VOLUME-9, ISSUE-1, JANUARY-20	20 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra				
South FOR Reserve	Original Research Paper Obstetrics & Gynaecology				
international	EVEL OF AWARENESS TOWARDS CERVICAL CANCER AMONG WOMEN TTENDING OBSTETRICS AND GYNAECOLOGY DEPARTMENT: A CROSS- SECTIONAL, HOSPITAL-BASED SURVEY IN CENTRAL INDIA				
Dr. Nishi Mitra	Assistant Professor, Department of Obstetrics & Gynaecology , L.N Medical College & Research Centre, Bhopal, Madhya Pradesh.				
Dr.Archana Meravi*	Senior Resident, Department of Obstetrics & Gynaecology, Gandhi Medical College, Bhopal, Madhya Pradesh. *Corresponding Author				
ABSTRACT INTRODUCTION: Cervical cancer-related mortality among women are mostly due to diagnosis of					

disease in advanced stage. Knowledge about disease and early screening is the most effective measure for cervical cancer prevention. Lack of awareness, negative attitude, and poor practice about cervical cancer and screening are the major causes to increase the incidence of disease.

AIM: The study was designed to assess the level of awareness towards cervical cancer, screening, and prevention.

**MATERIALS AND METHODS:** A total of 400 subjects were enrolled and subjected for interview using pre-validated KAP questionnaire on cervical cancer. Descriptive statistics were used to represent the sociodemographic characteristics and KAP levels. Association of sociodemographic variables with KAP levels is determined using Chi-square test.

**RESULTS AND DISCUSSION:** Most of the respondents had heard about cervical cancer and majority of them had heard from media and peer groups. About two-third women knew symptoms, risk factors, screening methods and preventive measures for cervical cancer. More than half of the women were having positive attitude toward screening. Majority of the population (more than three-fourth) were not practicing cervical cancer screening. Sociodemographic characteristics were strongly associated with KAP levels.

**CONCLUSION:** Although women were having good knowledge, positive attitude toward cervical cancer screening and prevention, still there is a gap to transform it into practice. There is a need for more educational programs to connect identified knowledge slits and upliftment of regular practice of cervical cancer screening.

# KEYWORDS : Attitude, knowledge, practice, prevention, cervical cancer, screening.

# INTRODUCTION

In India, cervical cancer is one of the most common causes of cancer-related deaths. According to National Institute of Cancer Prevention and Research, one woman dies of cervical cancer every 8 minutes in India.[1] Cervical cancer is the third largest cause of cancer mortality in India accounting for nearly 10% of all cancer-related deaths in the country.[2] The average 5-year survival rate is 48.7%. Length of survival depends on cancer stage at the time of diagnosis. The survival rate of a person becomes better if the cervical cancer is diagnosed and treated at earlier stages. Most cases of cervical cancer in India are diagnosed at advanced stages which will reduce the survival rate of women with cervical cancer. The prime reason for late stage diagnosis of disease is a lack of awareness about screening and preventive methods of cervical cancer. Unfortunately, there are various obstacles to screen cervical cancer that includes lack of awareness and misconceptions about female cancers and gynaecological diseases, socioeconomic limitations, and overall lack of national cervical cancer screening guidelines and policies. The prevention and control of cervical cancer depend on awareness about disease, screening procedures and preventive measures. There is a lack of information regarding knowledge, attitude, and practice (KAP) toward cervical cancer and its screening, hence this study was conducted. This study aims to assess the level of awareness toward cervical cancer and its screening among women attending obstetrics and gynaecology department of tertiary hospital and to measure the association between sociodemographic characteristics with KAP toward cervical cancer.

## **MATERIAL & METHODS**

This was a hospital-based cross-sectional study which was conducted in Outpatient Department of Obstetrics and Gynaecology of tertiary care centre of Bhopal,Madhya Pradesh, India from February 2019 to November 2019.Women who were aged 18 years or above attending obstetrics and gynaecology unit and willing to participate in the study were included in the study. Women who were mentally and critically ill and diagnosed with cervical cancer were excluded from the study. To determine the number of women to be included in the study, single population proportion formula was used with assumption of 50% of women have optimal knowledge, 95% confidence interval, and 5% precision, which was calculated as 384. Final sample size with 5% nonresponse rate was 400. All women who met study criteria were included and interviewed using pre-validated questionnaire about cervical cancer, screening, and prevention.

