

AWARENESS OF CERVICAL CANCER AND PAP SMEAR AND IT'S UTILIZATION AMONG HEALTH CARE WORKERS IN MEDICAL COLLEGE, KOZHIKODE

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ABSTRACT: BACKGROUND: The benefits of cervical screening programmes in developed countries have been well documented. But deaths from cervical cancer are high in India due to low level of awareness about cervical cancer and screening. **AIM:** To determine the level of awareness of cervical cancer and Pap smear test and utilization of Pap test among health care workers in Government Medical College, Kozhikode. **MATERIALS AND METHODS:** This is a descriptive study conducted from January 1, 2014 to March 31, 2014 in the Government Medical College, Kozhikode, Kerala on women aged 21 to 65 years who were working as health care workers including nursing assistants and hospital attenders. They were randomly approached and data collected using a validated questionnaire. It included questions about demographic and fertility characteristics, level of knowledge of cervical cancer and Pap smear test and attitude towards Pap smear test and data was expressed in percentages. **RESULTS:** In our study majority were in the age group 36 to 55 years, 135(90%) and were married and living with husband 118(78.7%). Educational status in 65.3% was up to class 10.93. 3% had 1 to 3 children. About 30.7% had heard about cervical cancer from hospital. Regarding the awareness of Pap smear, 38.7% heard about Pap smear from the hospital. 46.7% had never heard about Pap smear. 7.3% of the women said that cervical cancer was preventable but were not aware of treatment and 8.7% said that it can be treated. 44.7% of the respondents believed that cervical cancer can be prevented and was also treatable. 48% knew that regular Pap smear screening can prevent cervical cancer. Only 6.7% were aware that Human Papilloma virus infection can lead to cancer and they knew that HPV vaccine can be given to prevent Human Papilloma virus infection. 31.3% identified multiple sexual partners as the important risk factor. Regarding the utilization of Pap smear, 30.7% had at least one Pap smear. Only 8.7% reported they had regular Pap screening and 84% of the respondents were willing to undergo Pap smear test in the future. **CONCLUSIONS:** In developing countries, women's knowledge of cervical cancer is limited. We have to educate women about risk factors of cervical cancer and benefits of screening using Pap smear test and improve acceptability by providing accurate information and provide appropriate treatment.

KEYWORDS: Cervical cancer, Pap smear, awareness, prevention.

INTRODUCTION: Cervical cancer is a leading cause of cancer related deaths in developing countries. A key factor linked to the relatively high incidence of cervical cancer in these populations is a lack of awareness and access to preventive methods. It accounts for 12% of all cancers and global data have revealed an estimated 466, 000 new cases annually. Cervical cancer

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results from infection with human papilloma virus, commonly serotypes 16 and 18. This results in transformation of the cervical epithelial cells, first to precancerous lesions and then to cancer. This cancer can be prevented because of the long preinvasive period and its prevention and early detection by screening tests. The age standardised mortality rate in developing countries is 9.6 per 100,000 women, which is twice the rate in developed countries. This disparity can be attributed in part to lack of effective cytological screening programmes. The Papanicolaou smear is a reliable, inexpensive and the most widely recognized early detection test for cervical cancer. Active participation of the target population is required for the success of the screening programmes. Benefits of cervical cancer screening programmes in developed countries are well documented. The Pap test can accurately and inexpensively detect up to 90% of cervical cancers even before symptoms develop, with the result that the mortality associated with this type of cancer has been reduced by more than 50% since Pap tests were introduced in developed countries. Denmark recorded a 25% decline in mortality following 40% coverage. In Norway, 5% coverage achieved a 10% fall in mortality. In India deaths from cervical cancer are still high since there is a low level of awareness about cervical cancer and screening for cervical abnormalities.

MATERIALS AND METHODS: This study was carried out on 150 women working as health care workers in Government Medical College, Kozhikode from January 1, 2014 to March 31, 2014. Data were collected using face to face interviews using a structured questionnaire. The questionnaire included 27 questions about participants' demographic and fertility characteristics, questions to assess the level of knowledge regarding Pap smear test and cervical cancer and attitudes towards Pap smear. All participants gave informed consent before participation.

