

Cervical Cancer Awareness: Its Risk Factors, Perceptions and Prevention among Women in Hubli, Karnataka

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DOI: <https://doi.org/10.24321/2454.325X.201831>

Abstract

Background: Cervical cancer is the second most common cancer in women aged 15-44 years. The key to reducing cervical cancer morbidity and mortality is early detection and treatment of cervical pre-cancerous lesions through PAP and HPV tests.

Objective: To explore the level of awareness about cervical cancer among women and to assess their awareness regarding preventive screening methods available and its utilization and perceptions.

Methodology: A cross sectional community-based study was conducted on 120 women above 18 years of age. The study participants were randomly selected from four urban areas of Hubli and interviewed using a pretested semi structured questionnaire. The data was entered into Microsoft excel and analysed using SPSS.

Results: In our study, 91.7% had not even heard of cervical cancer. 77.5% participants did not know the cause for cervical cancer. 29% thought it was preventable. Less than 1% had undergone screening tests. None of the women were vaccinated against HPV infection. 42% of the women think that cancer treatment facility is available in government hospital and 40% think that it's available only in private hospitals with 18% having no idea where to go for treatment.

Conclusions: As women are ignorant about the risk of cervical cancer and don't prioritise their health, awareness can be created among them on days of ANC check-ups and immunisation. Health care workers also need to be sensitised towards the issue. There is need for effective and more efficient use of mass media in spreading awareness in form of advertisements, articles etc.

Keywords: Cervical cancer, Health education, Screening, Treatment

Introduction

Worldwide, cervical cancer is the second most common (12%) cancer in women, however, in developing countries; it is the most common cancer among women.¹ India bears about one fifth of the world's burden of cervical cancer, and >100,000 new cases are detected every year in India, which causes 20% of all female deaths in India.² Mortality due to cervical cancer is also an indicator of health inequities, as

86% of all deaths due to cervical cancer are in developing, low- and middle-income countries.³ The key to reducing cervical cancer morbidity and mortality is early detection and treatment of cervical pre-cancerous lesions through PAP and HPV tests.

Every year in India, 122,844 women are diagnosed with cervical cancer and 67,477 die from the disease. India has a population of 432.2 million women aged 15 years and

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How to cite this article: Bant DD, Sarvar R. Cervical Cancer Awareness: Its Risk Factors, Perceptions and Prevention among Women in Hubli, Karnataka. *Int J Preven Curat Comm Med* 2018; 4(4): 19-24.

older who are at risk of developing cancer. It is the second most common cancer in women aged 15-44 years. India also has the highest age standardized incidence of cervical cancer in South Asia at 22, compared to 19.2 in Bangladesh, 13 in Sri Lanka, and 2.8 in Iran.⁴

The majority of these women diagnosed with cancer of the cervix in India have never been screened for the disease. By the time most women with symptoms of cancer of cervix seek medical help the disease has already advanced.⁵ It is predicted that if conditions remain same in India, by 2020, the number of Indian women newly diagnosed with cancer of the cervix will be 1,82, 027 and over a lakh (1,01,362) Indian women will succumb to the disease each year.⁶

Moreover about 75-80% of cases are reported in advanced stage.⁷ Treatment in such case makes it costly exercise, with a poor prognosis resulting in poor compliance. Such late presentation is again attributed mainly to lack of knowledge and awareness, lethargic attitudes towards safe practices. The objective of cervical screening/ secondary prevention is to prevent invasive cervical cancer from developing by detecting and treating women with CIN2/3 lesions, and the effectiveness is determined by reduction in incidence and mortality. The critical components of a screening program are an acceptable good-quality screening test, prompt diagnostic investigations, appropriate treatment, and post treatment follow-up.⁸ There is strong support from non-experimental studies in developed countries such as Denmark and Finland that the incidence and mortality of cervical cancer can be reduced by screening.^{9,10} Ensuring high levels of participation and sufficient health care infrastructure and human resources are important for a screening program to succeed.¹¹ It is also important for screening to be guided by equity considerations for those who are more vulnerable or with lesser access to health care services because of social, economic, or demographic factors.¹²

As said 'Knowledge is Power', in India poor literacy and low level of awareness amongst women poses significant problem for early detection of cervical cancer through screening tests. This ultimately becomes hindrance towards formulation of exhaustive policy to tackle the menace of cervical cancer.

