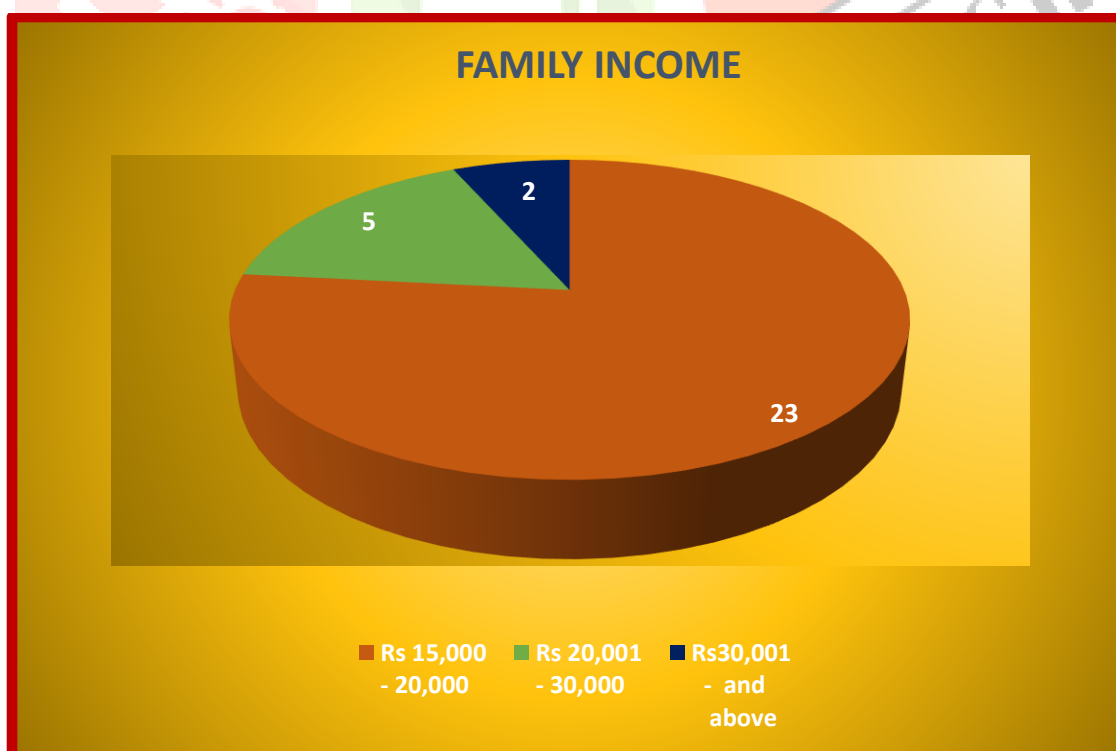


Chart 1.3

Study subjects were selected from different sociodemographic variables. Out of 30 adolescent girls, the frequency of the majority of adolescent girls having 15000-20000 family income i.e., 23 adolescent girls (76.66%) whereas 5 adolescent girls having 20001-30000 (16.66%) and 2 adolescent girls having above 30001 (6.66%). The data is depicted in chart 1.2 above.

