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A community-based study on the sociodemographic factors and knowledge regarding cervical cancer among women residing in an urban slum of Patna district

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ABSTRACT

Background: Carcinoma of the uterine cervix is a major health problem faced by the Indian women. Every year approximately 120000 women develop this disease. India accounts for 15.2% percent of the total cervical cancer deaths globally. Objective to assess the sociodemographic factors and knowledge regarding cervical cancer and associated risk factors among women of age group 20-60 years.

Methods: A community-based cross-sectional study was conducted among women aged 20-60 years residing in the urban field practice area attached to the department of community medicine of a tertiary care centre from June 2018 to May 2019 that is for a span of 12 months. The survey included demographic data such as age, education level, occupation, religion, socioeconomic status, parity, age of marriage, age at birth of first child.

Results: In the present study about 60% of the female had knowledge that menstrual abnormality is also a risk factor for cancer cervix. Only 60% of the female in our study reported that early marriage is also a risk factor for cancer cervix. A lower (30%) percent of the female in our study had knowledge that vaginal discharge is also a risk factor for cancer cervix.

Conclusions: The present study aimed to assess the socio-demographic factors and knowledge regarding cervical cancer among women of age group 20-60 years residing in an urban slum of Patna district. With prior knowledge of risk factors, cervical cancer can be identified. Identification of high-risk populations and starting early screening was found to be effective in early recognition of cervical cancer.

Keywords: Age, Cervical cancer, Human papilloma virus, Risk factors, Sexual transmitted disease, Women

INTRODUCTION

Carcinoma of the uterine cervix is a major health problem faced by the Indian women, and every year, approximately 120,000 women develop this disease. Cervical cancer is the fourth most common cancer in women worldwide leading to 85% of death in low- and middle-income countries. In 2012, 528,000 new cervical cancer cases were diagnosed globally, of which 123,000 were diagnosed in India, and among which 266,000 women died from this disease in 2012 globally, of which 67,000 died in India. Most of the cervical cancer cases

are found to be associated with carcinogenic HPV infection.¹ India accounts for 15.2 per cent of the total cervical cancer deaths in the world.² The improvement in the living standard and awareness among women through print and audio-visual media has resulted in a decline in the incidence of cervical cancer. Regular cervical cytological examination by all sexually active women can prevent the occurrence of carcinoma cervix. The situation of cancer prevalence is alarming in rural population where majorities of women are illiterate and ignorant about the factors that contribute to the development of cervical cancer, such as poor hygienic conditions and

other risk factors like early age of marriage and multiple pregnancy. Globally the risk factors which are associated with cervical cancer are sexually transmitted diseases (mainly HPV), human immunodeficiency virus, herpes simplex virus, multiple sexual partners, early age at the first sexual intercourse, early age at first delivery, parity, and oral contraceptive pills. Major signs of HPV are abnormal vaginal bleeding, foul smelling vaginal discharge, and contact bleeding. In many cases, women with cervical cancer report no symptoms. Almost all cervical cancers are caused by HPV and, therefore, are largely preventable.² Two vaccines is currently available that is cervarix and gardacil. The government of India, under national program for prevention and control of cancer, diabetes, cardiovascular diseases and stroke (NPCDCS) has recently initiated a population based screening for cervical cancer (in 100 districts on a pilot basis), for every 5 years for women aged between 30-65 years.3 The national programme for prevention and control of cancers, diabetes, cardiovascular diseases and stroke, launched in 2010, advocates for facility based opportunistic screening of cervical cancer among women aged >30 years. The more recent operational framework for screening of common cancers developed by government of India in 2016, recommends screening of cervical cancer using VIA by ANM among women in 30-65 years age group every five years. 4 Almost all sexually active individuals will be infected with HPV at some point in their lives and some may be repeatedly infected.⁵ Cervical cancer is one of the most easily preventable forms of female cancers. Yet, lack of knowledge about the disease and risk factors, beliefs about the disease, poor access to preventive services, affordability of the service and current health service system can affect decision to be screened for cervical cancer.⁵ In 2003 cancers have led to the death of 1.5 million people all around the world and unfortunately, despite significant developments in medical sciences, therapeutic methods of cancers are not yet useful enough and the economic burden of these disease is very heavy.6 Cervical cancer prevention efforts is done by both the government as well as voluntary organizations since several decades but are yet to make an impact. Early screening and treatment of precancerous lesions was possible initially, but presently there is an additional option of HPV vaccination.⁷⁻⁹

Objectives

To assess the sociodemographic factors and knowledge regarding cervical cancer and its associated risk factors among women of age group 20-60 years regarding cervical cancer.