The success and benefit of public health program to control and prevent it will depend to a great extent on the level of awareness of potential beneficiaries about different aspects of disease. Rightly quoted in La-Senza cervical cancer campaign road show in Malaysia. "The first step we can take to protect ourselves is through knowledge and information".

Since early detection is the only key to combat the menace of cervical cancer, and there is limited data on cervical cancer knowledge and safe practices of women in Hubli. The

purpose of our study is to explore the level of awareness of cervical cancer among women and to assess their awareness regarding preventive screening methods available and its utilization and perceptions. The outcome measurement of this short study may provide inputs towards designing suitable Information and Education and communication (IEC) strategies to inform and educate women on prevention of cervical cancer and thus augment the national cancer control program.

Objectives

The primary objective of the study is:

- To assess the level of awareness among women above the age of 18 about cervical cancer with regard to its prevalence, aetiology, clinical features and management.
- To evaluate their awareness regarding preventive screening methods available and its utilisation and perceptions.

Methodology

This study was carried out by Department of Community Medicine, KIMS, Hubli during the period of April 2016 to May 2016. The design adopted for the study was that of community based cross-sectional study. Inclusion criteria were women above 18 years of age. A pilot study was undertaken where 10 women were interviewed through questionnaire. It was found that regard less of socio economic status knowledge level was low among all of them. Then for our main study, 4 urban areas were selected randomly. In each area, 30 women were interviewed choosing random houses. The total study sample comprises of 120 women. The objective and study protocol were explained to the study participants and verbal informed consent was obtained. During the course of the study, those women who needed any kind of medical treatment were referred to a designated medical college as required. Questions were developed based on previously established facts of cervical cancer.

First part of questionnaire was to collect demographic and obstetric information. Next part contained questions to find out the knowledge of cervical cancer-its risk factors, symptoms and screening tests. The next part of questionnaire focused on personal hygiene, care seeking behaviours and utilization and awareness of availability of medical care around their locality. The responses were converted in to numerical scores and all the data was entered in Excel sheet. For assessing socio economic status Modified BG Prasad classification, March 2016 was used. Analysis was done using SPSS statistics 20, percentages and frequencies were calculated using proper statistical methods.

Results

In this study, among the 120 participants, 82.5% were homemakers. 71% were Hindu and 49% were Muslims by religion. The age distribution and literacy status of the women has been summarised in table 1. 44% women belonged to socio-economic class IV, while 6%, 13%, 36% and 21% belonged to classes I, II, III and V respectively.

99.2% women were familiar with the term cancer and 86.67% associated its causation with smoking and alcohol use. 12 believed them to be familial and 4 associated them with high risk behaviours. 69% were aware that different cancers affect different age groups, while 24% thought that cancer occurs only in old people and 5% thought they occurred only in people with high risk factors. 65.8% women felt that cancers were curable if detected early and 25% thought they were terminal and 9% had no knowledge about its fate.

Table 1. Age group and literacy status of the study participants

		Frequency	Percentage
Age groups	Less than 20 years	9	7.5
	20- 25 years	19	15.8
	25- 35 years	43	35.8
	35- 50 years	30	25.0
	More than 50 years	19	15.8
Literacy status	Uneducated	19	15.8
	Up to 3 rd Std	5	4.2
	3 rd to 7 th Std	22	18.3
	7 th to 10 th Std	44	36.7
	Above 10 th Std	30	25.0
	Total	120	100.0

Table 2. Risk factors among participants

Risk factors among participants	
Mean age of menarche	13.23+/-1.205
No. Of women using OCPs (or used)	2
No. Of women using IUDs (or used)	1
Family history of cancer	3
Women with high BMI	29
History of substance abuse (passive smoking)	4
History of chronic illness	12
BMI	22.37+/-4.545

