CERVICAL CANCER: KNOWLEDGE AMONG URBAN AND RURAL WOMEN OF VISAKHAPATNAM DISTRICT, ANDHRA PRADESH

Knowledge of Cervical Cancer among Visakhapatnam women

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Abstract: Cervical cancer can be reduced through health education, screening, and thereafter treatment of pre-cancers. However, over 80% of women with cervical cancer reside in developing countries. In majority of situations most women do not have any access to awareness, screening and treatment programs. The main purpose of our study is to find the knowledge of women regarding symptoms, risk factors, prevention and treatment of cervical cancer. A cross-sectional, self-administered anonymous questionnaire-based survey has been conducted on 500 females (both married and unmarried) covering both urban and rural areas of Visakhapatnam, Andhra Pradesh. Quantitative data was analyzed using SPSS software version 23. Statistically no significant difference between rural and urban women in their knowledge of cervical cancer was noticed. Around 41.4% of the population were aware of cervical cancer as a type of cancer affecting women, only 10% of the population have knowledge on the screening of cervical cancer. Lack of awareness and knowledge on cervical cancer is noted more in rural population when compared to urban. Specific knowledge on cervical cancer screening is noticed as a critical object in determining whether a woman to undergo screening. This study concludes that a strategy involving Government and NGO action, conducting awareness and screening programs is necessary to minimize the occurrence of cervical cancer in this region.

IndexTerms - **Cervical cancer. Screening. Pap test. HPV. Risk factors. Symptoms.**

I. INTRODUCTION

Cervical cancer is found to be the second deadliest disease that is noticed in women worldwide, with 500,000 new cases and 250,000 deaths reported annually (Armstrong, 2010). In India alone one-fifth of the cases are reported. This disease is observed to be the largest killer of middle-aged women in India (WHO, 2010), accounting for about 20 percent of all cancer-related deaths in women.

Cervical cancer can be prevented if it is detected early and adequate follow-up of treatment is made. In many cases, especially in developing countries, women do not have any access to cervical cancer prevention methodology. Regular screening with a pap smear can effectively lower the risk of cervical cancer by identifying precancerous changes. But only 5% of eligible women were undergoing cytology-based screening test in an interval of 5-year period. There are no effective and organized population-based high-level opportunistic screening programs for cervical cancer in any of the states in India when compared to developed nations (Ferlay et al., 2004; Denny et al., 2006; Vallikad, 2006; Curado et al., 2007), due to which routine screening of asymptomatic women has been almost non-existent (Basu and Chowdhury, 2009). About 70% of the decrease in the disease-related mortality can be achieved if organized population-based screening is linked to the identification and proper case management system is followed (Kitchener et al., 2006). The success and benefit of the program can be attained by creating awareness about different basic aspects of the disease. Especially middle-aged women need to be educated at all levels. Definitely, such an exercise will reduce the spreading and mortality rates that arise out of cervical cancer. Various studies have been undertaken to assess women's awareness and knowledge level about cervical cancer (Price et al., 1996; Ralston et al., 2003; Sankranarayanan et al., 2009; Aswathy et al., 2012; Ramavath and Olyai. 2013; SuryapriyaBalan et al., 2014; Vinita et al., 2015; Snigdha and Devi, 2016). In spite of all such efforts, less information is available on the knowledge base of the Indian women on cancer of the Cervix. Especially in India, women themselves need to educate on cervical cancer with the help of social organizations and periodical check-ups. In the fitness of the situation, the women's knowledge level, the motivation for screening, psychosocial factors often determine health-seeking behavior. Most of the studies from India either have the need for a compliance rate of attendees on specially arranged screening programmes or have been done in hospitals settings.

The present study identifies the need to impart higher knowledge levels of women on cervix cancer. The study is aimed at the screening practices and their determinants among women aged 20 years and above in rural and urban communities in Visakhapatnam in the absence of a screening programme. In addition to the above. an attempt has been made to identify and analyze a relationship between the overall knowledge level and a few socio-demographic, economic and reproductive parameters.

Thus, the above-quoted survey had research interest to study, analyze and suggest remedial measures for the prevention of cervical cancer. It is also observed that in the clinical research investigations, that patients irrespective of urban or rural, had inadequate information and knowledge on cervical cancer. This had prompted the research investigator to make a study on analyzing and creating awareness regarding screening of cervical cancer among general women in the urban and rural areas of Visakhapatnam, Andhra Pradesh, South India.