METHODS

A community-based cross-sectional study was conducted among women aged 20-60 years residing in the slum attached to the urban field practice areas of Shastri Nagar under the department of community medicine of Indira Gandhi Institute of Medical Sciences (IGIMS), from June 2018 to

May 2019 that is for a span of 12 months. Households were selected by systematic random sampling taking every fifth house situated in the urban slum of Shastri Nagar. The survey included demographic data like age, education level, occupation, religion, socioeconomic status, parity, age of marriage, age at birth of first child. Our survey had two parts. The first part included details regarding demographic factors such as age, education level, occupation, religion, socioeconomic status, parity, whether married or unmarried. In the second part of the survey, knowledge regarding cervical cancer symptoms, associated risk factors, and practices related to cervical cancer prevention was assessed.

The women between the age group of 20-60 years who showed co-operative attitude and gave verbal consent were included in the study. Those women who were below 20 years or above 60 years of age and those who did not gave verbal consent for participation in the study were excluded.

Sample size

The sample size was selected by convenience sampling technique. A total of 400 females were included in the study. A house-to-house survey was done for thrice a week for ten months. A Pilot study was done before starting of the study, information was collected by a semi-structured questionnaire. For statistical analysis SPSS-version 23 software was used.

RESULTS

According to Table 1 majority (60%) of the female in our study belonged to age group 20-40 years, 40% of them belonged to the age group 40-60 years. 75% of the female in our study had been married, only 25% of the study subject belonged to unmarried group. A greater portion (60%) of the study subject was belonging to class 3 socioeconomic status. In our study, Hindu population was more (65%) than Muslim (35%) (Table 1).

Table 1: Demographic characters of female, (n=400).

Demographic variables	N	Percentage (%)
Age (years)		
20-40	240	60
40-60	160	40
Marital status		
Married	300	75
Unmarried	100	25
Socioeconomic class	3	
Class 1	20	5
Class 2	140	35
Class 3	240	60
Religion		
Hindu	260	65
Muslim	140	35

In Table 2, we saw that 60% of the female had knowledge that early marriage is also a risk factor for cancer cervix, 55% of the study subject had no knowledge that early pregnancy is also associated with cancer cervix. A lesser percent (37.5%) of the female in our study knew that consumption of oral contraceptive pill was also associated with cancer cervix, however 62.5% of them had no knowledge that long term consumption of oral contraceptive pills also has effect on causation of cancer cervix (Table 2).

Table 2: Knowledge among the study group regarding various aspects of carcinoma cervix, (n=400).

Knowledge about cancer cervix		N (%)	
Symptoms			
Menstrual abnormality	Yes	240 (60)	
	No	160 (40)	
Vaginal discharge	Yes	120 (30)	
	No	280 (70)	
Pain	Yes	220 (55)	
	No	180 (45)	
Risk factors			
Early marriage	Yes	240 (60)	
	No	160 (40)	
Early pregnancy	Yes	180 (45)	
	No	220 (55)	
Repeated pregnancy	Yes	320 (80)	
	No	80 (20)	
Oral contraceptives	Yes	150 (37.5)	
	No	250 (62.5)	

Table 3: Practices related to cervical cancer prevention.

Preventive measure	N	Percentage (%)
Good genital hygiene		
Yes	120	30
No	280	70
Use of condom		
Yes	104	26
No	296	74
PAP test		
Yes	100	25
No	300	75

In Table 3 we are looking about the practices related to cancer cervix among our study subject. About 74% of the female in our study did not used condom. Only 26% of them had awareness regarding usage of condom during intercourse (Table 3).

