Research Article

A Study to Assess the Knowledge, Attitude, and Practice Regarding Cervical Cancer among Women Attending Obstetrics and Gynecology Outpatient Department at MGM Hospital, Aurangabad with View to Develop Information Booklet

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ABSTRACT

Aim: The aim of the study was to assess the knowledge, attitude, and practice (KAP) regarding cervical cancer among women visiting obstetrics and gynecology outpatient department (OPD). **Materials and Methods:** A descriptive study was conducted at MGM hospital, Aurangabad. About 140 women attending obstetrics and gynecology OPD were included in the study by non-probability purposive sampling technique. Data were analyzed using descriptive and inferential statistics. Paired "t"-test was used to assess the KAP regarding cervical cancer among women visiting obstetrics and gynecology OPD. **Results:** The results showed that majority of women respondents in study lacked in their knowledge regarding cervical cancer 92 (62.71%), poor attitude 77 (55%), and poor practice 83 (59.28%), while negative correlation between knowledge and practice (0.011298), knowledge and attitude (–0.03), and practice and attitude (–0.14025) was found. Hence, the result showed that women were not only lacking in knowledge but also had poor attitude and very few practice regular screening for early detection of cervical cancer. **Conclusion:** The findings of the present study indicated that women need to be educated regarding cervical cancer and its screening tests as they lack knowledge and positive attitude toward cervical cancer, where many more are still unknown and hesitant for practicing screening tests for cervical cancer.

Keywords: Cervical cancer, Human papilloma virus infection, Pap smear screening

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Introduction

Cancer is a disease process that begins when an abnormal cell is transformed by the genetic mutation of the cellular DNA. This abnormal cell forms a clone and begins to proliferate abnormally, ignoring growth-regulating signals in the environment surrounding the cell. The cells acquire invasive characteristics, and changes occur in surrounding tissues. The cells infiltrate these tissues and gain access to lymph and blood vessels, which carry the cells to other areas of the body. This phenomenon is called metastasis.[1]

Cervical cancer is a malignant neoplasm arising from cells originating in cervix uteri. It may be completely symptomatic or asymptomatic in early stages. Later in advanced stages, it may manifest as persistent pelvic pain, unexplained weight loss, bleeding between periods, unusual vaginal discharge, bleeding, and pain after sexual intercourse. Infection with human papilloma virus (HPV)

types 16 and 18 cause 75% of cervical cancer globally. Other risk factors may include tobacco consumption, multiple sexual partners, early age of sexual intercourse, increasing parity, prolonged use of oral contraceptive pills, and sexually transmitted diseases.[2]

Estimates of incidence and mortality of cervical cancer: A worldwide analysis in 2018 reported approximately 570,000 cases of cervical cancer and 311,000 deaths are occurred due to cervical cancer in year 2018. China and India together contributed more than a third of the global cervical burden, with 106,000 cases in China and 97,000 cases in India, and 48,000 deaths in China and 60,000 deaths in India.[3]

The knowledge and attitude of women toward the pap smear found to be low (i.e., 33%) and out of these hardly 10% women had correct information about pap smear in 2019. Whereas about 65% of the women said that they would have screen for pap smear, if they had known about it earlier. Despite the efforts from the medical fraternity and government, the number of women undergoing this test in Uttar Pradesh was founded as very minimal.[4]

Objectives of the study

The objectives are as follows:
1. To assess the knowledge level regarding cervical cancer among women attending Obstetrics and Gynecology outpatient department (OPD)
2. To assess the attitude regarding cervical cancer among women attending Obstetrics and Gynecology OPD
3. To assess the practice of women regarding cervical cancer among women attending Obstetrics and Gynecology OPD
4. To determine correlation between the knowledge, attitude, and practice (KAP) regarding cervical cancer and the demographic variables among women attending Obstetrics and Gynecology OPD
5. To find out the association between KAP regarding cervical cancer and the demographic variables among women attending Obstetrics and Gynecology OPD.