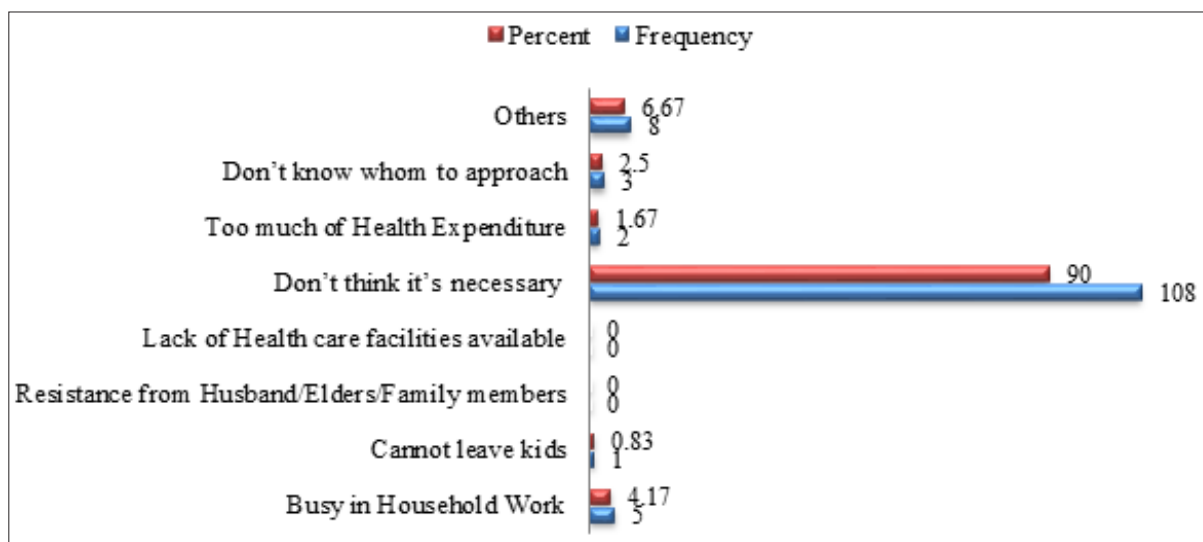


Figure 1. Social barriers to health check-up

Regarding cervical cancer in specific, only 10 women had heard about the cancer and the remaining 91.7% had not even heard of cervical cancer. 34.2% felt it affected women between 35-50 years while 13.3% thought it occurs above 50 years and 26.7% did not know the age group commonly affected.

77.5% participants did not know the cause for cervical cancer while the rest associated with family history (4), use of hormonal pills (7), IUD (4), genital infections (4), nulliparity (4), multiple sexual partners (4), early or late marriages and childbirth (7), infertility (1), no or excessive breastfeeding (1) and punishment for previous sins (2). The risk profile of the participants is depicted in Table 2.

92.5% of the women study didn't know about sign and symptoms of cervical cancer. 29% felt it was preventable and 73% felt it could not be prevented. 99% of the women have not heard about PAP test and HPV. Less than 1% have undergone screening tests. None of the women were vaccinated against HPV infection. Regarding the modality of treatment of cervical cancer, 67.5% women think cervical cancer can be cured by drugs and 49.17% women think that it can be treated by surgery.

All the women agreed to visit the doctor if symptoms of cancer such as bleed per vagina and pelvic pain occurred. 42% of the women think that cancer treatment facility is available in government hospital and 40% think that it's available only in private hospitals with 18% having no idea where to go for treatment.

60% participants confessed they would not opt for the screening tests as they consider them to be uncomfortable although they feel that it is necessary to undergo them. 95% of the participants never go for a regular check-up to a doctor for a gynecological examination. The most important reason is that they feel it is not necessary as they do not have any symptoms of disease. The other reasons are presented in figure 1. 67% of the participants feel that further awareness can be spread in the society by conducting more awareness camps.