d) Source of information

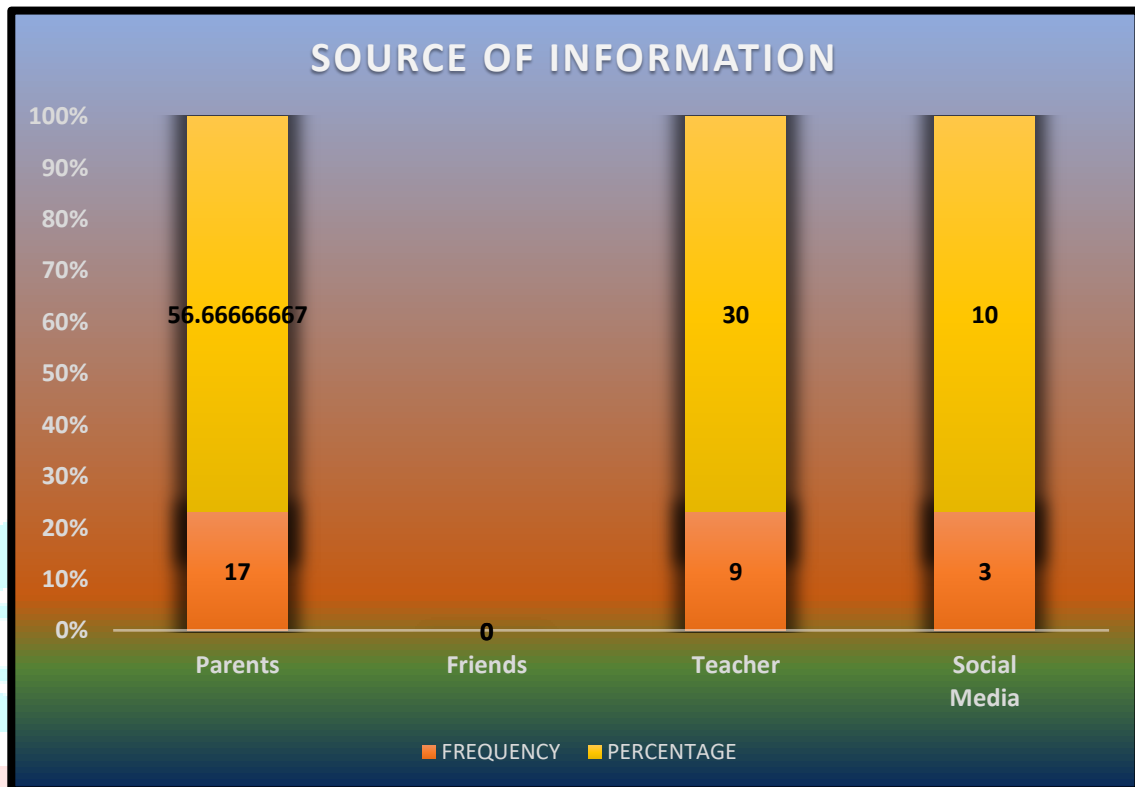


Chart 1.4

The data depicted in chart 1.4 demonstrates that the adolescent girls according to their previous information, 17 adolescent girls (56.66 %) have previous information from their parents, 9 adolescent girls (30%) have previous information from teachers and 3 adolescent girls (10%) have previous information from social media.

DISCUSSION

This study was performed on adolescent girls who are studying in 9th, 10th, 11th or 12th std. We found that there are several factors associated with HPV vaccine for cervical cancer such as sociodemographic variables (age, educational status, family income, source of information).

The study indicates that nearly 53.33% of the adolescent girls are of the age group 11-15 years, 46.66% of the age group 15 - 17 years and no girls are above 18 years.

60% of the girls are in 9th std, 40% are in 10th std and no girls in 11th or 12th std.

76.66% of the adolescent girls having Rs 15,000-20,000 family income, 16.66% girls having Rs 20,001-30,000 family income and 6.66% girls having family income above Rs 30,001.

56.66% of the adolescent girls have previous information from their parents, 30% have previous information from teachers and 10% have previous information from social media.

The aim of study is to assess the effectiveness of health awareness programme on knowledge regarding Human Papilloma Virus Vaccine for cervical cancer among adolescent girls of selected school of Sasaram.

CONCLUSION

The knowledge of girls on HPV vaccine for cervical cancer was significant increase in knowledge of adolescent girls on HPV vaccine for cervical cancer after administration of HAP.

It is concluded that HAP increased the knowledge of adolescent girls on HPV vaccine for cervical cancer. The knowledge may be utilized adolescent girls to have healthy life.

Declaration of competing interest

None

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Data availability

Data is available in the form of hard copies.

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