

Knowledge, Attitude and Practices Among North Indian Women for Cervical Cancer Screening Programs

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ABSTRACT

Introduction: The incidence of cervical cancer has declined in developed nations due to awareness, positive attitude towards cancer cervix screening test and well organised screening services. In India like developing nations opportunistic screening is the practice and majority of women come with late stage of cervical cancer. So, we designed a study to ascertain the knowledge and attitude of north Indian women about cervical cancer screening program and to find out factors which hinder them to use these services.

Method: A case control study was done with filling well designed questionnaire. The study was approved by institutional ethics committee and a written informed consent was obtained from each subject (cases & controls).

Result: Knowledge about cervical cancer was very low in both cases and control and attitude towards cervical cancer screening test is surprisingly very poor in educated housewives. Only 35.7% cases and 64.3% controls had heard the name cervical cancer. Only 19% cases and 27.4% control had knowledge about Pap smear test and its benefits. In cases all women (100%) had Pap test when they came to hospital for treatment, but in control group only 8.3% women had Pap smear test due to health-conscious attitude. Only 8.3% controls had positive opinion for routine cervical test which shows the real image of north Indian women toward cervical cancer screening programs and only 8.3% cases and 19% control women knew that cervical cancer is preventable.

Conclusion: Present study will provide exact image of our society in healthcare aspect which will help in planning cervical cancer prevention programme. There should be focus on what is cervical cancer, their risk factors, knowledge about vaccination, preventive measures and treatment of cervical cancer.

Key Words: Cervical Cancer, Human Papilloma Virus, Papanicolaou Test, Liquid Based Cytology, KAP (Knowledge, Attitude & Practices).

Abbreviations:

Ca cx = cervical cancer, **HPV** = Human papilloma virus, **Pap test** = Papanicolaou test, **LBC test** = liquid based cytology, **KAP** = Knowledge, Attitude & Practices.

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INTRODUCTION

Internationally, cervical cancer is the second most common cancer among women after breast cancer.¹ In year 2022, 94% of the 350 000 deaths caused by cervical cancer in low and middle-income countries like India.²

Routine check-ups and cervical cancer screening programs have shown its effectiveness in developed countries by decrease in mortality rate. Many risk factors are associated with cervical cancer such as first intercourse at early age, multiple sexual partners, high parity, smoking, immune-susceptibility, poor

nutrition and bacterial, viral, fungal infection. Most of the time cervical cancer at early stage is asymptomatic or having some abdomen pain or vaginal discharge but in later stage (invasive) notable symptoms occur like- bleeding after sexual intercourse, bleeding between menstrual cycle, severe abdomen pain and weight loss.³⁻⁶

Human papillomavirus (HPV) is main player for cervical carcinogenesis however cervical cancer is considered as preventable cancer.⁵ Because HPV infection mainly occurs in

fertile age but cervical cancer detection peak age is around 55-65. A big gap between primary infection and final outcome gives ample scope for prevention. Pap smear test and Liquid Based Cytology test can recognize cervical pre-invasive lesions before they become malignant and effectively reducing the incidence of cervical cancer by 75%–90%.⁶ A previous estimation declares that cervical cancer could be prevented if all women were offered cytological screening programs but in developing countries level of knowledge and awareness is very low, even they never heard the term cervical cancer.⁷ Same condition also occurs in north India and there is no previous study that had assessed the knowledge, attitude and practices about cervical cancer in north Indian women. So here we aimed to collect information regarding knowledge, attitude and practices to cervical cancer screening programs.

MATERIALS AND METHODS

A case control study was carried out among women in King George's Medical University Lucknow, India. The study design was approved by the institutional ethics committee letter no.185 4R/Cell-12 dated 14/08/2012. Before enrolment in the study, a written informed consent was obtained from each of the participants. The sample size was 84 cases and 84 controls, all women were married and age ranged between 30–75 years. They were

interviewed when they were first seen in the department; we included biopsy proven cervical cancer patients as case group and their female relatives and health professionals who are working in same department enrolled as control. For evaluating the knowledge, attitude & practices (KAP) of north Indian women on cervical cancer and their screening programs, a self-administered structured questionnaire with 21 items was designed. With provision for question related to subjects's general information, about cervical cancer and their screening. In general information we asked about their age, education, parity, husband's education, their profession and family income. We also asked about their delivery place either home or medical health centre and whether they are watching TV news, reading news paper daily or not. In KAP criteria we asked the question as- Did you ever hear about cervical cancer or not? Source of knowledge: health worker, media, friends or relatives? Heard about pap smear test: Yes/no? Do you know about risk factor of ca cx or not? Have you ever had Pap smear test: Yes/ no? Do you know cervical cancer is a preventable disease: yes or no? After obtaining data from all respondents, all questionnaire forms scrutinized thoroughly for accuracy then data entered in Microsoft office excel 2007 for analysis. Statistical analyses were performed using SPSS 16.0 versions (Chicago, Inc. USA) and MEDCALC 2018 as statistical tool.

