

Awareness regarding cervical cancer and pap test as a screening tool in females attending primary health centres of rural and tribal areas of south east Rajasthan: An observational study

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Abstract

Background: Cervical cancer being a major cause of mortality and morbidity in developing countries, its awareness is essential. Multiple social barriers in assessing basic screening and treatment are the reasons for posing Indian women at greater risk of developing cancer cervix. The Pap test is a simple and cost effective technique for early diagnosis of cervical cancer but is still underutilized. **Aims and objective:** To evaluate the knowledge and awareness of symptoms of cervical cancer and the use of pap test as screening tool among females attending PHCs (Primary Health Centers) in rural and tribal communities in the southern east section of Rajasthan, as well as to encourage females regarding routine pap smear tests. **Material and method:** A cross-sectional questionnaire-based survey was conducted among 500 women attending PHCs in rural and tribal areas of south east Rajasthan to determine their knowledge about early symptoms related to cervical cancer and availability of screening test {VIA, VILI and pap smear}. The data was gathered using a structured questionnaire with multiple choice options. Microsoft excel was used to enter the data.

Keywords: Awareness, cervical cancer, rural and tribal areas

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Introduction

In 2020, an estimated 604100 women were diagnosed with cervical cancer worldwide and 341831 women died from the disease[1]. According to reports, 96,922 new instances of cervical cancer and 60,078 fatalities (8.4%) from the disease were reported in India in 2018[2]. 9.4% of all malignancies and 18.3% (123907) of new cases of cervical cancer were reported in 2020[1]. It still is amongst the commoner cancers in India and a leading cause of cancer related deaths in women in low and middle income countries. Cervical cancer contributes to approximately 6.5% of all cancers in women with mortality 7.7% as reported in GLOBOCAN 2020[3]. The age adjusted incidence rate of cervical cancer varies widely among registries; highest is 23.07/100000 in Mizoram state and the lowest is 4.91/100000 in Dibrugarh district[4].

Cervical cancer is a deadly disease once it reaches the invasive stage, but it is the only female genital cancer which can be prevented by appropriate and timely screening. The pap smear is an inexpensive and easily performed test. Low levels of education, high cost of healthcare, high cost of acquiring and maintaining the infrastructure, the need for technical expertise for cytological screening as well as for tracking women with abnormal test results[5], and the

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predominance of etiological factors for cervix cancer have all been obstacles to its implementation. This results in patients presenting with advance disease thereby increasing both the morbidity and mortality and putting undue strain on available health facilities and resources. Many countries have significantly reduced their burden of cervical cancer morbidity and mortality through screening and early treatment. In the United States the introduction of pap smear has been responsible for a 90% decrease in deaths from cervical cancer[6].

In India, though the urban females have some knowledge about Pap smear and many undergo routine screening, the rural and tribal areas still lack the basic knowledge regarding symptoms of cervical cancer and mostly are unheard of Pap test.

Material method

A cross sectional questionnaire based study was conducted . A total of 500 female patients attending various PHCs of rural and tribal belt of Udaipur were questioned using pre developed Performa. Data was than analyzed in computer using spss 15 version.

Result

**Table 1 Socio demographic profile of study population
1A Age-wise distribution of cases**

Age(years)	Number	Percentage
<20	65	13%
21-30	178	35.6%
31-40	107	21.4%
41-50	53	10.6%
51-60	64	12.8%
>60	33	6.4%

1B Distribution of cases according to marital status

Marital status		
Married	415	83%
Unmarried	85	17%

1C Distribution of cases according to level of education

Educational status		
No formal education	437	87.4%
Primary	48	9.6%
Secondary	15	3%
Tertiary	0	

Table 2 Distribution of cases according to age at marriage

Age at marriage (out of 415)		
≤18	279	67.22%
19-25	105	25.30%
26-30	26	6.26%
>30	5	1.2%

Table 3 Distribution of cases according to parity

Parity (out of 415)		
Nullipara	25	6.02%
1	52	12.5%
2	89	21.44%
3	95	22.89%
>3	154	37.10%

Table 4 Knowledge regarding symptoms of carcinoma cervix

	Number	Percentage
No knowledge	429	85.8%
Slight knowledge	71	14.2%
Adequate knowledge	0	

Table 5 Knowledge and practice regarding PAP test

Ever heard of pap smear	Number	Percentage
Yes	35	7%
No	465	93%

Table 6 Response after counseling

Response	Number	Percentage
Yes	208	41.6%
No	292	58.4%

Out of 500 females 35.6 % belonged to the age group of 21 -30 years. The mean age of study population was 25.4 yrs . Majority of respondents (83%) were married. The parity distribution of study population was between 0-6 with 37.1%having more than 3 children. Most females (87.4%) in this area had no formal education, only(9.6%) had some primary education and secondary education (3%).Table 4 represents that most females (85.8%) had no knowledge regarding the symptoms of cervical cancer. Only a very small percentage (11.6%) of females (especially those with some level of education, and those who were younger) had some knowledge about symptoms of cervical cancer that only retrieved when leading questions were asked.Table 5 shows that 93% of study population has never heard of Pap smear, only a small percent (7%) gave some response when leading questions were asked. Even in this setting most respondents were like that some such test was performed when they went to hospital for any reason but they were not aware of the results.Even after giving some information regarding cervical cancer and pap smear only41.6% showed some positive response for undergoing pap's test (table 6).

Discussion

The present study was conducted in those areas which have very poor literacy rate and as such females are not aware about health related problems. These are the areas from where a high number of patients with advanced cervical malignancies are detected. The basic aim of this study was to make female aware educated about cervical cancer

symptoms and to motivate them for pap's smear.Most females attending the PHCS were in the age group 21-30(178) and 31-40(107), i.e in reproductive age group. Most females had no formal education. Higher level of education was not seen. Only a few young girls were there receiving secondary education. The study found that women were poorly aware of the symptoms of cervical cancer. 85.8% females had no knowledge regarding cervical cancer and only a few i.e.14.2% considered white discharge, pain lower abdomen irregular bleeding per vaginum as abnormal, that too when leading questions were asked. In the study by V Shaw et al[6] 69% of the participants had knowledge regarding some symptoms of cervical cancer. This difference can be attributed to the overall difference between the demographic profiles of the two study population.Only a few (7%) had some knowledge regarding pap smear. On the contrary in the study by V Shaw et al.2012⁽⁶⁾ 88.4% subjects had knowledge about pap smear while in the study by Shashank Shekhar[7] 77% had knowledge regarding pap smear. Gross difference between our study and the studies by V Shaw and Shashank Shekhar can be attributed to the difference in the type of study population.When asked about ever been screened before only a very few (7%) replied that some such test was done at higher centre but they were not aware of the results.

In our study even after repeated counseling and detail description about technique of taking pap's smear 58.4% respondents refused for undergoing pap's smear while in the study by Akinlaga OA, 2014[8] nearly 90 % females were ready for screening after counseling. This difference might be due to the difference in the level of education and health awareness attitude between the two study populations.

Conclusion

Education plays a key role in making the women aware about herself and her surrounding . Education gives them knowledge and freedom to think and accept the things which are out of box. The study reveals that there is a vast lacuna of education and health information among the females of rural and tribal areas. A lot of effort, health camps, adequate counseling, improvisation of infrastructure and basic facilities is needed to overcome the cultural and social barriers that exist in our society, to improve the health conditions of females of rural and tribal areas.

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