Assumptions

1. Women in reproductive age group may not have adequate knowledge, positive attitude, and screening practice regarding cervical cancer
2. The women in reproductive age group may have inadequate knowledge regarding cervical cancer and its prevention.

Materials and Methods

Research design

This study was a descriptive research design.

Setting of the study

The study was conducted at the Obstetrics and Gynecological OPD, Mahatma Gandhi Mission Hospital, Aurangabad.

Description of tool

The tool or the study instrument is divided into four parts.
- Part A: Socio-demographic variables
- Part B: Structured knowledge questionnaire regarding cervical cancer
- Part C: Attitude scale questionnaire regarding cervical cancer
- Part D: Practice check list regarding cervical cancer.

Population of the study

The accessible population of the study will be women attending Obstetrics and Gynecology OPD.

Sample size

The sample size for study selected was of 140 women who met with the inclusion criteria.

Sample technique

The sampling technique use in this study is non-probability purposive sampling technique.

Procedure for data collection

The study was carried out during February 2018 to April 2019 where 140 women attending obstetrics and gynecology OPD were selected by non-probability sampling technique.

Reliability of tool

The reliability of tool was calculated by Karl Pearson's correlation coefficient method and the reliability of study is 0.91 for the knowledge questionnaire and the tool was found to be reliable and feasible to conduct main study.

Statistics

Descriptive statistics

Frequency and percentage distribution were used to analyze the demographic data and assessment of the KAP regarding cervical cancer.

Inferential statistics

1. Paired "t" test was use to assess the KAP regarding cervical cancer among women

2. Chi-square test was use to study the association between the outcome of KAP regarding cervical cancer selected demographic variables.

Results

The data were entered into master sheet for tabulation and statistical processing the obtained data were analyzed, organized, and presented under the following headings:

Section A

This was distribution of respondents according to demographic variables.

Section B

This was distribution of respondents according to knowledge regarding cervical cancer.

Section C

This was distribution of respondents according to attitude regarding cervical cancer.

Section D

This was distribution of respondents according to practice regarding cervical cancer.

Section E

This was distribution of respondents according to association between the knowledge regarding cervical cancer and the demographic variables among women attending obstetrics and gynecology OPD.

Section F

This was distribution of respondents according to association between the Attitude Regarding Cervical Cancer and the Demographic Variables among Women Attending Obstetrics and Gynecology OPD.

Section G

This was distribution of respondents according to association between the Practices Regarding Cervical Cancer and the Demographic Variables among Women Attending Obstetrics and Gynecology OPD.

Table 1 shows that the majority of the respondents result were 59.28% in the age group of 30–40 years, 48.57% belonged to Hindu religion, 40% respondents received secondary education, 40.71% were housewives, 69.28% were married, 35% of women had three children's, 52.85% lived in nuclear family, 62.14% did not have any history of

Table 1: Distribution of respondents according to demographic variables (*n*=140)

Characteristics	Category	Respondents Frequency (%)
Age	30–40 years	83 (59.28)
	41–50 years	45 (32.14)
	51–60 years	9 (6.42)
	61 years and above	3 (2.14)
Religion	Hindu	68 (48.57)
	Muslim	49 (35)
	Christian	15 (10.71)
	Other	8 (5.71)
Education	Illiterate	20 (14.28)
	Primary	43 (30.71)
	Secondary	56 (40)
	Graduate	21 (15)
Occupation	Housewife	57 (40.71)
	Self-employed	23 (16.42)
	Private job	34 (24.28)
	Government job	26 (18.57)
Marital status	Unmarried	7 (5)
	Married	97 (69.28)
	Divorcee	15 (10.71)
	Widow	21 (15)
Number of children	One	38 (27.14)
	Two	41 (29.28)
	Three	49 (35)
	None	12 (8.57)
Type of family	Joint	43 (30.71)
	Nuclear	74 (52.85)
	Extended	23 (16.42)
Family history of cervical cancer	Yes	53 (37.85)
	No	87 (62.14)
Previous knowledge regarding cervical cancer	Yes	38 (27.14)
	No	102 (72.85)
If yes, the source of information	Health professionals	15 (39.47)
	Friends	12 (31.57)
	Television/media	11 (28.94)

cervical cancer in family, 72.85% did not have any previous knowledge regarding cervical cancer, and 62.85% had got information regarding cervical cancer from the television/media.