II. RESEARCH METHODOLOGY

2.1 Study design and participants

This was a cross-sectional study to assess the knowledge towards cervical cancer and screening for premalignant cervical lesion among women aged 20 years and above in Visakhapatnam district of Andhra Pradesh covering both urban and rural areas. Data was collected from 500 women which includes general women, staff nurses, teachers, government employees, students etc.

2.2 Questionnaire Design

The questionnaire comprises of questions that addressed personal data and questions about knowledge with regard to cervical cancer screening. Personal data included age, education level, marital status, number of sex partners, parity, number of miscarriages and occupation status. Knowledge and beliefs about cervical cancer and screening were tested with the following items: whether the respondent had ever heard of cervical cancer, symptoms, risk factors, Pap smear, and HPV vaccination.

2.3 Study Method

The study participants were explained about the study in detail. The objectives and background of the study were explained before administering the questionnaire and data was collected through face-to-face interviews. The questionnaire was translated into local language and then translated back to English to assess validity. The same was pilot-tested in a sample of 30 women who were not part of the study sample to ensure cultural acceptance and level of validity and degree of repeatability. The survey achieved a 100% response rate from rural and urban areas, respectively. Interviewer-reported validity and quality measures were collected for each survey, and those identified as invalid surveys were excluded, leading to a final study sample size of 311 urban and 189 rural women.

2.4 Statistical Analysis

Data were analyzed using SPSS version 23 software (IBM Corp, 2013). The results were summarized and were subjected to test statistical significance. Frequency distributions and proportions were calculated to show the knowledge of women about cervical cancer and screening.

III. RESULTS

The results present the data about current levels of awareness and knowledge of cervical cancer and screening. The background characteristics of the respondents are necessary for contextualizing the study.

Table 1 illustrates the socio-demographic characteristics of the respondents. Females aged 20–70 years participated in the study. The mean age of the participants was 36 years. The majority were in the age range 30-39 (41%) and 20-29 (28%). This means that the majority of the respondents were still within the reproductive age group. This calls for the provision of reproductive health services to meet their sexual and reproductive health needs. Urban women were younger with greater education and higher socioeconomic status than women in rural areas. About 25% of the participants were working for wages, 15% were employed, 7% were health workers and 11% were students while 42% were homemakers. Data was collected from employees and health workers to assess the level of awareness in empowering women. Likewise, selection of the educated population i.e. post-graduate girls is since they are the most important source of information carriers and dissemination.

Table 3.1: Socio-demographic characteristics among rural and urban women

Parameters	Characteristics	Urban (N= 311) No. (%)	Rural (N=189) No. (%)	Total (N=500) No. (%)	p-value
Age (in yrs)	20-29	79 (15.8)	59 (11.8)	138 (27.6)	0.0000***
	30-39	155 (31.0)	52 (10.4)	207 (41.4)	
	40-49	57 (11.4)	45 (9.0)	102 (20.4)	
	50-59	12 (2.4)	24 (4.8)	36 (7.2)	
	≥60	8 (1.6)	9 (1.8)	17 (3.4)	

Education	None	41 (8.2)	97 (19.4)	138 (27.6)	0.0000***
	Primary	37 (7.4)	45 (9.0)	82 (16.4)	
	Secondary	64 (12.8)	33 (6.6)	97 (19.4)	
	Graduate	169 (33.8)	14 (2.8)	183 (36.6)	
Economic status	Lower	100 (20.0)	69 (13.8)	169 (33.8)	0.511098NS
	Middle	174 (34.8)	102 (20.4)	276 (55.2)	
	Upper	37 (7.4)	18 (3.6)	55 (11.0)	
Occupation	Home maker	107 (21.4)	104 (20.8)	211 (42.2)	0.0000***
	For wages	62 (12.4)	61 (12.2)	123 (24.6)	
	Student	45 (9.0)	11 (2.2)	56 (11.2)	
	Health worker	30 (6.0)	7 (1.4)	37 (7.4)	
	Employee	67 (13.4)	6 (1.2)	73 (14.6)	

p<0.05, **p<0.01, ***p<0.001, NS Non-significant

In terms of marital status, 76% of the respondents were married. More women (92.6%) in the rural stratum reported having the first intercourse at about the age of <20 years (Table 2). About 14% reported having more than one sexual partner. Around 46% of women in rural were noticed to have more than four children. The frequency of abortions and use of contraceptives is same in both rural and urban women. Tubectomy was the family planning followed in the majority of the rural (71%) and urban (79%) women. The majority (88%) of rural women still use homemade pads. Presence of white discharge was said to be observed sometimes in about 34% of the women in the study population.

