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Medicine

A Cross Sectional Study on Knowledge of Young Girls on Cancer Cervix in a **Private Medical College, Puducherry**

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Original Research Article

Abstract

Cancer Cervix, the second most common cancer in the world is caused by Human Papilloma Virus (HPV). In spite of the existence of screening the cervical cancer using Pap smear, the uptake of screening is low. The aim of this study is to explore the knowledge of cervical cancer among young girls in a Private Medical College. The objective is to assess the knowledge of cancer cervix in young girls. This is a Cross sectional study conducted among the young girls of a Private Medical College, Puducherry. The second, third, final year MBBS & Intern students participated in the study in the month of April, 2019. From each year 25 students were picked up randomly and the study was done among them. The data was collected from 100 participants using pretested and predesigned questionnaire after obtaining their consent. The data on Sociodemographic profile, knowledge, risk factors and barriers of Cervical cancer screening were collected and analyzed using suitable Statistical tool. Most of the participants had adequate knowledge about risk factors of cervical cancer. The highest knowledge about risk factor of Cervical cancer reported by the respondents was having more than one sex partner (91%), whereas the lowest knowledge was smoking(82%). The most common barriers of cervical cancer screening was the Papanicolaou (Pap)smear test which will make them embarrassing(53%) whereas the least common barrier reported among participants (19%) performing pap smear test will be expensive. Some false beliefs about Pap smear test prevent the women from taking up the test. Though the knowledge about cervical cancer screening is adequate they have a very poor practice of Pap smear test. The routine method of undergoing the screening test is advised and it has to be inculcated in all aspects of the health care department. KEYWORDS: Cervical cancer, screening, Knowledge, Risk factor, Barrier, Embarrassment, Pap test.

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INTRODUCTION

Globally, cervical cancer is a major health problem, and is the second most common cancer in women worldwide [1].Cervical cancer is caused by sexually acquired infection with Human Papilloma Virus (HPV), the causative agent. Worldwide, 15% of all cancer cases and nearly 26% of cancer cases in developing countries are attributable to infectious agents, particularly viruses like human papillomavirus (HPV). Hence, every year more than 270,000 women die from cervical cancer; more than 85% of these deaths are in low- and middle-income countries like India [2].

The age adjusted incidence rate for cervical cancer has been reported to vary from 19 to 44/100,000 women in various cancer registries in India [3].Burden of the disease in India is that more women die from cervical cancer than in any other country. New cases of cervical cancer detected in India: 96,922 every year. Deaths due to cervical cancer in India: 60,078/year [4, 5].One woman dies of cervical cancer every 8 minutes in India [6]. It is estimated that 50 to 80 percent of sexually active women are infected at least once in their lifetime.

The prevalence of human papillomavirus (HPV), an important cause of cervical cancer, is higher in less-developed countries than in moredeveloped regions [7,8]. The majority of deaths due to cervical cancer occur in women who were never screened or treated as well as those who had an early sexual debut, a history of multiple sexual partners, and a high number of live births [9]. The prevalence of HPV is very high among young, sexually active adult women (Burak& Meyer, 1998).The other risk factors include: average age 35-45 years, precancerous lesions occur 10-15 years earlier, coitus before the age of 18 years, delivery of first baby before 20 years, Multiparty with poor birth spacing, poor personal hygiene, poor socioeconomic status. Women with Sexually Transmitted Disease(STD), HIV infection, Herpes Simplex Virus-2, HPV infection(16,18,31,33) and condylomata have a high predisposition to cancer, Smoking and drug abuse, including alcohol are immunosuppressive(13fold).combined oral contraceptives (COC) and progesterone's use over 8 year periods can cause adenocarcinoma of cervix [10]. In developed countries, the incidence of cervical cancer has been controlled due to effective screening programs, especially the systematic use of the Papanicolaou (Pap) smear test for identifying premalignant changes in the cervix [11]; however, in many developing countries, screening services are lacking or are poorly accessible for the majority of the population [12].Cervical cancer can be prevented by identifying pre-cancerous lesions early using repeated Pap smear screening and treating these lesions before they progress to cancer. Prevention, early diagnosis and treatment have been shown to reduce mortality due to cervical cancer. Many countries have significantly reduced their cervical cancer morbidity and mortality through cervical cancer screening and early treatment. In the United States, the introduction of the Pap smear has been responsible for a 90% decrease in deaths from cervical cancer[13].

