



STUDY TO ASSES THE AWARENESS AND KNOWLEDGE OF CERVICAL CANCER AND ITS PREVENTION AMONG WOMEN OF RURAL INDIA

Dr K. Aravinda*

Assistant Professor, Department of obstetrics & gynaecology, Viswabharathi medical college, kurnool, Andhra Pradesh. *Corresponding Author

Dr. Vaheda begum

Department of obstetrics & gynaecology, Viswabharathi medical college, kurnool, Andhra Pradesh.

Dr. Swetha

Department of obstetrics & gynaecology, Viswabharathi medical college, kurnool, Andhra Pradesh.

ABSTRACT

Background: Cervical cancer is one of the most common malignancies among women in India. There is a high mortality as patients usually present at an advanced stage because of lack of awareness of the disease and its screening methods.

Aim: of present study were to assess the level of knowledge regarding symptoms, risk factors, prevention and screening of cervical carcinoma among women of rural India.

Methods: Semi-structured interview-based survey regarding knowledge of cervical carcinoma was conducted among married women attending gynaecology OP at viswabharathi medical college hospital. A structured questionnaire regarding different aspects of cervical cancer was used as a tool for data collection. 1000 women participated in the current study. Data was entered in Microsoft Excel. SPSS statistical software was used to generate statistical parameters like proportion, mean, standard deviation, etc. The test of significance used was the Z test and a P value of <0.05 was considered as the level of significance.

Conclusions: The study revealed very low cervical cancer knowledge and poor screening behavior among the women. This may be due to lack of awareness, education and low priority of women's health issue.

KEYWORDS : Awareness, cervical cancer, screening, Pap smear.

INTRODUCTION

In India, cervical cancer is one of the leading malignancies among women, with about 130,000 new cases and 74,000 deaths every year [1] accounting for 30% of global cervical cancer mortality. [2] The absolute incidence is still very high, especially in rural areas, and the number of cases is increasing due to high population growth. [3] Although cervical cancer can be treated effectively if detected in Stage I and II, it does not cause any symptom in early stages. In the absence of a screening program, most of these cases come to the attention of doctors at an advanced stage when hardly any curative management is possible. Cervical cancer is a subject that is not freely discussed in India because of cultural taboo. There is an urgent need for information and education on awareness of cervical cancer and early detection measures. Furthermore, important is to find out the willingness of women to utilize screening services and to comply with follow-up treatment protocol. Global evidence demonstrates that the key to reducing cervical cancer morbidity and mortality is early detection coupled with timely treatment of cervical precancerous lesions. [4] Cervical cytology often referred to as the Papanicolaou test (Pap test) is perhaps the most well known of available screening methods. [5]

A recent qualitative study [6] reported a low level of knowledge on HPV and cervical cancer among children, parents, teachers, community leaders and even health service providers of four developing countries (India, Peru, Uganda and Vietnam). Very similar results, i.e. lack of proper knowledge regarding cervical cancer, were found in several studies conducted in other countries in the world [7–11].

Cervical cancer exposes the vulnerability of poor, uneducated women often living in underserved areas reflective of poor access to health care. [12]

The present study was done to find out awareness of women of rural areas about carcinoma cervix, its early detection measures and screening services.

METHODS

Approval of Institute's (Medical College) Ethics Review Committee

was obtained before initiation of the study. The study was conducted in the month of August – September 2018. The study was conducted in the out patient department of obstetrics and gynaecology and all the women attending the clinic were informed about the purpose of study and those who are willing to participate were interviewed with the questionnaire related to

1. Risk factors of carcinoma cervix
2. Symptoms of carcinoma cervix
3. Awareness of screening methods

The section on knowledge about cervical cancer consisted of questions about risk factor and symptoms of cervical cancer. Informed verbal consent was obtained from all study participants and as and when required they were appropriately treated or were referred to a higher center for any reported morbidity. During the study, it was ensured that if any of the study participants were willing to undergo screening, she would be facilitated for further investigations and management. This study was done before the department organized a health education program to spread awareness about cancer cervix. After interview the women were given health education regarding cancer cervix and willing participants were screened with Pap smear or biopsy as per requirement.

INCLUSION CRITERIA

All married women attending the OBG OPD were explained about the study and the willing women were included in the study.

Exclusion criteria

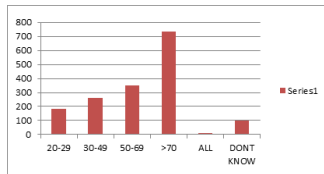
1. Women who were not willing to participate in the study.
2. Women who were known cases of carcinoma cervix, as they will be more aware of all the parameters as part of their treatment.