Table 2: Health characteristics among rural and urban women

Parameters	Characteristics	Urban (N= 311) No. (%)	Rural (N=189) No. (%)	Total (N=500) No. (%)	p-value
Marital status	single	50 (16.1)	15(7.9)	65(13.0)	0.000***
	Married	239 (76.8)	141(74.6)	380(76.0)	
	Divorce-separated	7 (2.3)	5(2.6)	12(2.4)	
	widow	15 (14.8)	28(14.8)	43(8.6)	
Age at marriage	<20	139 (44.7)	175(92.6)	314(62.8)	0.000***
	20-29	138 (44.4)	8(4.2)	146(29.2)	
	30-39	34 (10.9)	6(3.2)	40(8.0)	
No. of sex partners	1	274 (88.1)	157(83.1)	431(86.2)	0.114NS
	>1	37 (11.9)	32(16.9)	69(13.8)	
No. of children	0	17 (5.5)	10(5.3)	27(5.4)	0.000***
	1-3	216 (69.5)	92(48.7)	308(61.6)	
	≥4	78 (25.1)	87(46.0)	165(33.0)	
No. of abortions	0	225 (72.3)	144(76.2)	369(73.8)	0.607NS
	1-2	51 (16.4)	28(14.8)	79(15.8)	
	≥3	35 (11.3)	17(9.0)	52(10.4)	
Use of contraceptives	Permanent	10 (3.2)	3(1.6)	13(2.6)	0.155NS
	Temporary	26 (8.4)	9(4.8)	35(7.0)	
	None	275 (88.4)	177(93.7)	452(90.4)	
Family Planning	Vasectomy	23 (7.4)	7(3.7)	30(6.0)	0.003***
	Tubectomy	244 (78.5)	134(70.9)	378(75.6)	
	None	44 (14.1)	48(25.4)	92(18.4)	
Type of Napkin	Homemade	147 (47.3)	167(88.4)	314(62.8)	0.00***
	Branded	164 (52.7)	22(11.6)	186(37.2)	
Presence of white discharge	Yes	72 (23.2)	57(30.2)	129(25.8)	0.042NS
	No	121 (38.9)	80(42.3)	201(40.2)	
	Sometimes	118 (37.9)	52(27.5)	170(34.0)	

*p<0.05, **p<0.01, ***p<0.001, NS Non-significant

Table 3 illustrates the respondent's knowledge of carcinoma of the cervix. More than half (59%) of the women had never heard about cervical cancer, which is statistically significant when observed between rural and urban women. A higher proportion (11%) of

urban women had heard of cervical cancer through the health worker, while media was a more frequent source for urban women (32%). Seven questions were raised to assess the knowledge on cervical cancer and Pap smear screening (Fig. 1). Less than 25% of women in urban and 15% of women in rural were aware of the symptoms of cervical cancer. About 13% of women were aware of the risk factors. The most common risk factor mentioned was poor hygiene (1.4%). Three (0.6%) of the respondents reported that having multiple sexual partners could result in cervical cancer, while two (0.4%) identified HPV virus could be responsible for cervical cancer. However, none of the respondents identified cigarette smoking and tobacco chewing as possible risk factors in cervical cancer infection. Majority of respondents (87%) do not even know that cervical cancer can be prevented. About 41% were aware of the treatment for cervical cancer. Only 9% of the respondents knew that cervical cancer is predominantly the result of a sexually transmitted infection. Although the difference is not statistically significant (p>0.05), more urban than rural interviewees knew about the symptoms, risk factors, prevention and treatment of the disease. However, there was no statistical difference between urban and rural women in their awareness on Pap test and HPV vaccine.

