DAUGHTERS TO BE PREVENTED FROM CERVICAL CANCER: EDUCATION THROUGH SIM ON KNOWLEDGE OF HPV VACCINE.

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Abstract

Background

Human Papilloma virus (HPV) infection is common, with prevalence peaking among young adults. Continued efforts are needed to ensure that health care professionals and adolescents understand the importance of vaccinating before they become sexually active. Health care professionals may benefit from guidance on communicating HPV recommendations to patients and parents. Aim and Objectives: In order to educate the adolescents on prevention, acceptanceof the HPV vaccine, It was decided to educate adolescents in order to prevent this deadly disease that is cervical cancer Methods: An experimental study on Human Papilloma virus vaccine acceptability in adolescents through a self Instructional module was conducted.

Results: For assessing the knowledge and the effectiveness of self instructional module with reference to the knowledge of Human papilloma virus (HPV) vaccine, among adolescent girls. 87% of the adolescent girls had poor knowledge and 13% of them had average knowledge regarding HPV vaccine. In posttest,63% of them had good knowledge, 35% of them had average knowledge and 2% of them had poor knowledge regarding HPV vaccine. This indicates that there is remarkable improvement in the knowledge of the adolescent girls regarding HPV vaccine after SIM.

Keywords: HPV vaccine, self Instructional module, Adolescent girls.

Introduction:

The World Health Organization's Global Burden of Disease statistics identified cancer as the second largest global cause of death, after cardio vascular disease. Cancer is the fastest growing segment of the disease burden; global cancer deaths are projected to increase from 7.1 million in 2002 to 11.5 million in 2030. One third of cancers are preventable and another third are curable through early detection and effective therapy.²

A study conducted on attitudes toward Human Papilloma Virus (HPV) vaccination among parents of adolescent girls in Mysore, India. Seven focus group discussions were held among parents of adolescent girls. The study found that while parents have limited knowledge about Human Papilloma Virus or cervical cancer most are still highly

accepting an HPV vaccine. The results highlight the need for additional education and health promotion regarding Human Papilloma Virus and cervical cancer prevention in India.¹

A exploratory survey study was conducted to assess the knowledge of cervical cancer, one of the leading causes of cancer death is women, and current screening practices among female student at the University of Nasik. A stratified sampling technique was used to select100 respondents. Semi-structured questionnaires were used. Nearly 2/3(63%) of respondents have heard about cervical cancer. Knowledge of predisposing factors for the disease was high for early exposure to sex (82%) and sex with multiple partners (70.6%). Only 15.7% knew that abnormal menstrual bleeding is symptomatic of cervical cancer; 14.9% perceived themselves for screened 2.6% for the disease. The study revealed that Intense and integrated educational programs are urgently needed for the adolescents.³

Methods: A cross-sectional study with 100 samples using stratified random sampling technique was done to select the study participants. The age group of the girls was 16-29 years with the inclusion criteria of who could read English .Girls who were present during the time of data collection, and exclusion criteria students who were not willing to participate in the study. Approval from the institutional ethical committee was obtained. Written informed consent was taken from the girls and consent was taken from parents whose children were aged above 16-17 years. The tool and technique used for the study were as follows: A structured questionnaire was developed for assessing the knowledge and the effectiveness of self instructional module with reference to the knowledge of Human papilloma virus (HPV) vaccine, among adolescent girls.

Section A: This section included items seeking information on demographic profile of sample such as age, gendereducation, do you know about availability of vaccine for cervical vaccine, If Yes from where.

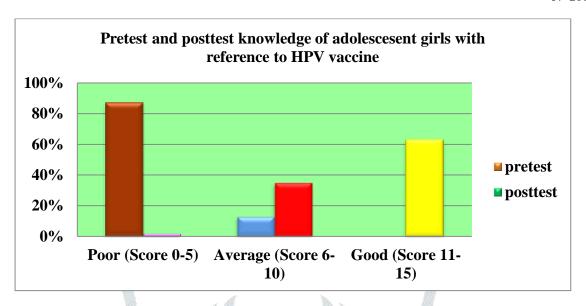
Section B: Comprised of items to assess knowledge of Human papilloma virus (HPV) vaccine, among adolescent girls. It comprised questions on following broad aspects, Meaning, CausesSigns and symptoms, Diagnosis, Screening, Treatment/care, Prevention, Complication, and Resources/counseling.

The final study was conducted from 15thJanuary 2016- 16th April 2016.Data collection was done on 100 students meeting the criteria for the study. Samples were obtained from various classes of the college. The objectives of the study were discussed with the principal of the college. Consent was obtained from the parents of children participating in the study and consent was obtained from the children aged above 16-17 years. They were assured about the confidentiality of the data. The investigator collected demographic details followed by teaching on HPV infection and Vaccines to prevent the infection.