RESULTS: We studied 150 women working as nursing assistants and attenders in Government Medical College, Kozhikode in the age group 21 to 65 years. Majority were in the age group 36 to 55 years 135(90%). Only 12(8%) were between 21 and 35 years and 3(2%) above 55 years. Most of the participants were married and living with husband 118(78.7%). 21.3% were widows or divorced. Regarding educational level, 65.3% studied up to class 10. Majority of our study population were Hindus 89.3% (Table I). 93.3% had 1 to 3 children. Only one case had 4 children. 6% had no children. All our respondents had only one life partner. (Table II) Regarding awareness of cervical cancer 30.7% had heard about it from the hospital. The next source of information was the media. 39.3% had never heard about cervical cancer. As far as awareness of Pap smear was concerned 38.7% heard about Pap smear from the hospital and 46.7% never heard about Pap smear (Table III). 45.3% of the women said that cervical cancer was preventable and 8.7% said that it can be treated. 44.7% of the respondents believed that cervical cancer was preventable and treatable. 48% knew that regular Pap smear screening can prevent cervical cancer. 6.7% were aware that Human Papilloma virus infection can lead to cancer and they had heard that HPV vaccine can be given to prevent Human Papilloma virus infection (Table IV).

When asked about the risk factors of cervical cancer, 31.3% identified multiple sexual partners as the important risk factor, the source of information being the media, hospital and awareness classes. Other risk factors identified were early onset of sexual activity by 22.7% and

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HIV/AIDS by 18.7%. High parity and cigarette smoking were identified by 7.3% each (Table V). Only 5 women revealed that their male partner had multiple sexual partners. When asked about awareness of signs and symptoms of cervical cancer to those who had heard about cervical cancer, 12(13.2%) responded that it will be asymptomatic, 64(70.3%) knew that abnormal vaginal bleeding will be present and 15(16.5%) were of the opinion that cancer cervix will be asymptomatic initially and could be diagnosed only in an advanced stage. When asked about the utilization of Pap smear, 30.7% had at least one Pap smear. Only 8.7% reported that they had regular Pap screening. 84% of the respondents were willing to undergo Pap smear test in the future. Others reported being anxious about a positive result or felt the procedure was embarrassing or they were not at risk for having cervical cancer (Table VI).

DISCUSSION: In our study majority were in the age group 36 to 55 years, 135(90%), similar to the study by Nguyen TT where the mean age was 45 years.¹ The mean age was 33 years in the study by Ertem G.³ Most of the participants were married and living with husband 118(78.7%) similar to study by Chamani SR where 93% were house wives². Considering their educational level, 65.3% studied up to class 10 and 34.7% had education above class 10. So the lower level of awareness may be related to the lower level of educational status. In the study by Donta B, education of higher secondary and above was found in only 19.5%.⁴ Majority of our study population were Hindus (89.3%) since Hindus constitute 58.79% of the total population in Kozhikode district. In study by Hyacinth HI, 99% of the study population were Christians.⁷

In our study 93.3% had 1 to 3 children. Only one case had 4 children. 6% had no children. This is in contrast to the study by Hyacinth HI, where 64.1% had 4 to 6 children. About 30.7% had heard about cervical cancer from the hospital. The second common source of information was the media. 39.3% had never heard about cervical cancer. Regarding the awareness of Pap smear, 38.7% heard about Pap smear from the hospital. 46.7% had never heard about Pap smear. In a study by Javanmanesh F, the source of knowledge were physicians, obstetricians and health care workers (61%) family and friends (13.5%), books and magazines (13.1%) and TV and radio (12.4%).⁸ 7.3% of the women said that cervical cancer was preventable but were not aware of treatment and 8.7% said that it can be treated. 44.7% of the respondents believed that cervical cancer can be prevented and was also treatable. In study by Hyacinth HI, 12.5% believed that it can be treated and 45.6% believed that it can be prevented.⁷ 48% knew that regular Pap smear screening can prevent cervical cancer. Only 6% were aware that Human Papilloma virus infection can lead to cancer and 6.7% had heard about HPV vaccine given to prevent Human Papilloma virus infection. This is in contrast to the study by Wong LP, where none of the respondents had heard about Human Papilloma virus.⁵ When asked about the risk factors of cervical cancer, 31.3% identified multiple sexual partners as the important risk factor. Other risk factors identified were early onset of sexual activity by 22.7% and HIV/AIDS by 18.7%. High parity and cigarette smoking was identified by 7.3% each. In a study by Hyacinth HI, 27.6% identified having multiple sexual partners as a risk factor. Early coitarche (20.3%) cigarette smoking (17.2%), having a sexually transmitted disease/infection (14.7%), oral contraceptive use (9.9%), high parity (5.7%) and HIV/AIDS (1.7%) were other factors identified.⁷ Regarding the awareness of the signs and symptoms of cervical cancer, 64(70.3%)