Table 3: Cervical cancer knowledge among rural & urban women

Knowledge on cervical cancer		Urban (N= 311) No. (%)	Rural (N=189) No. (%)	Total (N=500) No. (%)	p- value
Heard of cervical cancer	Yes	165 (53.1)	42 (22.2)	207 (41.4)	0.000***
	No	146 (46.9)	147 (77.8)	293 (58.6)	
Source of information	Friends/Relatives	23 (7.4)	4 (2.1)	27 (5.4)	0.000***
	Doctors/ Health workers	43 (13.8)	21 (11.1)	64 (12.8)	
	Media	99 (31.8)	17 (9.0)	116 (23.2)	
Awareness on signs and symptoms*	Yes	37 (22.4)	6 (14.3)	43 (20.8)	0.246^NS
	No	128 (77.6)	36 (85.7)	164 (79.2)	
	Menstrual abnormality	9 (2.9)	1 (0.5)	10 (2.0)	
	Vaginal bleeding	10 (3.2)	2 (1.1)	16 (2.4)	
	Bleeding after menopause	7 (2.3)	1 (0.5)	7 (1.6)	
	Incorrect responses	11 (3.5)	2 (1.1)	13 (2.6)	
Awareness on risk factors*	Yes	18 (10.9)	8 (19.0)	26 (12.6)	0.155^NS
	No	147 (89.1)	34 (81.0)	181 (87.4)	
	Multiple sexual partners	3 (1.0)	0 (0.0)	3 (0.6)	
	Poor hygiene	5 (1.6)	2 (1.1)	7 (1.4)	
	Genetics	1 (0.3)	0 (0.0)	1 (0.2)	
	HPV virus	2 (0.6)	0 (0.0)	2 (0.4)	
	Smoking	0 (0.0)	0 (0.0)	0 (0.0)	
	Incorrect response	7 (2.3)	6 (3.2)	13 (2.6)	
Awareness on prevention*	Yes	19 (11.5)	7 (16.7)	26 (12.6)	0.368^NS
	No	146 (88.5)	35 (83.3)	181 (87.4)	
	Good genital hygiene	3 (1.0)	0 (0.0)	3 (0.6)	
	Avoid multiple sexual partners	4 (1.3)	2 (1.1)	6 (1.2)	
	Avoid early sexual intercourse	1 (0.3)	1 (0.5)	2 (0.4)	
	Using condom	2 (0.6)	0 (0.0)	2 (0.4)	
	Incorrect response	9 (2.9)	4 (2.1)	13 (2.6)	
Awareness on treatment*	Yes	68 (32.9)	17 (8.2)	85 (41.1)	0.931^NS
	No	97 (46.9)	25 (12.1)	122 (58.9)	
	Herbal remedies	8 (2.6)	0 (0.0)	8 (1.6)	
	Surgery	12 (3.9)	0 (0.0)	12 (2.4)	
	Drugs	9 (2.9)	8 (4.2)	17 (3.4)	
	Radiotherapy	12 (3.9)	3 (1.6)	15 (3.0)	
	Chemotherapy	19 (6.1)	5 (2.6)	24 (4.8)	
	Incorrect responses	8 (2.6)	1 (0.5)	9 (1.8)	
Awareness on cause	Yes	16 (9.7)	3 (7.1)	19 (9.2)	0.609^NS
	No	149 (90.3)	39 (92.9)	188 (90.8)	
Awareness on PAP test	Yes	17 (10.3)	3 (7.1)	20 (9.7)	0.536^NS
	No	148 (89.7)	39 (92.9)	187 (90.3)	
Aware of HPV vaccine	Yes	18 (10.9)	4 (9.5)	22 (10.6)	0.795^NS
	No	147 (89.1)	38 (90.5)	185 (89.4)	