The questionnaire comprised four parts to gather information regarding sociodemographic characteristics of study population and KAP toward cervical cancer and screening. The sociodemographic details included were age, gender, location, religion, marital status, parity, level of education, income, and usage of contraceptive.

The knowledge of cervical cancer, screening, and its prevention was assessed using 16-point scale. There were 19 knowledge-related multiple choice questions that carried 16 correct answers. Each correct answer was given a point of 1 and wrong answer a point of 0.

Attitude was assessed by putting four statements regarding risk factors and screening of cervical cancer on Likert's scale; each statement having points ranging from 1 to 5 (1=strongly disagree to 5=strongly agree). The maximum score expected was 20 and minimum 4. All those scoring  $\geq$ 10 were considered as positive attitude otherwise negative attitude was recorded. Practice was assessed by response toward screening for cervical cancer in the past 5 years. If the respondents were screened within the past 5 years, they were considered as regular practice, those who were screened more than 5 years ago were considered as irregular practice, and those who were never screened were considered as no practice.

SPSS Version 22 (Armonk, NY: IBM Corp) was used for analysis.Means, standard deviation, and median were estimated, and student's t-test were used to evaluate differences between means, according to independent variables. Chi-square and ANOVA tests were applied. Multivariate analysis of variance was used to examine group differences in response to the scale data (total risk score and total symptom score). Adjusted variable were included in the multiple analyses based on their potential confounding effect and p-valued on univariate analyses. Univariate and multivariate linear regression analyses were used to estimate the association.

## RESULTS

Mean age of presentation was 34years. The results were analysed and tabulated as below.

Table 1-Knowledge about cervical cancer and its screenin	g
among respondents (n=400)	

Variable	Frequency (%)		
Aware about cervical cancer	78		
Source of information			
Media	45		
Peer groups	25		
Family members	4		
Medical personal	4		
Other sources	-		
Knowledge of symptoms of cervical cancer	67		
Intermenstrugt bleeding	34		
Foul smolling dischargo	01		
Post soits blooding	27		
Post-collar bleeding	20		
It is a set of the set	<u>21</u>		
	18		
Backache and abd.pain	31		
Swelling in legs	22		
Do not know	23		
Knowledge of risk factors of cervical	65		
	00		
Having multiple sexual partners	23		
Acquiring HIV	28		
Cigarette smoking	21		
Parity and age at first birth	15		
Use of OCP	12		
Poor menstrual hygiene	17		
Multiple pregnancies	7		
Do not know	34		
Knowledge of preventive measures of	68		
cervical cancer			
Avoid multiple partners	32		
Avoid early sexual intercourse	29		
Vaccination against HPV	12		
Quit smoking	20		
Avoid birth at young age	11		
Avoid use of OCP	6		
Do not know	38		
Knowledge about modalities of treatment	64		
available			
Chemotherapy	23		
Radiotherapy	6		
Surgery	45		
Alternative medicine	29		
Do not know	40		
Knowledge about screening tests of	69		
cervical cancer			
VIA	22		
VILI	23		
Pap Smear	40		
Others	26		
Explanation of cervical	68		
cancer screening test			
Knowledge about persons who must	79		
undergo screening			

Women age 25 years and above	67
Women having multiple sexual partners	66
Elderly women	23
Do not know	48
Knowledge about screening frequency in	77
cervical cancer	
Once every year	5
Once every 3 years	45
Knowledge about HPV vaccination	67

Table 2-Attitude and practices about cervical cancer and its screening among respondents.