RESULTS

KNOWLEDGE ABOUT RISK FACTORS
AGE AT RISK OF CERVICAL CANCER

Table .1. Questionare related to awareness about are at risk of cervical cancer

20-29	181
30-49	263
50-69	353
>70	735
ALL	12
Dont know	100

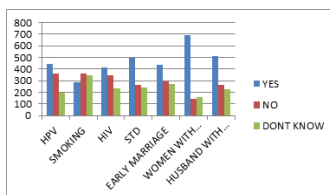
Figure .1.Questionare related to awareness about age at risk of cervical cancer

Considering the age as arisk factor seperately when the women were asked which age is at risk of cancer cervix 10% did not have any idea and 73% women felt advanced age is at risk and only 1.2 % women felt reproductive age being the risk factor.

All the risk factors related to cancer crevix were enlisted and all the women were interviewed about each factor and their answers were enlisted as 1. Yes 2.No 3. Don't know

Table.2. Questionare related to awareness about risk factors of cervical cancer

Risk factor	Yes(%)	No(%)	Dont know(%)
HPV infection	441(44.1)	362(36.2)	197(19.7)
Smoking	287(28.7)	363(36.3)	350(35)
HIV infection	412(41.2)	351(35.1)	237(23.7)
STD 's	497(49.7)	262(26.2)	241(24.1)
Early marriage	434(43.4)	294(29.4)	273(27.3)
Women with multiple partners	693(69.3)	144(14.4)	163(16.3)
Husband withmultiple partners	509(50.9)	264(26.4)	227(22.7)

Figure .2. Questionare related to awareness about risk factors of cervical cancer

Of the risk factors more than 50% women felt that promiscuous behaviour of one or both part ners as the main risk factor and less than 50% of women knew that HPV,STD, HIV,Early marriage and smoking as risk factors.

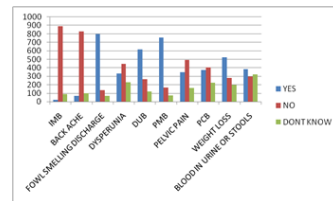
Knowledge about symptoms

All the symptoms related to cancer crevix were enlisted and all the women were interviewed about each factor and their answers were enlisted as 1. Yes 2.No 3. Don't know

Table.3. Questionare related to awareness about sympoms of cervical cancer.

Symptom	Yes (%)	No(%)	Dont know(%)
Inter menstrual bleeding	23(2.3)	889(88.9)	88(8.8)
Back ache	69(6.9)	831(83.1)	100(10)
Fowl smelling discharge	799(79.9)	134(13.4)	67(6.7)
Dysperunia	330(33)	444(44.4)	226(22.6)
DUB	619(61.9)	262(26.2)	119(11.9)

Post menopausal bleeding	758(75.8)	167(16.7)	75(7.5)
Pelvic pain	346(34.6)	493(49.3)	161(16.1)
Post coital bleeding	373(37.3)	404(40.4)	223(22.3)
Weight loss	525(52.5)	280(28)	195(19.5)
Blood in urine or stools	384(38.4)	294(29.4)	322(32.2)

Figure .3. Questionare related to awareness about symptoms of cervical cancer

Of all the symptoms majority(>75%) of women felt fowl smelling vaginal discharge and post menopausal bleeding as the main symptom.

Of the other symptoms 61.9 % women opted DUB as symptom, 52.5% women felt weight loss as a symptom, less than 40% women felt that dysperunia, pelvic pain, post coital bleeding and blood in urine or stools as symptom and less than 25% women felt inter menstrual bleeding and persistent low back pain as symptom. Though majority of women were aware of one or other symptom considering all symptoms the awareness was poor.

KNOWLEDGE REGARDING SCREENING

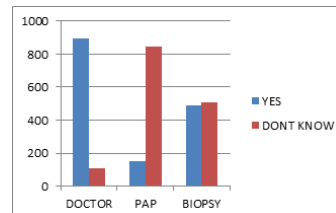
Table.4. Awareness about screening

Yes	444
No	556

Only 44.4 % women knew that screening procedures were available and they were analysed of each screening method majority were unaware of different screening methods. they just were aware of the term not the method.

Table .5.Questionare related to awareness about screening of cervical cancer

	Doctor	PAP	Biopsy
Yes	894	154	490
Dont know	106	846	510

Figure .5.Questionare related to awareness about Screening of cervical cancer

Of the 1000 women screened nearly 89.4% women felt that doctor consultation and examination can detect cancer and more than 84.6% women unaware of pap smear as ascreening method and less than 51% women biopsy can detect cancer.

ACCEPTANCE OF SCREENING TEST

Of the thousand all opted for gynaecological examination.

According to the per speculum examination findings the women were counselled for the screening test. Those with normal cervical findings were offered pap test and those with abnormal findings were offered biopsy.

