

## Lack of Awareness: A Barrier in Cervical Cancer Screening

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### Abstract

*In developing countries, the prevention for cervical cancer is only suboptimal in comparison to the developed countries where there are lesser deaths due to improved survival rates. This article describes the awareness of Indian females regarding cervical cancer and how it is affecting the screening process for the cervical cancer. Human papillomavirus (HPV) is considered as the causative agent for cervical cancer development. Critical measures for prevention and screening of cervical cancer needs to be undertaken since the ability to detect and treat the illness at its initial stage may disrupt the process of neoplasia. The precancerous period for cervical cancer is very long which opens up a considerable window of opportunity to detect and treat it completely. If regular routine check-up is done for all women, the onset of cancer can be identified at an initial stage and combated effectively. However, implementing effective screening programs for the detection of cervical cancer has been a difficult task in our country. Many studies have shown that the Indian females have inadequate knowledge regarding cervical cancer. There could be tremendous increase in screening process if the females were provided with adequate knowledge regarding the cervical cancer risk, screening, signs and symptoms, etc. Mass media could be used to educate the women. In conclusion, health education should be promoted to increase awareness about the risk associated with cervical cancer. Also, improving women's attitude towards screening for cervical cancer and addressing their fears would increase the objective to screen for such types of cancer.*

**Keywords:** awareness, cervical cancer, screening

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### INTRODUCTION

Cervical cancer is the leading cancer among the Indian women. Nearly, 74,000 new cases of cervical cancer were reported in 2010, with 38% of cases occurring in women of reproductive age (15–49 years). As a consequence, there is considerably adverse social and economic impact of cervical cancer on families and communities.[1] From 1980 to 2010, little progress was made in lowering the cervical cancer mortality cases in India: 37 women died for every 100 new cases of cervical cancer in 1980 compared with 32 for every 100 new cases in 2010.[1] India

has a high mortality rate in cases of cervical cancer mainly because the diagnosis occurs at an advanced stage (stage III or IV).[2] Less than 1/3rd of Indian women diagnosed at stage III cervical cancer survive the initial 5 years after the diagnosis, and the 5-year survival rate drops to approximately 6% among those diagnosed at stage IV.[2]

Annually, about 231,000 women die due to cervical cancer all over the world. Out of these, 80% are reported to be from developing countries.[3]

In India, every year, 122,844 women are diagnosed with cervical cancer and 67,477 die from the disease.[4] India has a population of 432.2 million women aged 15 years and above who are at the risk of developing cancer.[4] It is the second most common cancer in women aged 15–44 years.[4]

### **BARRIERS IN CERVICAL SCREENING**

In India, among the women that are at or near the age of reproduction, cervical cancer is found to be the most common cancer. In spite of several methods for prevention, most of the women remain unscreened due to reasons including unawareness of the risk factors/symptoms and prevention; stigma and misconceptions about gynecological diseases; and lack of national cervical cancer screening guidelines and policies. Due to lack of an appropriate nationwide screening program for cervical cancer, it remains a major public health problem in India.

### **SCREENING FOR CERVICAL CANCER**

Cervical cancer can be prevented if detected at an early stage. However, due to lack of trained manpower and resources in countries like India, the implementation of universal screening is still not possible. Some of the well-tested screening methods include cervical cytology, aided visual inspection of the cervix and human papilloma-virus tests. For successful implementation of community-based cervical cancer screening programs, prior-understanding of the attitude of women in the target community is necessary.

The different methods implied for screening have been cytology or Pap smear, visual inspection using acetic acid (VIA) or Lugol's iodine (VILI) and high-risk human papilloma virus (HPV). Sensitivity, specificity and predictive

values are important aspects in a screening strategy while considering the practical implications.[5]

### **LACK OF SCREENING FOR CERVICAL CANCER**

In the absence of a nationwide screening program, there are disparities in screening, treatment, and also survival. A population-based survey revealed that coverage of cervical cancer screening in developing countries is 19% compared to 63% in developed countries and ranges from 1% in Bangladesh to 73% in Brazil.[6] Further, older and poor women who are at the highest risk of developing cancer are least likely to undergo screening. Opportunistic screening in various regions of India varied from 6.9% in Kerala[7] to 0.006% and 0.002% in the western state of Maharashtra and southern state of Tamil Nadu, respectively.[8,9] Nearly 85% cases are found to be in advanced and late stages, while 63–89% has regional disease at the time of presentation.[10] The diagnosis and treatment of cervical cancer in the advanced stages makes it a cost-effective exercise, with a poor diagnosis resulting into poor compliance.