Table 1: Knowledge regarding cervical cancer prevention

Question	Case	Case %	Control	Control %	P-value
Watching TV					
Yes	64	76%	81	96.42%	0.1
No	20	23.80%	03	3.57%	
Reading news paper					
Yes	05	5.95%	12	14.28%	0.01
No	79	94.04%	52	61.90%	
Read when got time not daily	00	-	20	23.80%	
Place of delivery					
Home	71	84.52%	50	59.52%	0.01
Hospital	13	15.47%	34	40.47%	
Do you hear the term cervical cancer?					
Yes	30	35.7%	54	64.3%	0.1
No	44	52.4%	26	31.0%	
Hear when came to Hospital	10	11.9	4	4.8%	
Do you know about pap smear test?					
Yes	16	19.0%	23	27.4%	0.01
No	53	63.1 %	23	27.4%	
Know test is there for ca cx name not known	15	17.9%	38	45.2%	
Do you know about risk factors?					
Yes	7	8.3%	8	9.5%	0.465
No	69	82.1%	63	75.0%	
Little knowledge about risk factors	8	9.5%	13	15.5%	
Did you ever have Pap smear test?					
Yes	84	100%	7	8.3%	0.54
No	0	0%	77	91.7%	
Can cervical cancer cure by treatment?					
Yes	7	8.3%	16	19.0%	0.47
No	77	91.7%	68	81.0%	

Table 2: Odds Ratio calculation

Parameter	OR (95% CI)	P value
Watching TV	8.43 (2.40-29.65)	0.09
Reading news paper	2.63(0.88-7.84)	0.08
Place of delivery	3.71(1.78-7.74)	0.54
Do you know about pap smear test?	4.53(2.36-8.71)	0.01
Did you ever have Pap smear test?	0.0006 (0.0-0.01)	0.01

Note; OR= Odds Ratio, CI= Confidence Interval. Dark = significant values.

RESULTS

The study included 168 women; the mean of cases and controls age were 53 and 54 respectively. Over 50 % had parity more than four. Most of them watch TV but not read news paper in both cases and controls. Knowledge of cervical cancer, Pap test and risk factors is very low. In cases only 35.7% (30) and in control 64.3% (54) were heard about cervical cancer moreover 11.9% cases (10) and 4.8% control (4) heard about cervical cancer when they came to hospital and rest 52.4% (44) cases and 31% (26) controls never heard about cervical cancer.

On asking about Pap smear test only 19% (16) cases and 27.4% (23) control said yes that they know about this test, other 17.9% (15) cases and 45.2% (38) controls had information about test for diagnosis of cervical cancer but not knew the name exactly. Among cases 8.3% (07) and controls 9.5% (08) knew about risk factors of cervical cancer and other (9.5% cases and 15.5% controls) have some information and rest subjects (82.1% cases and 75% controls) had no idea about risk factors. In case group 100% had Pap test because of some clinical symptoms but in control only 8.3% had Pap test, this shows real attitude of women for cervical cancer screening programs. Only 8.3% cases and 19% control women knew that cervical cancer is preventable [Table-1 and 2].

DISCUSSION

This study will provide basic information for planning a cervical cancer prevention programme in India. The results showed that lack of knowledge was surprisingly common among both cases and controls. Apart from inadequate knowledge the most considerable reason for not having cervical cancer screening practices in well educated women was fear of pain, embarrassment and fear of whether they getting HPV positive report.^{8,9}

A significant finding by this study was majority of women aware through relatives and friends rather than physicians or media. That's why very less percentage of women in developing countries participate in cervical cancer screening program compared to developed nation.^{10,11}

In conclusion, our study result shows lack of knowledge and neutral attitude toward cervical cancer screening program in north Indian population. However, a positive attitude was found in low-educated working women, it may be because of thought exchange process with friends and bosses on working place.

CONCLUSION

Recommendation for perfectly organized cervical cancer screening program which should include points of awareness, risk factors, vaccinations, prevention and treatment of cancer cervix.

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