*p<0.05, **p<0.01, ***p<0.001, NS Non-significant
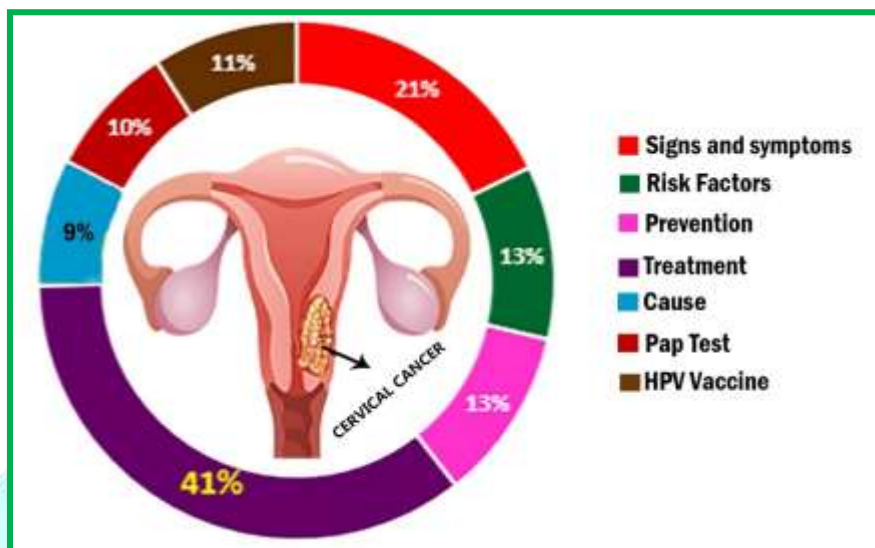***Multiple Responses**

Fig. 1 Distribution of respondents basing on knowledge about cervical cancer

Statistically there was no significant difference between rural and urban women in their knowledge of cervical cancer (Fig. 2). Out of 500 respondents, around 80% of women were not aware of the cervical cancer symptoms, risk factors, and prevention, irrespective of urban and rural, educated and uneducated, employed or unemployed. Only about 8% of women living in the rural area, (which is quite low as compared to the 33 % of women living in the urban area) are aware of the treatment of cervical cancer. Drugs were the most known treatment by 8 respondents from a rural area, which accounted for 4.2%.
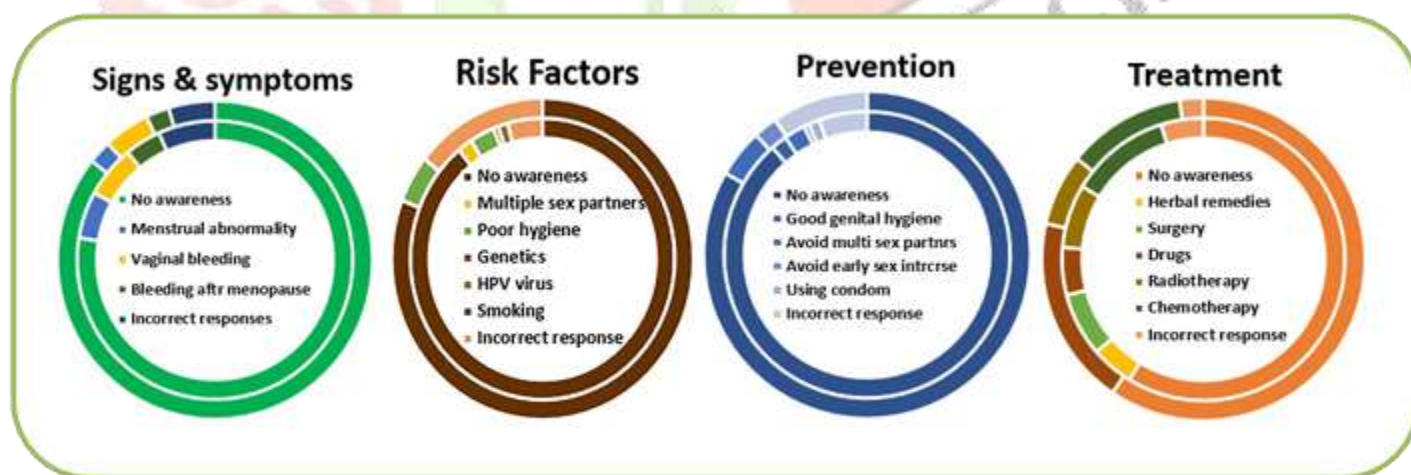

Fig. 2 A pie chart showing awareness of cervical cancer in Urban (outer circle) and Rural (inner circle) women

IV. DISCUSSION

The most commonly found cancer in South Indian women is carcinoma of the uterine cervix. This occupies the top rank among

cancers in women in the majority of developing nations. This alone contributes to 34% of all women cancers. In an estimated annual global occurrence of 5,00,000 cervical cancers, India alone contributes 1,00,000, which accounts for 20% of the world burden. The intensity of such a problem is thus more than evidence. India's National Cancer Control Program stresses the need and importance of early detection and treatment. However, the country has no specific screening program. Many Indian women lack both awareness about the disease and methods of prevention and treatment facilities. Hence the investigator felt the need for the assessing the knowledge regarding prevention of cervical cancer among general women and educate them simultaneously.