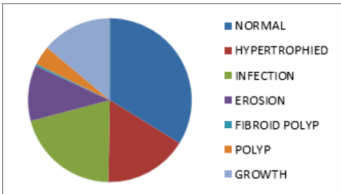
Of the total women 709(70.9%)had normal cervical findings and were advised for pap test and 117(11.7%) were not willing for the test and those who had infective discharge were given treatment and advised for follow up for pap smear. Some of them 110(11%) members lost follow up.

Those with abnormal cervical findings were advised for biopsy . of the 291 had abnormal cervical findings like polyp, fibroid polyp, erosion,growth. 30 were not willing for the test. The rest underwent biopsy.

Table .6per speculum findings

Clinical findings	number	%
Normal	338	33.8
Hypertrophied	165	16.5
Infection	206	20.6
Erosion	110	11
Fibroid polyp	4	0.4
Polyp	38	3.8
Growth	139	13.9

Figure .6per speculum findings



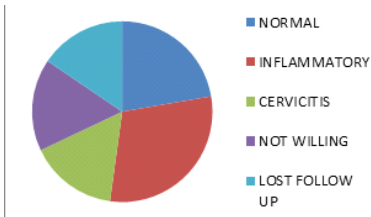
Of those with normal cervical findings(338,33.8% and those with hypertrophied (165,16.55) were offered pap test on the same day cervix and those with infection 206,20.6%were advised pap test at a later date after correcting infection.

PAPTEST STATISTICS

Table.7. Papa test findings

Findings	NUMBER	%
Normal	158	22.2
Inflammatory	212	29.9
Cervicitis	112	15.7
Not willing	117	16.5
Lost follow up	110	15.5

Figure.7. Papa test findings

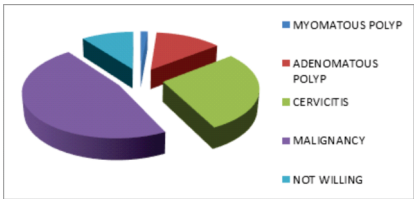


Of the women who were advised pap test i.e.,709, 117 were not willing for the test, and 110 members lost follow up, 212 women had inflammatory smear and 158 had normal findings and 112 had cervicitis.

Table .8. Biopsy findings.

Findings	Number	%
Myomatous polyp	4	0.1
Adenomatous polyp	38	13.05
Cervicitis	82	28.17
Malignancy	137	47.07
Not willing	30	10.3

Table .8. Biopsy findings.



Of those 291 women with abnormal cervical findings30 were not willing for biopsy and 137 malignant cases were detected and 82 women had cervicitis and 4 women had myomatous polyp and 38 women had fibroid polyp as their biopsy findings.

DISCUSSION

The knowledge level about cervical cancer was low among the participants inspite of the introduction of National Cancer Control Programme in India. This is probably because the primary health care facilities are often over burdened and under resourced [13]. However, there was a positive attitude to screening as all the respondents agreed to vaginal examination by a health practitioner even when they did not have symptoms and also agreed to screening when given the opportunity. Cervical cancer exposes the vulnerability of poor, uneducated women often living in underserved areas reflective of poor access to health care.

The present study was conducted among women of rural india in order to evaluate their knowledge regarding cervical carcinoma.

In our study, Considering the age as arisk factor seperately when the women were asked which age is at risk of cancer cervix 10% did not have any idea and 73% women felt advanced age is at risk and only 1.2 % women felt reproductive age being the risk factor.

Of the risk factors more than 50% women felt that promiscuous behaviour of one or both part ners as the main risk factor and less than 50% of women knew that HPV,STD, HIV,Early marriage and smoking as risk factors, while in a study of Ali et al [9], 45% mentioned multiple partners and other promiscuous behaviour as the most common risk factor. In a study carried out by McCarey et al [10], 41% of nurses mentioned multiple sexual partners as a risk factor for cervical cancer.

In the present study, Of all the symptoms majority(>75%) of women felt fowl smelling vaginal discharge and post menopausal bleeding as the main symptom .Of the other symptoms61.9 % women opted DUB as symptom, 52.5% women felt weight loss as a symptom, less than 40% women felt that dysperunia,pelvic pain, ,post coital bleeding and blood in urine or stools as symptom and less than 25% women felt inter menstrual bleeding and persistant low back pain as symptom., while in a study by Nganwai et al [7], 77.7 and 92.4% knew that common symptoms of cervical cancer include post-coital bleeding, inter-menstrual bleeding and abnormal leucorrhoea or bloodstained vaginal discharge. A similar finding (menstrual abnormality –80.6%) was found in a study by Anya et al [8] among female health personnel.