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knew that abnormal vaginal bleeding will be present and 15(16.5%) were of the opinion that cancer cervix will be asymptomatic initially and could be diagnosed only in an advanced stage. When asked about utilization of Pap smear, 30.7% had at least one Pap smear. In the study by Chamani SR, only 21.7% had a Pap smear at least once in their life.² Only 8.7% reported they had regular Pap screening. This was in contrast to the study by Hyacinth HI, where utilization of Pap smear test was 10.2% and 76.5% of whom who ever had a Pap test had reported a regular screening pattern.⁷ It was encouraging to note that 84% of the respondents were willing to undergo Pap smear test in the future.

CONCLUSION: The awareness of cervical cancer and Pap smear screening was unacceptably low among health care workers in our study population. It is essential that all health providers consider every contact with the women as an opportunity to educate and encourage them to do regular Pap smear. It is important to provide accurate information about cervical cancer and the purpose of Pap smear screening when designing interventions aimed at improving cervical cancer screening. Health care workers have to be targeted first since they play a very important role in screening programmes.

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		Number	Percentage
Age in years	21-35	12	8
	36-55	135	90
	>55	3	2
Marital status	Married	118	78.7
	Widow /divorced	32	21.3
Educational status	Upto tenth class	98	65.3
	Above tenth class	52	34.7
Religion	Hindu	134	89.3
	Muslim	12	8
	Christian	4	2.7

Table 1: Sociodemographic characteristics

		Number	Percentage
Number of children	1-3	140	93.3
	4-6	1	0.7
	0	9	6
Number of sexual partners	1	150	100
	>1	0	0
Sexual behaviour of male partner	Single partner	145	96.7
	Multiple partners	5	3.3

Table 2: Fertility characteristics

		Number	Percentage
Cervical cancer	Media	21	14
	Hospital	46	30.7
	Relatives	1	0.7
	Awareness class	13	8.7
	Media and hospital	10	6.7
	Not heard	59	39.3
Pap smear	Media	7	4.7
	Hospital	58	38.7
	Awareness class	11	7.3
	Media and hospital	4	2.7
	Not heard	70	46.7

Table 3: Heard about cervical cancer and Pap smear?

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	Number	Percentage
Can cervical cancer be prevented but not aware of treatment?	11	7.3
Can cervical cancer be treated?	13	8.7
Can cervical cancer be prevented and treated?	67	44.7
Can regular pap smear prevent cervical cancer?	72	48
Aware that Human papilloma virus leads to cancer	10	6.7
Aware of HPV vaccine	10	6.7

Table 4: Awareness of treatability and preventability of cancer cervix

	Number	Percentage
Multiple sexual partners	47	31.3
Early onset of coitus	34	22.7
STD/STI/HPV	9	6
High parity	11	7.3
HIV/AIDS	28	18.7
Cigarette smoking	11	7.3

Table 5: Awareness of risk factors of cervical cancer

	Number	Percentage	
Have you ever had a pap smear?	46	30.7	
How regular is your pap smear?	Regular	13	8.7
	Irregular	33	22
Willing for pap smear?	Willing	126	84
	Not willing	11	7.3

Table 6: Pap smear utilization

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