4.1 Socio-economic demographic profile of women

Majority (41.4%) of the participants are in the range of 30-39 years age group, which is similar to studies done elsewhere. This age structure shows that the sample consisted of a young population, which could have high fertility. This calls for the provision of reproductive health services to meet their sexual and reproductive health needs. Increasing in the age group was observed to be associated with a decreased use of screening services in several studies carried out in different settings (Nascimento et al., 1996; Perez-Stable et al., 1995; Hsia et al., 2000). This was found confirmed in rural India in a study that screened with visual inspection with acetic acid (Sankaranarayanan, 2003). It was noticed that older women were less responsive to awareness activities. This is due to the fact that they believe that detection and treatment make no difference to them (Chamberlain, 1986). Hence, strategies to promote cervical cancer screening must pay special attention to incorporating messages, specifically targeting older women. Our study includes a greater proportion of women among each specific components of socio-economic demographic profile i.e married, parous, low socioeconomic status, less or uneducated, early marriage etc., mostly in rural women compared to urban.

Education is considered to be the fundamental factor among the socio-demographic and reproductive determinants of cervical cancer in low resource settings. Public awareness through education, especially in slum areas and improvements in living standards and implementation of cervical cancer screening programmes, can help in reducing the high incidence of cervical cancer in India. Occupation was the next most significant point in determining knowledge of the availability of cervical cancer screening facilities. Few earlier findings (Simayi et al., 2013; Kress et al., 2015; Yoruk et al., 2016; Ochomo et al., 2017), found the occupation to significantly affect knowledge of cervical screening. In our findings, better education and socio-economic status were noticed to have a significant role in the awareness of screening which is consistent with findings in studies done in China, Wufeng Count and India (Lantz et al., 1997; Jia et al., 2013; Siddharthar et al., 2014). A survey conducted by Swaminathan et al., Swaminathan et al. (2009) in a rural population, revealed that the risk of cervical cancer is inversely proportional to increasing educational levels. The prevalence and burden of cervical cancer is at higher level in women having low socio-economic status, and among rural women in India (Vallikad, 2006; Kurkue, and Yeole, 2006; Geetha and Santhy, 2013). The primary reason given for this is lack of access to screening and health services and lack of awareness of the risk factors for cervical cancer. HPV infection often goes unnoticed and magnifies as well-developed cancer before women realize the need to go for medical help (Kaku et al, 2008). In addition to the above, due to difficulties of access and affordability, compliance to, and follow up of, treatment is much worse for women having low socioeconomic status. This further lead to morbidity and mortality.

4.2 Health characteristics of women

Incidents of cervical cancers are found to be declining among women in cities, while it is on the rise among their rural counterparts, early marriage is one reason for it. Personal hygiene is considered to be one of the most important factors in cervical cancer. Awareness has to be created among the rural women on this. In our study cloth use was more common in rural women (88.4%) compared to urban (47.3%). The cyclic use of cloth, washed after every use during menstruation was the usual practice resulting in poor hygienic conditions. Similar results were found in a study by Raychaudhuri and Mandal (2012). A little bit of clear, odourless vaginal discharge is normal. However, increase in vaginal discharge or foul smell is a clear sign of infection or cervical or endometrial cancer. In case of cervical cancer, vaginal discharge is found to be heavy, pale, watery, brown or mixed with blood.

4.3 Level of Knowledge about Cervical Cancer and Screening

The present analysis focusses on the existing awareness level of cervical cancer. In spite of high educational levels among urban respondents, there is lack of knowledge deficiencies regarding cervical cancer, its symptoms, risk factors, and prevention. The study concludes that there is very little difference between rural and urban women (either educated or uneducated) with respect to their knowledge regarding cervical cancer.