Variable	Frequency(%)
Cervical cancer is highly prevalent and	
leading cause of cancer associated	
morbidity	
Strongly agree	21
Agree	12
No knowledge	49
Disagree	23
Strongly disagree	6
Can you or any lady can acquire cervical	
cancer	
Strongly agree	23
Āgree	26
No knowledge	30
Disagree	12
Strongly disagree	8
Feeling of requirement to consult a doctor if	
there are signs of cervical cancer	
Strongly agree	45
Agree	23
No knowledge	21
Disagree	12
Strongly disagree	2
Does screening helps in prevention of	
cervical cancer	
Strongly agree	23
Agree	22
No knowledge	40
Disagree	12
Strongly disagree	6
Practice towards cervical cancer screening	
Subjects screened for cervical cancer	15
Screened within 5 years	6
Screened beyond 5 years	6.8
Never screened before	89

Table 3- Association of Sociodemographic characteristics with knowledge ,attitude and practice towards cervical cancer and its screening.

Variable	Total(n	Good		Positive		Regular	
	=400)	knowledge		attitude		practice	
		n(%)	$X^2$	n(%)	$X^2$	n(%)	$X^2$
Age(years)	•						•
<30	134	32	12.4	70	17.5	3	5.5
30-39	56	46	]	62		17	]
40-49	87	34	1	46		3	
>50	123	12	1	23		1	
Residence	•						
Rural	256	45	12.5	34	20.1	12	40.6
Urban	144	23	1	79		51	
Religion							
Hindu	108	34	5.9	23	4.5	22	1.2
Muslim	235	12	1	12		12	
Christian	23	45	1	32		43	1
Others	34	13	1	8		7	1
Marital status							

## VOLUME-9, ISSUE-1, JANUARY-2020 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Single	56	4	17.8	32	18.6	7	6.7
Married	312	34	1	28		6	1
Divorced	13	23	1	21		3	
Separated	10	19	1	12		2	
Others	9	8	1	2		2	1
Parity							
1-2	59	19	9.3	38	17	3	8.6
3-4	128	43		65		6	
>4	213	41		23		4	
Educational s	status						
Illiterate	189	67	16.8	34	19.7	2	34
Primary	106	45		57		6	
school							
Sec.school	80	43		65		12	
College	25	23		67		19	
Occupation							
Farmer	186	24	54	51	47	5.3	14.8
Housewife	129	49		58		5	
Student	77	69		87		12	
Trader	4	56		84		9.7	
Teacher	1	78		89		32	
Health care	1	89		88		38	
person							
Others	2	45		58		52	
Monthly income							
<10,000	173	25	75	56	17	5	25.4
10-20,000	145	31		57		7	
20-30,000	68	45		54		8	
>30,000	14	68	]	89		98	

## DISCUSSION

Cervical cancer is the most common cause of cancer-related deaths among women globally.Due to intensive screening programs, developed countries are reporting a significant drop in the incidence of cervical cancer.[3] Cervical cancer is a fatal disease once it reaches the advanced stages but out of all the female genitourinary tract malignancies, it is the only preventable cancer if detected in its early stages. Evidence from the epidemiological and molecular biological studies has established a strong association between human papilloma virus (HPV) serotypes 16 and 18 and cervical cancer.[4] HPV is responsible for more than 90% of invasive cancer and 80% of precancerous lesions in the cervix.[5]During the early stages of infection, HPV does not show any symptoms and signs, thus, the women do not know that they have been infected. For most women, HPV will go away on its own however, if it does not, over time, it causes cervical cancer.[6]

When women develop cervical cancer, they present with various symptoms, per vaginal discharge, lower abdominal pain, low backache, post coital bleeding, post menopausal bleeding, dyspareunia and vaginal bleeding.[7]

Since early detection predicts better prognosis, one of the most effective ways of preventing and controlling cervical cancer is regular screening and early diagnosis. Lack of effective screening programs aimed at detecting and treating precancerous conditions is a key reason for the much higher incidence of cervical cancer in developing countries. But even if intensive screening programs are designed, the success of these programs will depend on the knowledge and attitude of the women who receive them.[8]

