

Research Article

Effect Of An Instructional Video-Based Method On Nonmedical Undergraduate Female Students' Awareness And Knowledge Of Cervix Cancer.

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Abstract

Background: Access to screening and treatment for cervical cancer is restricted in low- and middle-income nations, making it a major global health concern. Despite the fact that frequent screening and immunization can effectively prevent human papillomavirus (HPV), cervical cancer continues to be a major cause of cancer-related death among women worldwide due to a lack of awareness. Because it lowers rates of morbidity and mortality, early identification is essential. The purpose of this study was to assess the knowledge and awareness of cervical cancer among female undergraduate nonmedical students in Belagavi, Karnataka, India. Raising awareness of cervical cancer is crucial to save women's lives since, despite the fact that this topic has been studied, young women are not well-informed on the modifiable and nonmodifiable risk factors.

Materials and Methods: 550 female undergraduate nonmedical students in the Indian state of Karnataka's city of Belagavi participated in this three-month observational study. After a pretested self-administered questionnaire was distributed, a 12-minute and 33-second instructional movie was shown. The participants were given the same questionnaire to gauge their awareness and fundamental understanding of cervical cancer after the film was shown. Version 20 of SPSS was used to do the statistical analysis.

Results: After watching the video, 550 female undergraduate students' general knowledge of cervix cancer (92.73%) and HPV vaccine (79.45%) improved significantly. When comparing participants by age group and degree course, those between the ages of 18 and 19 (46%) and those pursuing engineering (32.91%) knew more about cervix cancer than others. The mean value of the pre- and postscore of the general knowledge component was 9.94 ± 1.91 , and $P < 0.05$ indicated statistical significance.

Conclusion: According to a recent study, female undergraduate nonmedical students knew very little about risk factors, preventative strategies, and the HPV vaccine pretest.

Keywords : consciousness, cervical cancer, instructional video, Human papillomavirus, immunization against it, and preventative measures.

INTRODUCTION

Nearly 266,000 women worldwide lose their lives to cervical cancer each year, with just the least developed nations accounting for 87% of these fatalities. Cervical cancer is the fourth most common tumor among women worldwide. [1] Every year in India, 122,844 women receive a cervical cancer diagnosis, and 67,477 of them pass away as a result of the disease. Cervix carcinoma is the second most common kind of cancer among Indian women between the ages of 15 and 44. [2]. Poor socioeconomic status, smoking, getting married before turning 18, being young when having your first sexual experience, having several sexual partners, having a lot of children, and being infected with human papillomaviruses

(HPVs) are risk factors for cervical cancer. According to epidemiological and clinical data, HPV, which is the most common, especially HPV-16 and HPV-18, appears to be the main cause of cervical cancer. According to data from cancer registries, women over 35 account for more than 75% of cervical cancer cases. [3, 4].

Geographical location and religion were found to be drivers of cervical cancer rates, which ranged from 3 to 61 per 100,000 females, in a study of 127 low- and medium-developed nations. According to research, male partners who engage in sexual activity and practice poor penile hygiene are more likely to get cervical cancer. Compared to using a clean cloth or sanitary napkins, using an unclean cloth or a homemade napkin during menstruation raises the chance of acquiring

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cervical cancer by 2.5 times. Tobacco usage is also thought to be one of the main risk factors. The principal manifestation of the smoking effect is thought to be the carcinogenic response of squamous cells.

Together with smoking, a diet low in fruits and vegetables that is deficient in vitamin C and beta-carotene, and family history, stress is another risk that leads to cervix cancer. [6].

Cervical cancer can cause vaginal bleeding after menopause or after sexual activity, thicker or longer-lasting menstrual bleeding than usual, red, watery, foul-smelling, and sometimes excessive vaginal discharge, a bacterial infection of the vagina, bladder or bowel leaks, and pelvic pain that may be related to sexual activity, even though it may not initially show any symptoms. When cervical cancer spreads to the muscles, bones, or nerve endings, it usually results in excruciating agony. [7].

The American Cancer Association guidelines state that Pap tests, HPV DNA tests, and vaginal and cervical preventative checks are useful diagnostic techniques for examining asymptomatic women and adhering to them following treatment of preinvasive cervical cancer.

Currently, the two investigational tests utilized for cervix cancer screening are the Papanicolaou test and the HPV test. The first one identifies the second kind of HPV infection that can lead to cancer as well as the lesions of precancerous and cancerous cells that need to be effectively treated. [8]. According to the most recent recommendations from the American Cancer Society, screening should begin at age 21. Women between the ages of 21 and 29 should have a Pap test performed every three years. Women between the ages of 30 and 65 should have co-testing (Pap and HPV tests) every five years. Pap tests should still be conducted every three years even though this type of screening is recommended. [9]

The best cervical cancer prevention method currently available is the HPV vaccine. Currently, India offers two vaccines: the quadrivalent Gardasil vaccine, which combines the L1 proteins of HPV serotypes 16 and 18, and the bivalent Cervarix vaccine, which pairs the L1 proteins of HPV serotypes 16 and 18 with AS04 as an adjuvant.

Cervical cancer kills a woman every two minutes, making up around 270,000 deaths worldwide each year. The fatality rate from this cancer is particularly high because it primarily affects young people. The standards for screening, care, and prevention are not met in many locations. Despite extensive understanding about HPV-induced carcinogenesis, clinical outcomes have remained unchanged throughout the years. Many people think that with better screening, treatment, and prevention initiatives as well as increased worldwide resources, fewer women may die from this virus-induced cancer.