A great proportion of the sample population had never heard of cervical cancer, the rural being more (77.8%) compared to urban (46.9%). Notably, women recognized cervical cancer less than half (41.4%) as often as either breast or uterus cancers. Media has a major share (56%) in disseminating information to the women.

Most of the respondents were not in a position to recollect any symptoms (79.2%) or risk factors (87.4%) of the disease. Less than 25% of women in urban and 15% of women in rural has sufficient knowledge on the symptoms of cervical cancer. Out of which, the most recalled symptoms in our study were vaginal bleeding (2.4%), menstrual abnormality (2.0%), and bleeding after menopause (1.6%). In this study majority of respondents had no knowledge of risk factors for cervical cancer. Only 13% of women were aware of

the risk factors. Earlier studies have cited lack of knowledge and awareness about the risk factors of cervical cancer as important factors impacting screening uptake (Were et al., 2011; Kivistik et al., 2011; Aswathy et al. 2012; Nadarzynski et al., 2012). Majority of respondents (87%) did not know that cervical cancer can be prevented. About 41% were aware of the treatment for cervical cancer. HPV is a sexually transmitted virus, and some infections by this type of virus clear up without the need for any medication. But if the infection continues for prolonged periods, there are chances of it developing into cancer. In a study conducted in China, 22.1% and 13.3% of the study population have heard of HPV and HPV vaccine respectively (Hong et al., 2013). This can affect prevention as it is difficult for these women to go for vaccination if they don't know the link between HPV and cervical carcinoma. Integrating knowledge and awareness programs with educational intervention for cervical cancer or HPV screening along with HPV vaccination will go a long way in reducing HPV infection and controlling cervical cancer in Indian women.

Dramatic reductions in the incidence and mortality from invasive cervical cancer (Day, 1984; Hristova & Hakama, 1997; Taylor et al., 2001) have been experienced in western countries. incidence rates of cervical cancer are observed to be generally low and account for only 3.6% (Bray et al., 2005) in developed countries. Since late 1980s dramatic decrease in the incidence of cervical cancer has been noticed following the introduction of the national NHS cervical cancer screening programs around the UK in 1988. Since then, rates decreased by 49% in Great Britain from their peak in 1985-1987 (at 16.3 per 100,000 women) to the lowest rate in 2002-2004 (at 8.4 per 100,000 women). Such a change can be attributed to the fact that cervical screening detects and treats abnormal cells, and so can help prevent many cases of cervical cancer from ever developing (Thomson et al., 2010). Cervical cancer used to be the leading cause of cancer death for women in the United States. However, in the past 40 years, the number of cases of cervical cancer and the number of deaths from cervical cancer have decreased significantly. This is due to the fact that many women are getting regular Pap tests, which can find cervical precancer before it turns into cancer. Thus, in developed countries, the widespread use of cervical "Pap smear" screening programs has reduced the incidence of invasive cervical cancer by 50% or more. Therefore, in developed or developing countries, existing preventive measures of vaccination reduce but do not eliminate the chance of getting cervical cancer. Therefore, experts recommend that women combine the benefits of both programs by seeking regular Pap smear screening, even after vaccination.

V. CONCLUSION

Our study concludes that awareness on the knowledge on cervical cancer was low in this region amongst the middle-aged women in India. In our literature, lack of knowledge on spreading of cervical cancer, it's screening with the socio-economic profile, health characteristics of women on cervical cancer, their belief towards the disease and the health care system had been at lowest ebb or even sometimes found absent. Understanding the implications of these evolving population characteristics may facilitate planning targeted studies and interventions for cervical cancer prevention, screening, and treatment in the future amongst the middle-aged women in developing countries viz., India etc. Educating the public, effective cervical cancer screening strategies using Pap smear, visual inspection with acetic acid & cervical tissue sampling whenever required will reduce the spreading of advanced cervical cancer. Periodic educational interventions targeting socially and economically disadvantaged women will encourage at least short-term sexual risk reduction behavior. A two-pronged methodology involving strong government and NGO commitment action-based strategy is absolutely necessary to lower the occurrence of cervical cancer especially in developing countries like India. Unless and until the women gather enough knowledge and awareness on cervical cancer, it will be difficult to achieve the mission of National Cancer Control Programme.

VI. ACKNOWLEDGEMENT

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