Results and Description:

Figure 1: Shows Analysis of data related to the knowledge of adolescent girls with reference to HPV vaccine

N=100



In pretest, 87% of the adolescent girls had poor knowledge and 13% of them had average knowledge regarding HPV vaccine. In posttest, 63% of them had good knowledge, 35% of them had average knowledge and 2% of them had poor knowledge regarding HPV vaccine.

Effectiveness of SIM on HPV vaccine on knowledge of adolescent girls regarding HPV vaccine.

Table 1: Description of Category wise percentage distribution of the Effectiveness of SIM on HPV vaccine and it's knowledge scores.

		Percentage of knowledge
Sr.no	Section II test	scores N=100
1	Meaning	30.6
2	Causes	21
3	Signs & Symptoms	31
4	Diagnosis	39.3
5	Screening	13
6	Treatment/Care	38
I		1

7	Prevention	35
8	Complication	39
9	Counselling/Resources	36

Table 1 shows that:

The analysis shows that approximately only 31% of the samples know meaning of HPV vaccine and an average of 21% samples know the causes of cervical cancer. On an average, 31 % of the samples know the signs & symptoms of cervical cancer. An average of 39% of the samples had the knowledge on diagnosis of cervical cancer and the importance of the HPV Vaccine. The table above shows a very poor knowledge scores on screening tests for cervical cancer. Only 13% know correctly that there is a HPV vaccine for the adolescents. Approximately 38% of the samples know and believe that the HPV vaccine is a preventive measure in cervical cancer. Only 35% of the samples know that the HPV vaccine can prevent from getting cervical cancer in adolescents. An average of 39% have fair idea on the complications of cervical cancer and regarding the risk of developing different disorders both physically and mentally. Not more than 36% of the samples know about the benefits of the SIM in giving knowledge for the prevention of cervical cancer.

Analysis of data related to association between knowledge of adolescent girls and selected demographic variables. Association between knowledge of adolescent girls and selected demographic variables was assessed using Fisher's exact test.⁴ summary of Fisher's exact test is tabulated below:

Table 2: Fisher's exact test for association between knowledge of adolescent girls and selected demographic variables.

N=100

Demographic variable		Knowledge		p-value
		Average	Poor	
Age	16-17 years	13	73	0.574
	17-18 years	0	11	
	18-20years	0	3	
Gender	Female	11	75	1.000
	Male	2	12	
Education	Graduate	12	72	0.687
	Secondary	1	15	
Do you know about availability of vaccine for cervical vaccine	No	7	17	0.013
	Yes	6	70	

Since p-value corresponding to 'Do you know about availability of vaccine for cervical vaccine' is small (less than 0.05), knowledge about the availability of vaccine for cervical vaccine was found to have significant association with the knowledge of the adolescent girls regarding HPV vaccine.

Discussion

The study reveals that 87% of the adolescent girls had poor knowledge and 13% of them had average knowledge regarding HPV vaccine. This is an important information to us which directs us to provide the SIM for public information through the OPD of the Gynecologic practitioners, so that the expected and those who are prone to be in the risk group can avail information, thus it can help to prevent the chance of having cervical cancer in adolescents girls.

A study conducted on attitudes toward Human Papilloma Virus (HPV) vaccination among parents of adolescent girls in Mysore, India. Seven focus group discussions were held among parents of adolescent girls. The study found that while parents have limited knowledge about Human Papilloma Virus or cervical cancer most are still highly accepting an HPV vaccine. The results highlight the need for additional education and health promotion regarding Human Papilloma Virus and cervical cancer prevention in India.³

Our society obtains a majority of its information from the media, whether it is the internet, television, or radio. Gardasil has been advertised through all routes of media and the process has been evaluated.⁵ In a study conducted to determine the relationship between media influence and vaccine acceptance, researchers found that 70.2% of mothers were accepting of the vaccine prior to the FDA approval and mass media coverage.⁶ This number has not changed greatly compared to studies being completed after the approval but this is still debatable. Also, mothers who were younger in age, did not have a college degree, and lived in a rural community were more likely to accept the vaccine.⁷

Conclusion:

This study concludes that the adolescent students should have knowledge about the vaccine to prevent cervical cancer. In addition to the public gaining education on the HPV vaccine, it is important that all health care providers who come in contact with adolescents also receive information on the vaccine. The programs should encourage the need for vaccination, provide the administration directions, and list the possible side effects. This indicates that there is remarkable improvement in the knowledge of the adolescent girls regarding HPV vaccine after SIM.

Recommendations:

The investigator preferred to make the SIM ready to impart knowledge of Human papilloma virus (HPV) vaccine, among adolescent girls. The prevention of cervical cancer through Human papilloma virus (HPV) vaccine, among adolescent girls is the area where they are lacking. Nurses can carry out health education both on one to one basis and in groups in varied settings. Booklets / self Instructional Module can be distributed in OPD/ hospital.

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Conflicts of interest

There are no conflicts of interest.

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