DISCUSSION

In the present study about 65 % of the female were of Hindu religion were as 35% of the female were belonging to Muslim religion. However a study done by Elizabeth et al found that both the Hindu (29.4%) and Muslims (26.8%) were lower in the study group as compared to

women among Sikh (50.2%), Buddhists (48.2%), and Christian (39.1%), whereas another study done by Dahiyaa et al found that about 86.7% of the study subjects were Hindu and 4.7% were Muslim, which was almost similar to the findings of our study. 1,5 These differences may be due to the difference in the study area. In our study the majority (60%) of the women were of the age group 20-40 years, and 40% of them belonged to age group 40-60 years, whereas study done by Dahiyaa et al found that about 37.3% of the female were belonging to the age group less than 30 and about 62.7% of them belong to age group more than 30.1 In our study 75% of the women were married and 35% of the women were unmarried, were as study done by Dahiyaa et al found that 79.3% of the women were married, and 20.3% of the women were not married, which was almost similar to our study.1 These may be due to same study area and same cultural factors. Another study done by Heena et al found that about 60.5% of the female were married and 36.2% of the female were unmarried.² In our study the practices related to cervical cancer prevention were good genital hygiene seen in 40% of cases. About 59% of the female were using condom in our study and about 25% of the female were had undergone PAP test, however 75% were not undergoing PAP test. However, study done by Heena et al found that only 26.2% of the female had undergone pap test.² This situation in our study may be due to the fact that the awareness was very low in the women residing in urban slum, also we can observe that literacy and socio-economic status also play an important role. In our study that only 30% of the female had awareness that vaginal discharge is also a risk factor for cancer cervix, whereas study done by Humariya et al found that vaginal discharge was seen in 7.3% of the female in their study.² The finding of those study was less than our study. Bhatija et al in her study on awareness of cervical cancer among women of reproductive age group in urban slums of old Hubli, Karnataka found that awareness about cervical cancer was poor among women and also its screening tests, HPV vaccinations were never heard of in community, which is also accordance with our Raychaudhuri et al in his study sociodemographic and behavioural risk factors for cervical cancer and knowledge, attitude and practice in rural and urban areas of North Bengal concluded that a large number of risk factors were present in both areas, the prevalence being higher in the rural areas. The level of awareness and role of education appears to be insignificant determinants in rural compared to urban areas. This pilot study needs to be followed up by large scale programmes to re-orient awareness campaigns, especially in rural areas. 12,13

Limitations

As this disease has some social stigma attached, might be there was possibilities that participants have not given correct answer.

CONCLUSION

The present study aimed to assess the knowledge regarding cervical cancer and associated risk factors of cervical cancer. With prior knowledge of risk factors, cervical cancer can be identified. Identification of high-risk populations and starting early screening is found to be effective in early recognition of cervical cancer. Implementation of both arms of cervical cancer prevention, i.e., HPV vaccination and screening linked with treatment of pre-cancers, can lead to significant reduction in incidence and mortality to a level where it will no longer be a public health problem. Factors like cultural barriers, lack of awareness, low socio-economic status, poor access to healthcare, and lack of resources and infrastructure also need to be addressed. The National Cancer Control Programme (NCCP) was first started in 1976 with the objective of prevention of cancers through health education; and by screening and strengthening of cervical, oral and breast cancers by providing palliative care to patients at terminal stage. January is Cervical Cancer Awareness Month. It is a perfect opportunity for WHO and partners to raise awareness about cervical cancer and HPV vaccination in schools, colleges. Government must include a accelerated population awareness and screening programme in routine by the help of poster, banner and IEC material, and also to incorporate digital innovations. The government of Delhi has included vaccine for cervical cancer (HPV) under national immunisation schedule for girls of age group 9 and above till the age 16. It is an important contribution of the government for adolescent girls, and we are in a hope that sooner or later the other states are also going to include it in their routine state immunisation programme.

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