The study found that more than quarter of the population had never heard about cervical cancer which is similar with results of studies conducted in developing and underdeveloped countries by Anorlu and Yifru and Asheber.[9, 10] However, these results are contrast with a study conducted by Chande HM et al. whose results show more than three-quarters of population having heard about cervical cancer.[11] In this study, media, friends, and family members are the principle information resources of cervical cancer, which is similar with findings of study conducted by Abdullahi et al.[12]

Our study found that more than half of proportion of women are aware of symptoms, risk factors, and preventive measures for cervical cancer. This is consistent with findings from a similar study conducted in Northern Uganda by Mukama et al.[13] Still there is a lack of awareness about cervical cancer in women residing at rural area, where there is a need to conduct campaigns to improve their knowledge regarding symptoms, risk factors, and preventive measures. Women who are aware about cervical cancer are expected to take up measures of prevention by seeking medical attention and early screening.[14]

Most of the women showed positive attitude toward cervical cancer. Women who are aware of symptoms, risk factors, and preventive measures showed positive attitude toward cervical cancer screening. Early screening and HPV vaccination will be helpful in prevention of cervical cancer. Some studies report that even providing of screening opportunities to women may not be utilised well due to some barriers such as fear of positive cervical cancer diagnosis, fear of cervical screening, and vaginal examination.[15] Continuous conducting of cervical cancer awareness programs will bring change in the attitude and perception of women toward cervical cancer screening.

The study findings show that more than half of the percentage of respondents are having knowledge about cervical cancer, screening, and preventive measures. Most of the women showed positive attitude toward cervical cancer screening, but still there is a gap between perception and practice. In this hospital-based, cross-sectional survey, prevalence of screening for cervical cancer was extremely low at 6.8%; it is close with the 5-year screening prevalence estimated for developing countries by the WHO (5%).[16]

The study found association between sociodemographic characteristics with adequate knowledge, positive attitude, and regular practice toward cervical cancer. We found that adequate knowledge and positive attitude were associated with seven sociodemographic characteristics: age, residing area, marital status, parity, level of education, occupation, and monthly income. Women aged between 30 and 39 years are having adequate knowledge and positive attitude in relation to other age groups, similar findings are observed in the study conducted by Ogunbode and Ayinde.[17] Women who are residing in urban and semi-urban area were strongly associated with adequate knowledge and positive attitude toward cervical cancer in comparison with women residing in rural area. These findings are parallel to study conducted by Lyimo and Beran.[18] Married women given birth to one or two children and finished secondary level of education are having adequate knowledge and positive attitude toward cervical cancer screening in relation to others. Women whose household income was <10,000 Indian Rupee (INR) and farmers were having poor knowledge and negative attitude toward cervical cancer and its screening. Women residing in rural area, college, or university level of education, healthcare worker, and household income more than 20,000 INR were having regular practices.

The degree of education is indirectly linked with the average income, knowledge and understanding of nature of the disease, its related risk factors and health education. Many studies in our investigated field have reported that literacy of women is considered as an independent risk factor for delayed diagnosis of the cancer.[19] Ma et al. also supports the findings of our study, that lower education (primary school education or illiterate) and low annual income were the high risk factors for delayed reporting of cervical cancer and a negative attitude toward cervical cancer screening.[20]

Our study provides insights into the KAP of women toward cervical cancer screening and attributable demographic characteristics. These data are useful to design educational program on cervical cancer screening and prevention to bring awareness in women. The major limitation was it is a hospitalbased survey conducted in resource-limited settings, so findings are not transferable to other settings.

#### CONCLUSION

Women with mentioned risk factors should be targeted for implementation of specialised educational programmes for improving knowledge and screening test. In addition, the findings of this study could serve as baseline information for planning further large studies and performing large scale educational programs for general population. The consequences will be early detection, proper management and reducing disease related mortality. Personal care, community education programs and socioeconomic support may help in their early presentation to the hospital for earlier detection and treatment and in providing better quality of life.

