



## AWARENESS AND KNOWLEDGE OF CERVICAL CANCER AND ITS PREVENTION IN A TERTIARY HEALTH INSTITUTE IN MYSORE, KARNATAKA, INDIA

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### ABSTRACT

**BACKGROUND:** Carcinoma of the cervix is the most common genital cancer encountered in clinical practice in India (80%) & it accounts for 15% of all cancers in females. It is the second most common cancer in women worldwide. Screening programs & vaccines are effective at reducing the incidence of cervical cancer. Awareness regarding cervical cancer is quite low amongst Indian women. Hence it is necessary to make general public aware of cervical cancer for its prevention.

### OBJECTIVES:

- 1) To determine the information of the knowledge on risk factors of cervical cancer as well as awareness of the related symptoms
- 2) To explore the attitudes among general population in terms of cervical cancer screening programs such as Pap smear.
- 3) To find out the behaviour of respondents regarding prevention of cervical carcinoma.

**MATERIALS AND METHODS:** A structured self administered questionnaire based survey was done on 100 patients visiting gynaecology OPD at Cheluvamba Hospital, Mysore, Karnataka, containing demographics, knowledge about cervical cancer, its risk factors, screening technique (PAP smear) & attitude towards cervical cancer vaccines.

**KEYWORDS :** Cancer awareness - cervical cancer – PAP test

### INTRODUCTION

Cervical cancer is a deadly disease once it reaches the invasive stages, but out of all the female genital tract cancers, it is the only preventable cancer if detected at its early stages. In developed countries, programmes are in place which enable women to get screened, making most pre-cancerous lesions identifiable at stages when they can easily be treated. Early treatment prevents up to 80% of cervical cancers in these countries.

In developing countries, limited access to effective screening means that the disease is often not identified until it is further advanced and symptoms develop. In addition, prospects for treatment of such late-stage disease may be poor, resulting in a higher rate of death from cervical cancer in these countries. With an estimated 530 000 new cases in 2012 representing 7.5% of all female cancer deaths, more than 270 000 deaths from cervical cancer every year, more than 85% of these occur in less developed regions<sup>1</sup>.

The high mortality rate from cervical cancer globally (52%) could be reduced by effective screening and treatment programmes.

A recent qualitative study<sup>2</sup> 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<sup>3,4</sup>.

Conventional cytology based screening with pap smear test developed by George Papanicolaou has been the mainstay of cervical cancer prevention worldwide since the 1950's. They require multiple visits by the women for various reasons like screening, obtaining the results follow up investigations and treatment in case of abnormal smears. Thus, despite the low consumable cost, high quality cytology is expensive in absolute terms and may not necessarily be the most cost-effective option for screening<sup>5</sup>. PAP test has repeatedly demonstrated good specificity ranging from 86% to 100%<sup>6</sup>. Cytology based screening programmes are labor intensive and logistically burdensome. Chronic infection with oncogenic HPV is a necessary, but insufficient cause for the development of cervical cancer. Presence of Co-factors such as high parity smoking nutritional deficiency, hormonal contraceptive use and presence of other sexually transmitted infections increases the risk. Population-based screening with Pap smear is an important secondary preventive measure for cervical cancer that leads to a high cure rate among cervical cancer patients. The facilities to carry out Pap smear are available in the institute where the study has been carried out.

### MATERIALS AND METHODS

A cross-sectional study was carried out among 100 patients attending

the gynaecology OPD at Cheluvamba Hospital, Mysore, Karnataka, India in February 2018. Verbal-informed consent was sought from the study subjects. A 15-item structured questionnaire was designed. The patients were interviewed by the investigator for seeking information about the socio-demographic profile of the respondents, their knowledge about symptoms, risk factors and prevention, their attitude and utilization of Pap smear as a screening device for carcinoma cervix, their knowledge and attitude towards vaccines for cervical cancer. Results were compiled using appropriate statistical methods.