SUPPLIES AND TECHNIQUES

Before the study started, an ethical clearance was obtained from the Institutional Ethics Committee. A sample size of 470 was determined. The head of the institution or principal of the several Belagavi degree colleges for carrying out the research. Only those who were willing to participate were recruited based on the inclusion criteria, which were nonmedical undergraduate female students of Belagavi between the ages of 18 and 22, and they were given written informed consent after being briefed about the study's purpose in a group of 25 to 50 students. They were then given a self-administered questionnaire pretest, which consisted of questions about their knowledge and awareness of cervix cancer in the remaining sections and demographic information in the first section. [9] Following their completion of the survey, they watched a 12-minute, 34-second instructional film about the risk factors, symptoms,

RESULTS

IBM's Statistical Package of the Social Sciences (SPSS) version 20 (New York City, NY, USA) was used for statistical analysis. The information gathered was grouped using frequency and percentage forms to show the nonmedical undergraduate female students' understanding of risk factors, general knowledge, and primary and secondary prevention of cervical cancer. The significance level was chosen at $P < 0.05$ and tested using a dependent t-test. Of the 550 participants, the majority of responders (46%) were between the ages of 18 and 19, followed by those between the ages of 19 and 20 (36.55%). The majority of female undergraduate students were enrolled in their first year of study (46%), followed by polytechnic (20%), diploma (19.27%), and engineering (32.91%) [Table 1]. Prior to the intervention, 57.45% of the 550 female nonmedical undergraduates had never heard of cervical cancer, and 56.36% were unsure if it was a terminal condition. The majority of the students (50.18%, 73.09%) did not know of the strategies that decreased risk and did not have direct contact with friends or family who had cervical cancer, despite the fact that 52.73% of them believed that the disease was linked to an infection. Following the intervention, it was shown that participants' knowledge had significantly increased, with 92.73% of them knowing about cervical cancer and 73.78% believing it to be a fatal condition. Pretest results showed that 55.09% of participants were unaware that an early menarche increases the risk of cervix cancer, and 367 participants (66.73%) had never heard of human papillomavirus infection. Young age (38.18%), HIV infection (30.55%), having multiple sexual partners (40.18%), alcohol abuse (40.36%), smoking (40.18%), miscarriages and abortions (45.27%), and hormonal contraceptives (50%) were the risk factors for cervix cancer

that the majority of them knew less about. After watching the video, the majority of female students (92.18%) believed that the main risk factors for developing cervical carcinoma were having multiple sexual partners, smoking (91.9%), being infected with HPV (88.18%), having a high number of pregnancies (86.36%), and being infected with HIV (84.36%). Of the 550 participants, 100 (18.18%) said they learned about cervical cancer at their respective institutions, 133 (24.18%) said they learned about it online, and 138 (25.09%) said they learned about it on television.

TALK

Cervical cancer is the fourth most common type of cancer worldwide. [1] With 122,844 women receiving a cervical cancer diagnosis each year and 67,477 of them dying from the illness, it is the second most common cancer among women in India. Cervical cancer is the second most common type of cancer among Indian women between the ages of 15 and 44. The mortality rate of cervical cancer persists because of the disease's late discovery, even with the availability of numerous preventive and therapeutic alternatives. The possibility of making certain decisions on personal behaviors is decreased when people are unable to identify early signs of cervical cancer because of a lack of knowledge and misconceptions about risk factors. Therefore, the purpose of this study was to evaluate the effectiveness of an instructional film. The majority of the 550 participants were between the ages of 18 and 19 (46%), followed by 19 and 20 (36.55%). The majority of female undergraduate students were enrolled in their first year of study (46%), followed by polytechnic (20%), diploma (19.27%), and engineering (32.91%). 1268 female undergraduate students, with a mean age of 18 to 20, participated in a study that supported the underlying study in Delhi, Mangalore, Pokhara, and Kandy. [6] 200 women who frequently visited the gynecology outpatient department of a tertiary care hospital were included in another study; it was observed that the majority of the women were between the ages of 30 and 60. Only one-third (23%) of the women in the 30–50 age range who participated in a survey supporting the research conducted at the gynecology outpatient department in Puducherry were aware of the disease's symptoms and risk factors (22.2%). Only 5% of screening practices were impacted by education; this may have been due to the women's insufficient use of screening services. The study additionally revealed that the participants lacked knowledge about the risk factors, symptoms, and indicators. Following the intervention, students discovered that the disease's uncomfortable symptoms included bleeding during intercourse (85.27%), itching in the genital area (79.82%), unpleasant menstruation (86.18%), and foul-smelling vaginal discharge (74.73%). The majority of them (61.82%) were informed about cytological

examination, and 55.45% of them believed that it had a 100% probability of detecting the illness early. Additionally, 56.55% of them expressed a desire to have the examination. To assess the impact of a video-based educational intervention that addressed health perceptions about cervical cancer, a cross-sectional survey was conducted. Following the intervention, it was seen that all participants gained knowledge about the illness, and the proportion of individuals who were interested in getting a Pap smear test increased from 35.8% to 94.2%. When the participants were checked six months following the intervention, it was discovered that 253 of them had had a Pap smear test for cervical cancer.

FINAL RESULTS

Prior to watching the film, the majority of female undergraduate nonmedical students knew very little about the risk factors, symptoms, and preventative strategies for cervical cancer. Following the video's showing, it was seen that the participants' understanding of risk factors, general knowledge, and preventative actions had significantly improved, suggesting the necessity for increased awareness campaigns about cervical cancer in this susceptible group.

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