In the present study, knowledge regardscreening methods of the 1000 women screened nearly 89.4% women felt that doctor consultation and examination can detect cancer and more than 84.6% women unaware of pap smear as ascreening method and lees than51% women biopsy can detect cancer.similar findings (83%) were documented in a study carried out by Mutyaba et al [11]. In a study by Ali et al [9], 75% knew that Pap smear is the screening test for cervical cancer.

In the present study,482(67%)women accepted screeing in a study by Udigwe [14]. In a study carried out by Nganwai et al [7], 56.4% underwent Pap smears every year.

Of the women who were advised pap test i.e.,709, 117 were not willing for the test, and 110 members lost follow up, 212 women had

inflammatory smear and 158 had normal findings and 112 had cervicitis. Of those with normal cervical findings (338, 33.8%) and those with hypertrophied (165, 16.55%) were offered pap test on the same day. Cervix and those with infection (206, 20.6%) were advised pap test at a later date after correcting infection. Of those 291 women with abnormal cervical findings, 30 were not willing for biopsy and 137 malignant cases were detected and 82 women had cervicitis and 4 women had myomatous polyp and 38 women had fibroid polyp as their biopsy findings.

With the prevalence of being attached to the Viswabharathi Cancer Hospital, all the 137 women who were identified with carcinoma cervix were offered the appropriate treatment.

FINAL CONCLUSION

Women in this community were ignorant about risk factors, signs and symptoms, and early detection measure of this particular cancer. Consequently, the uptake of cervical cancer screening services was very low. Our study recommends an urgent need to educate women in the community on different aspects of cervical cancer. Special efforts would be required for the core group of illiterate women for a better impact on screening acceptance. We recommend the establishment of policy guidelines for enhancement of knowledge among women for cervical cancer.

Also utilization of the services of media like television, newspaper and radio can have massive impact in improving the knowledge.

REFERENCES

1. Ferlay J, Bray F, Pisani P, Parkin DM. Cancer Incidence, Mortality and Prevalence Worldwide, GLOBOCAN 2002. IARC Cancer Base No. 5 Version 2.0. Lyon: IARC, 2004.
2. Drain PK, Holmes KK, Hughes JP, Koutsky LA. Determinants of cervical cancer rates in developing countries. *Int J Cancer* 2002;100:199-205.
3. Sankaranarayanan R, Budukh AM, Rajkumar R. Effective screening programmes for cervical cancer in low- and middle-income developing countries. *Bull World Health Organ* 2001;79:954-62.
4. Miller AB. Cervical Cancer Screening Programmes: Managerial Guidelines. Geneva: World Health Organization; 1992.
5. Moyer VA; U.S. Preventive Services Task Force. Screening for cervical cancer: U.S. Preventive services task force recommendation statement. *Ann Intern Med* 2012;156:880-91, W312.
6. Bingham A, Drake JK and LaMontagne DS (2009) Sociocultural issues in the introduction of human papillomavirus vaccine in low-resource settings *Arch Pediatr Adolesc Med* 163:455-617.
7. Nganwai P, Trudpon P, Inpa C, Sangpetngam B, Mekjarasnapa M et al (2008) Knowledge, attitudes and practices vis-a-vis cervical cancer among registered nurses at the Faculty of Medicine, Khon Kaen University, Thailand *Asian Pac J Cancer Prev* 9:15-18.
8. Anya SE, Oshi DC, Nwosu SO et al (2005) Knowledge, attitude and practice of female health professionals regarding cervical cancer and Pap smear *Niger J Med* 14:283-6.
9. Ali SF, Ayub S, Manzoor NF, Azim S, Afif M et al (2010) Knowledge and awareness about cervical cancer and its prevention amongst interns and nursing staff in tertiary care hospitals in Karachi, Pakistan *PLoS ONE* 5(6): e11059. DOI: 10.1371/journal.pone.0011059.
10. McCarey C et al (2011) Awareness of HPV and cervical cancer prevention among Cameroonian healthcare workers. *BMC Women's Health* 11:45. <http://www.biomedcentral.com/1472-6874/11/45>
11. Mutyaba TF, Mmiro A et al (2006) Knowledge, attitudes and practices on cervical cancer screening among the medical workers of Mulago Hospital, Uganda *BMC Med Educ* 6:13.
12. Adewole IF, Benedet JL, Crain BT, Follen M. Evolving a strategic approach to cervical cancer control in Africa. *Gynecol Oncol* 2005;99:5209-12.
13. Tsu VD, Pollach AE. Preventing cervical cancer in low resource settings: How far have we come and what does the future hold? *Int J Gynaecol Obstet*. 2005;89:555-9.
14. Udigwe GO (2006) Knowledge, attitude and practice of cervical cancer screening (pap smear) among female nurses in Nnewi, South Eastern Nigeria *Niger J Clin Practice* 9(1):40-43.