Discussion

Knowledge about health and health care are important determinants of health behaviour. So, if knowledge and beliefs people possess regarding the aetiology of cervical cancer and its treatment are inaccurate, we would expect inappropriate care seeking behaviours. Although knowledge is not a sufficient condition for appropriate care seeking, it is certainly a necessary one.^{13,14}

Our study revealed low level of knowledge among women in Hubli about cervical cancer. Although 99.2% of participants had heard the term cancer only 8.3% of them knew about

cervical cancer. On the other hand, 38.3% and 15.8% knew about breast cancer and uterine cancer respectively.

The prerequisite for early diagnosis is to have knowledge about the symptoms of cancer so as to consult the doctor at the earliest. Nearly 78% of women were unaware of risk factors for cancer cervix in our study. In a study by Shankar Aetal.¹⁵ 66.6% were unaware of risk factors. Similar findings were noted by other study.¹⁶ In a Malaysian study, women aged 21-56 years could not identify any of the risk factors.¹⁷ 92.5% of participants in our study were unaware about signs and symptoms. Nearly four fifth of them were ignorant about it as revealed by the knowledge level of almost all of them being far below the average score.

Similarly, a study from North Bengal, India by Chaudhuri and Mandal¹⁸ showed that 80% women were aware of term cancer and few about cervical cancer. It was observed that 96.4% of population was unaware of causes of disease, 93.7% were not aware about signs and symptoms, 96.4% were not aware about prevention of cervical cancer screening tests.

In a study by Siddharthar et al.¹⁹ showed that less than half of the population was aware of cervical cancer and only one third of the women had knowledge about its risk factors and symptoms.

Despite of advances in medical field only 24.2% of the study population think it is preventable. Among the preventive measures, PAP test was unknown to all of the women. This is in accordance with Roy and Tang study²⁰ where 84% had no knowledge about cervical cancer and 95% were unaware of PAP test.

In our study 99.2% of women have not heard about HPV vaccination and 52.5% of women felt uncomfortable about being examined by male doctor. This is consistent with a qualitative study (Bingham et al.) which reported low level of knowledge on HPV and cervical cancer among children, parents, teachers, community leaders and even health service providers off our developing countries (India, Peru, Uganda and Vietnam).²¹

35% think that cervical cancer can be treated and they find it unnecessary to avail the facilities unless they are found with signs and symptoms. This shows that most of women have the perspective that being healthy is merely absence of disease. Nearly three fourth of women were unaware of treatment facilities available in their locality.

Ashwathy et al. have sorted the reasons for non-screening into knowledge factors (51%) constituting the leading group followed by resource factors (15.5%) and psychological factors (10%). A key point emphasized in this study is that women do not get screened because they 'do not have

symptoms' which is the predominant reason grouped in the knowledge factors.²² This is consistent with our study findings. Hence it is crucial that information material and education communicate the fact that screening is vital for all women irrespective of presence or absence of gynaecological symptoms.

77.5% of women are of opinion that awareness should be spread through camps as they felt even poor women would have access to knowledge through awareness camps as compared to their access to television and newspapers.

The result so far study and that from other studies too suggest that despite advent of vaccines to prevent HPV infections and increasing burden of cervical cancer deaths in India, there has not been any major improvement in HPV awareness among women. The possible reasons are high cost of vaccine and not considering health as their most important priority.

During this study we accessed a population that has not been widely studied and our observations lead to conclude that absence of an active national cancer screening and awareness program has resulted in lack of knowledge about cervical cancer even among literate population of women. As awareness grows, we grow. Hence unless and until Indian women are aware of cervical cancer it would be impossible to accomplish the mission of National Cancer Control Programme.

Conclusion

As women are ignorant about the risk of cervical cancer and don't prioritise their health, awareness can be created among the Mondays of ANC check-ups, vaccination. Health care workers need to be sensitised towards the issue. There is need of effective and more efficient use of mass media in spreading awareness in form of advertisements, articles etc.

To include safe practices in life style of people, Awareness camps should be conducted more widely and frequently and knowledge attained through them should be reinforced by treating physicians and social health workers who are at first point of contact with health system.

Conflicts of Interest: None

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Date of Submission: 2018-06-18

Date of Acceptance: 2018-06-25