Table 2 shows that the majority of respondents 92 (62.71%) had poor knowledge regarding cervical cancer, while 32 (22.85%) had average and 16 (11.42%) had good knowledge regarding cervical cancer.

Table 3 shows that the majority of respondents 77 (55%) had poor attitude toward cervical cancer while 36 (25.71%) had average attitude and about 27 (19.28%) had good attitude toward cervical cancer.

Table 4 shows that the majority of respondents 83 (59.28%) had poor practice while 41 (29.28%) had average practice and 16 (11.42%) had good practice regarding cervical cancer.

Table 2: Analysis of knowledge regarding cervical cancer (*n*=140)

Total score	Frequency (%)
21–30 (Good)	92 (65.71)
11–20 (Average)	32 (22.85)
0–10 (Poor)	16 (11.42)

Table 3: Analysis of attitude regarding cervical cancer (*n*=140)

Total Score	Frequency (%)
51–75 (Good)	27 (19.28)
26–50 (Average)	36 (25.71)
0–25 (Poor)	77 (55)

Table 4: Analysis of practice regarding cervical cancer (*n*=140)

Total score	Frequency (%)
11–15 (Good)	16 (11.42)
6–10 (Average)	41 (29.28)
0–5 (Poor)	83 (59.28)

Table 5 depicts, significant association between Age, Education, Occupation, Number of children, Family history of cervical cancer and Source of information with knowledge of women regarding cervical cancer.

Table 6 depicts, significant association between education, occupation, and number of children with attitude of women toward cervical cancer.

Table 7 shows, significant association between religion, education, occupation, marital status, and family history of cervical cancer with practices of women related to cervical cancer.

Discussion

- The first objective of this study was to assess knowledge regarding cervical cancer of women attending Obstetrics and Gynecology OPD. The knowledge level of women was found majority of respondents while 92 (65.71%) had poor knowledge and 32 (22.85%) had moderate

- The second objective of study was to assess attitude of women regarding cervical cancer. The attitude level of women was found majority of respondents 77 (55%) had poor level of attitude, 36 (25.71%) had average level, and 27 (19.28%) had good level of attitude towards cervical cancer

- The third objective of study was to assess level of practice of women regarding cervical cancer. The practice level of women was found majority of respondents 83 (59.28%) had poor level of practice, 41 (29.28%) had average level, and 16 (11.42%) had good level of practice towards cervical cancer

- The fourth objective of study was to assess the correlation between KAP. The correlation between knowledge and practice (0.011298), knowledge and attitude (–0.03), and practice and attitude (–0.14025) was found to be negative correlation.

A study conducted at Hossana town, Southern, Ethiopia by Yitagesu HA, Samuel YA and Tariku LE supported the current study by assessing the knowledge, attitude, practices and factors for each domain for cervical cancer among women of child bearing age. The result of the study shows that 270 (46.3%) of the respondents had poor comprehensive knowledge. Only 58 (9.9%) of participants had been screened for the cervical cancer before the survey. Two hundred three (34.8%) of participants had negative attitude toward selected proxy variables.[5]