According to the International recommendations, women above the age of 21 years can get the pap test. If the woman is *30 years* and above Pap test should be done once in every 3 years till the woman turn 65 years of age. If this test is

combined with HPV test, then the test may be repeated every 5 years [13].

A study found that there was a high prevalence of the major risk factors for cervical cancer among the respondents, and these included initiation of coitus before 18 years (53.3%), multiple sexual partners (73.6%), previous history of sexually transmitted diseases (42.2%), and vulval warts (4.7%). Therefore, primodial and primary prevention can be made to overcome this cancer in the women and enrich their lives with happiness. This study is aimed at identifying the knowledge among the young female medical graduates who are the future health care professionals of this world.

MATERIAL AND METHODS

This study was done using Cross sectional study among the female Medicine pursuing students, SLIMS, Puducherry, India. A total of 100 female students from Second Year, Third Year, Final Year MBBS & Interns participated in the study. Questionnaires was distributed to the students and the response rate was 100%. Female students less than 18 years old, and those who were not willing for the study was excluded from the study. However, only 25 girl students were selected randomly from each year. And the inclusion criteria was the volunteer female students,18 years old or more, Indian citizens. The questionnaire consisted three sections: Socio-demographic of characteristics, Knowledge about risk factors of cervical cancer, and barriers for Pap smear screening.

RESULT

This study among the 100 young female medical graduates in a Private Medical College, Puducherry showed the following results. Table [1] shows demographic profile in which the Mean age is 20.84; each year (i.e,second year,third year,final year,interns) constituted to 25%.83% were Hostellers and 17% were Day scholars.

	Table-1		
Age group	Frequency	Percentage	
18-20	34	34	
21-22	59	59	
>22	07	07	
Year of study			
Second year	25	25	
Third year	25	25	
Final year	25	25	
CRRI	25	25	
Mode of stay			
Hosteller	83	83	
Day scholar	17	17	

All young girls were known about the Cervical cancer and its causative agent, of which 94% responded that it can be prevented. On analyzing the knowledge on Risk factors of Cervical cancer Table[2],89% responded positively for early coitus,91% for multiple partners,90% for family

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history,82% for smoking and as a whole 88%

(Mean) gave correct response.

Risk factor	Frequency	Percentage
Early coitus		
Yes	89	89
No	11	11
Multiple partner	s	
Yes	91	91
No	09	09
Family history		·
Yes	90	
No	10	10
Smoking		·
Yes	82	82
No	18	18

Table 1. Veramiadae on viels fortows of coursiant concern

On scrutinizing the barriers of Cervical cancer screening figure [1], it turned out as follows; 81% gave response that the test is not expensive, 70% not painful, 68% will not make the women worry. The study showed that embarrassment (53%) was also considered as the barrier for the test. The

study also showed that 37% do not know where the test has to be done, 48% reported that the health care worker advised to take the test. Moreover, 52% were aware that there is a vaccine for cervical cancer, and out of which 48% mentioned the vaccine has to be administered for prevention.

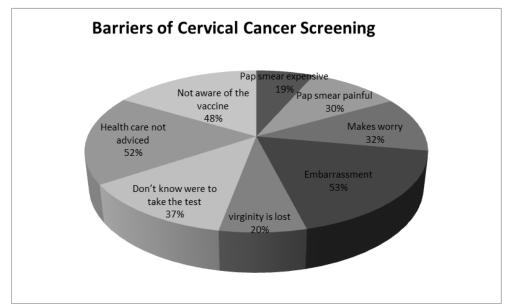


Fig-1: Barriers of cervical cancer screening *Based on Individual question frequency

DISCUSSION

This study is confined to young female medical graduates at SLIMS, Puducherry, India. Since the young budding doctors whose thirst is unquenchable for pursuing Medicine in this competitive world, it's necessary to find their knowledge on risk factors, barriers of cervical cancer screening, so that primordial and primary intervention can be made for the betterment of humanity. Hence, this study emphasizes the level of knowledge and barriers for cervical cancer screening among the young female medical graduates.