### **LACK OF AWARENESS REGARDING CERVICAL CANCER**

In a study on rural women in Sangali district, Maharashtra, India the important barrier for utilization of cancer screening was found to be cognitive barrier. First level of cognitive domain is awareness, which the women were lacking.[11] For early diagnosis, it is required to have awareness about the symptoms of cancer so as to consult the doctor at the earliest.[12]

A study was done on 630 Indian female college students, 17–24 years of age, at Kolkata, to assess their awareness about cervical cancer, its risk factors, the human papillomavirus (HPV) etiologic agent and Pap (Papanicolaou) smear testing for

screening. Only 20% of them, correctly identified cervix cancer as the most prevalent female cancer in India, while 43% were aware of the ages of occurrence. Although 41% thought that sexual activity is associated with cervical cancer, its risk factors, like, smoking, having multiple sex partners, cervical infections, early onset of sexual intercourse, multiple parity were recognized by 29%, 3%, 4%, 13% and 15% respectively. Approximately, 11% students had heard about the Pap test, while 15% knew about the HPV. Also, 75% of the students showed interest to have protective vaccination.[13]

Another study conducted in Mangalore, India revealed that majority of the women have poor knowledge about cervical cancer (81.9% [68/83]) and it is screening (85.5% [71/83]). Out of 83, only 6 women underwent screening. Although several women had contacted the doctors well in advance *i.e.*, during the initial stages, but neither they were educated about cervical cancer nor they were taught about the screening strategies. Whatever little information those women had was obtained from mass media.[14]

Another study conducted in Sangli district of Maharashtra, India where 281 women were interviewed for awareness regarding cancer about cancer cervix, breast, and oral. Findings revealed that all women were aware about these 3 cancers. However, for cancer cervix only 46 (16.37%) women were aware about its symptoms.

Only 40 (14.23%) women knew tests. Pap smear was known to 10 (3.56%), internal examination to 32 (11.38%), and colposcopy to four (01.42%) women. Only 80 (28.47%) women had awareness about risk factors. Typical answer was “don’t know,” given by 201 (71.53%) followed by early marriage (43, 15.3%), poor

personal hygiene (21, 07.47%), having more number of children (19, 6.76%), having first child at an early age (17, 6.05%), irresponsible sexual behavior by both partners (seven, 2.49%). No one was aware of human papillomavirus. Furthermore, only 50 (17.79%) women knew the correct age for undergoing screening.[11]

Further it was found that the most common and major Barriers for screening was “don’t know,” (236, 83.99%) *i.e.* unawareness about the cervical cancer.

In a study conducted in JA Groups of Hospital’s Obstetrics and Gynecology OPD, Gwalior, India on a total of 812 women the results suggested significant lack in awareness and perception among Indian women. Only 9.59% women, most of which belonged to upper socioeconomic group had heard of cervical cancer and 11.62% underwent at least one cervical screening during their life time. None of these reported exact purpose of the Pap test. Male partner was the sole decision maker of the family for 47.20% of the women.[15]

### **NEED TO INCREASE AWARENESS REGARDING CERVICAL CANCER**

Cervical cancer can be cured and prevented through screening women systematically through organized population based programmes. Screening aims to detect the disease at the pre-cancer stage when it is amenable to simple treatment and cure. In several developed countries, the annual incidence and mortality from this cancer have gone down by 50–70% since the introduction of population based screening.

It is imperative that women gather adequate knowledge on cervical cancer for the success of any program to control the disease. Wide and effective spreading of

awareness about the disease among women must form an integral part of public health policy of government. Mass media could be used to educate the women. There is a need to carry out community-based study to know the practices of doctors and find out if they are educating and ready to offer suggestions for screening.

It is not surprising that the women's reluctance to undergo cervical cancer screening appears to be based on a lack of knowledge about the natural history of cervical cancer, the effectiveness of screening and the risk factors of cervical cancer.

Education, communication and reassurance are required to overcome such resistance. For cervical cancer prevention there is a need to create a massive awareness program to motivate women to get screened and to enlist the cooperation of their extended family.

Mass media can play an important role in spreading critical information among poor communities; however the drawback lies in the fact that many Indian women living in rural areas lack any sort of exposure to the media. Only one-half of rural women surveyed in NFHS-2 mentioned that they had regular exposure to newspapers, magazines, television, radio or cinemas, compared with 87% of urban women.[16]

It is suggested that at rural level a program work with *Anganwadi* (grass roots workers) to spread awareness among families and village women can be employed.

It is suggested that cervical cancer prevention can be integrated with established services. The best resource is the family planning centers, which India has a wide network of, to reach out to the women and their families to inform them about the danger of cervical cancer and prevention measures.

## CONCLUSION

Taken together, in India, the full responsibility of preventing cervical cancer lies on the women themselves. It is the women's level of awareness, motivation for screening towards the development of cancer and other psychosocial factors that determine their attitude towards own health.

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