#### REFERENCES

- Sathiyalatha S, Hemavathy V, Vijayalakshmi R. Cervical cancer kills one Indian woman every 7 minutes. Int J Innov Res Dev 2015;4:132-4.
- Sharma A, Kulkarni V, Bhaskaran U, Singha M, Mujtahedi S, Chatrath A, et al. Profile of cervical cancer patients attending Tertiary Care Hospitals of Mangalore, Karnataka: A 4 year retrospective study. J Nat Sci Biol Med 2017;8:125-9.
- Elovainio L, Nieminen P, Miller AB. Impact of cancer screening on women's health. Int J Gynaecol Obstet 1997;58:137-47.
- Mishra GA, Pimple SA, Shastri SS. An overview of prevention and early detection of cervical cancers. Indian J Med Paediatr Oncol 2011;32:125-32.
- Kaarthigeyan K. Cervical cancer in India and HPV vaccination. Indian J Med Paediatr Oncol 2012;33:7-12.
- PATH (Program for Appropriate Technology in Health) (2000). Planning appropriate cervical cancer prevention programs. 2nd Edition. http:// www. path.org/publications/files/cxca-planning-appro-prog-guide.pdf
- Mosha, D., Mahande, M., Ahaz, J., Kitali, B. and Obure, J. (2009). Factors associated with management of cervical cancer patients at KCMC Hospital, Tanzania: A retrospective cross-sectional study. Tanzania Journal of Health Re-search,11
- Narayana G, Suchitra MJ, Sunanda G, Ramaiah JD, Kumar BP, Veerabhadrappa KV. Knowledge, attitude, and practice toward cervical cancer among women attending Obstetrics and Gynecology Department: A cross- sectional, hospital-based survey in South India. Indian J Cancer 2017;54:481-7.
- Anorlu RI. Cervical cancer: The sub-Saharan African perspective. Reprod Health Matters 2008;16:41-9.
- Yifru T, Asheber G. Knowledge, attitude and practice of screening for carcinoma of the cervix among reproductive health clients at three teaching hospitals, Addis Ababa, Ethiopia. Ethiop J Reprod Health 2008;2:1-6.
- Chande HM, Kassim T. Assessment of women's knowledge and attitude towards carcinoma of the cervix in Ilala Municipality. East Afr J Public Health 2010;7:74-7.
- Abdullahi A, Copping J, Kessel A, Luck M, Bonell C. Cervical screening: Perceptions and barriers to uptake among Somali women in Camden. Public Health 2009;123:680-5.
- Mukama T, Ndeijo R, Musabyimana A, Halage AA, Musoke D. Women's knowledge and attitudes towards cervical cancer prevention: A cross sectional study in Eastern Uganda. BMC Womens Health 2017;17:9.
- Mutyaba T, Faxelid E, Mirembe F, Weiderpass E. Influences on uptake of reproductive health services in Nsangi community of Uganda and their implications for cervical cancer screening. Reprod Health 2007;4:4.
- Lim JN, Ojo AA. Barriers to utilisation of cervical cancer screening in Sub Sahara Africa: A systematic review. Eur J Cancer Care (Engl) 2017;26:1-9.
- Control of cancer of the cervix uteri. A WHO meeting. Bull World Health Organ 1986;64:607-18.
- Ogunbode OO, Ayinde OA. Awareness of cervical cancer and screening in a Nigerian female market population. Ann Afr Med 2005;4:160-3.
- Lyimo FS, Beran TN. Demographic, knowledge, attitudinal, and accessibility factors associated with uptake of cervical cancer screening among women in a rural district of Tanzania: Three public policy implications. BMC Public Health 2012;12:22.
- Shrivastava A, Yogi V, Singh OP, Mandloi V, Choudhary M(2018). The symptom to treatment delay in carcinoma cervix: where we stand among developing countries. IJSR2018:7;9:54-55.
- Ma J, Zhu Q, Han S, Zhang Y, Ou W, Wang H, Zhao J, Liu Z (2012). Effect of socio- economic factors on delayed access to health care among Chinese cervical cancer patients with late rectal complications after radiotherapy. Gynecol Oncol, 124, 395-8.