### RESULTS

Out of 100 cases, 40 cases belonged to the age group of 40-49 years (table 1). The mean age of the study population was 45.5 years. The majority of respondents were unemployed (69) and married (78) (Table 2). 82% of the patients were educated (Table 3). 47% of respondents had some knowledge of cervical carcinoma. As per information regarding awareness about the risk factor for cervical cancer, 39 (82.9%) cases gave positive response (Table 5). Out of 47 patients, only 26 were concerned about having cervical cancer. Out of 47 respondents who had some knowledge regarding cervical carcinoma, 44 patients were aware of PAP smear test but only 28 patients had undergone PAP smear in the past (table 4). Out of 39 patients who were aware of the risk factors for cervical cancer, 33 respondents were aware of family history as risk factor and 12 and 7 respondents knew poor personal hygiene and multiple sexual partners as risk factors respectively (table 5). Only 2 respondents were aware of HPV virus as the causative factor for cervical cancer and only 1 respondent had knowledge about vaccine for cervical cancer (table 4).

**Table 1-Age**

Age (years)	No. Of cases	Percentage (n=100)
<30	20	20
30-39	15	15
40-49	40	40
>50	25	25

**Table 2- Occupation And Marital Status**

Occupation	No. Of cases	Percentage (n=100)
Student	9	9
Employed	22	22
unemployed	69	69
Marital status		
single	5	7
Married	78	78
widow	17	17

**Table 3- Education Status**

Education	No. Of cases	Percentage (n=100)
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Professional	0	0
Graduate	5	5
Intermediate/Higher secondary [11-12thStd]	7	7
Secondary school[5-10 <sup>th</sup> Std]	43	43
Primary School[1-4 <sup>th</sup> Std]	27	27
Illiterate	18	18

**Table 4- Knowledge About Cervical Cancer**

Variable	No. Of cases-yes	No. Of cases- no
Cases aware of cervical cancer	47	53
Concern about having cervical cancer	26	21
Risk factor awareness	39	8
HPV virus awareness	2	98
Awareness of PAP smear	44	56
Undergone PAP	28	72
Awareness of cervical cancer Vaccine	1	99

**Table 5- Risk factors for cervical cancer**

Risk factor	Yes (n=39)	percentage
Smoking	2	5.1
Oral Contraceptive pills	5	12.8
Multiparity	0	0
Early Pregnancy	3	7.6
Family history of Cervical Cancer	33	84.6
Early age of coitus	0	0
Multiple sexual partner	7	17.9
Poor personal hygiene	12	30.7
Sexually transmitted disease [HIV]	5	12.8

## DISCUSSION

The present study was conducted among patients attending gynaecology OPD at Cheluvamba hospital in order to evaluate their knowledge regarding cervical carcinoma. 47% of the subjects had some knowledge related to cancer of the cervix.

In our study, only 39 cases were aware of the risk factors out of which, 84.6% said family history as the major risk factor for cervical cancer which is higher than the result of as per the study of Arunadevi et al<sup>3</sup> that said only 6%.

In our study, only 17.9% mentioned multiple sexual partners as one of the risk factors which is on a higher range compared to the study of H N Harsha kumar et al<sup>9</sup> which mentioned 15.7%, while in a study of Ali et al<sup>6</sup>, 45% mentioned multiple partners and other promiscuous behaviour as the most common risk factor. In our study 12.8% of the respondents knew oral contraceptives as the risk factors which is lower than the study of V shah et al<sup>10</sup> which said 17.8%.

Only 44% had knowledge of PAP smear according to our study, but 83% were documented in a study carried out by Mutyaba et al<sup>7</sup> and 88.4% of the study group were aware of PAP smear as per the study of V Shah et al<sup>10</sup>

28 out of 100 (28%) cases had undergone PAP smear in our study but, 56.4% had undergone PAP smear according to Nganwai et al<sup>4</sup> but Only 6 out of 83 (7.2%) women had undergone PAP smear according to HN Harsha kumar et al<sup>9</sup> and 5% according to the study of V shah et al<sup>10</sup>.

The overall awareness about cervical cancer, its causative factors and the risk factors and knowledge about cervical cancer vaccine among the cases in our study was less. Hence, there should be efforts to set up awareness clinics and educate the women through doctors and nursing staff regarding awareness of cervical cancer and its prevention.

## CONCLUSION

Our data suggest that levels of knowledge and understanding of cervical cancer and its screening and prevention is low. There is a need for community-based study to know the practices of doctors and assess if they are educating the women about cervical cancer and its screening and whether they actually offered screening services to the eligible women who consulted them for any other health problem.

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