Almost, all the respondents (100%) were aware of cervical cancer which is quite large in number when compared with the study done among female undergraduates in Mangosuthu University of Technology students by Muhammad Ehsanul Hoque, with 33% [15] and in Ibadan by Ayinde *et al.* with 71% [16].

This study enlightens that all the respondents (100%) were aware that HPV can cause

cervical cancer. National Cancer Institute's 2005 Health Information National Trends Survey in the United States showed that 20% of American women were aware that HPV can cause cervical cancer [17]. Another study done by Wong *et al.* [18] among Malaysian women also revealed that they were not familiar with the HPV infection.

Since, this study was conducted among the Medical graduates, their level of knowledge on Risk factors were comparatively high, and yet there are many community of people who are unnoticed both in urban and rural areas to whom health education should be given through proper channel like mass media-Radio, Television, Mass campaign so as to attract them and make them to have some considerable knowledge about this major social health issue. This study showed that 18% of the participants were not aware that smoking was one of the risk factor for cervical cancer.

With regard to barriers of cervical cancer screening, many respondents (53%) feel that the test would be embarrassing for them. Similar studies done by Fatima Ahmed AL-Hammadi *et al.* (11%)[19], Pryma Baskaran *et al.* (70%)[20].

Another important barrier reported was that health advicers did not ask them to take the test. In order to overcome this barrier, health care professionals can educate the health care users who remain as the target population for cervical cancer. Similar finding were also reported from studies conducted in South Africa by Wellensiek *et al.* [21]. In a study conducted by Wong *et al.* [18] a woman reported that they had never been informed of the existence and importance of Pap smear by the health care Professionals.

The study also reported that lack of information about screening sites also served as the barrier for screening test. This is consistent with the study conducted by Abotchie and Shokar in 2009 [22] and Ayinde *et al.* [16] in 2004 (16%). Another study conducted by Aniebue in 2010 [23], also reported the similar finding that 34% of the participants did not know where to have the Pap smear test.

Cost was also considered as one of the barrier by 19% of the participants which is less in this study when compared with the study conducted by Redhwan Ahmed Al-Naggar *et al.* [24] in Malayasia in which he reports almost half the participants considered, cost as one of the important barrier.

Nearly 20% of the participants reported that the Pap smear test will affect their Virginity. This was less in this study when compared with the study conducted by Abotchie and Shokar in 2009[22]. This may be due to false belief of the participants. Hence, a proper education should be given to overcome this attitude. Finally, with regard to pain and discomfort associated with Pap smear was also reported as one of the barrier of this study.

CONCLUSION

In conclusion, the present findings suggest a high level of knowledge on cervical cancer, its risk factor and barriers of screening among the female medical graduates. Although, there is high level of knowledge there are few deficits like embarrassment, they don't know the site to take the Pap smear test, false attitude that Virginity will be lost upon taking the test which serves as one of the most hindrance in the screening of the test. Hence, the health care associated department should take utmost care to provide the knowledge and encourage them by giving proper health education. The medical graduates should also be encouraged to inform the neighbors who are eligible for cervical cancer screening.

The relative five year survival rate averages to 48.7% [14]. The duration of survival of the person depends on the stage of the cancer at the time of detection. The survival rate of the person increases if the disease is diagnosed and treated at an early stage. Hence, it is important to undergo cervical cancer screening.

"If health is lost, everything is lost "as this saying suggests that when a health condition of a person deteriorates, every aspect of that concerned person and his family members' life is affected and so everyone should take care of their health by utilizing the proper health care.

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