A study conducted at Kashmir, Pakistan by Arslaan Javaeed, Sana Shoukat, Saddaf Hina, Zartasha Hameed, Sanniya Khan Ghauri, Malik Mahmood Ahmed supported the current study by assessing the knowledge, attitude, and practices (KAP) related to cervical cancer among the adult women. The result found was a total of 346 (58.2%) women heard about cervical cancer and 210 (35.4%) women heard about the pap smear test. Thirty-five women (5.9%) underwent a pap smear test in their lifetime. More than half (51.7%) thought that undergoing a pap smear test is embarrassing. However, 382 respondents (64.3%) will undergo a pap smear test if the test is provided free of cost. Unmarried women had a better KAP score as compared to married women (13.58 ± 5.14 vs. 9.12 ± 4.04, $P < 0.001$). The KAP score was significantly different in respondents with different levels of education ($P < 0.001$).[6]

The findings were supported by a study conducted at Zimbabwe by Mapanga *et al*., on young people between 15 and 24 years old to determine the KAP of young people of Zimbabwe on cervical cancer, screening, HPV, and vaccination. A total of 751 young people were recruited through a three-stage cluster design from high schools and universities. Most young people, 87.47% (656/750) claimed to know what the disease called cervical cancer is, with a mean score of 89.98% (95% CI 73.71.11–96.64) between high school and 86.72% (95% CI 83.48–89.40) among university students. There was no significant difference in mean scores between high school and university students (P = 0.676). A risk factor knowledge proficiency score of ≥13 out of 26 was achieved in only 13% of the high school respondents and 14% of the university respondents with a broad range of misconceptions about cervical cancer risk factors in both females and males. There was not much difference on comprehensive knowledge of cervical cancer and its risk factors between female and male students, with the difference in knowledge scores among high school (P = 0.900) and university (P = 0.324) students not statistically significant. In contrast, 43% of respondents heard of cervical cancer screening and prevention, and 47% knew about HPV transmission and prevention.[7]

Table 5: Association between the knowledge, regarding cervical cancer, and the demographic variables

Socio-demographic variables	Total no. of samples	Level of knowledge score			Df	P-value	χ²-value	Result
		Poor	Average	Good				
		n	n	n				
Age								
30–40 years	83	7	12	64	6	0.010	16.7	S
41–50 years	45	7	15	23				
51–60 years	9	1	5	3				
61 years and above	3	1	0	2				
Religion								
Hindu	68	4	17	47	6	0.072	11.6	NS
Muslim	49	5	10	34				
Christian	15	4	3	8				
Other	8	3	2	3				
Educational qualification								
Illiterate	20	2	7	11	6	0.000	31.4	S
Primary	43	2	13	28				
Secondary	56	4	5	47				
Graduate	21	8	2	6				
Occupation								
Housewife	57	2	5	50	6	0.000	47.5	S
Self employed	23	0	2	21				
Private job	34	7	12	15				
Government job	26	7	13	6				
Marital status								
Unmarried	7	1	2	4	6	0.343	6.76	NS
Married	92	11	27	59				
Divorcee	15	2	2	11				
Widow	21	2	1	18				
Number of children's								
One	38	2	17	19	6	0.006	18.2	S
Two	41	5	9	27				
Three	49	6	5	38				
Four	12	3	1	8				
Type of family								
Joint	43	4	14	25	4	0.082	8.14	NS
Nuclear	74	9	10	35				
Extended	23	3	8	12				
History of cervical cancer in the family								
Yes	53	9	21	23	2	0.00	19.3	S
No	87	7	11	69				
Previous knowledge regarding cervical cancer								
Yes	38	2	13	23	2	0.087	4.89	NS
No	102	14	19	69				
If yes, the source of information								
Health professionals	15	4	7	4	4	0.508	3.31	NS
Friends	12	6	4	2				
Television/Media	11	6	2	3				

S: Significant; NS: Non-significant; P value is significant if it is $P<0.05$

The findings were supported by a study conducted by Geremew *et al.*, at public hospitals in Ethiopia where women aged 30–49 years were involved to assess comprehensive knowledge on cervical cancer, attitudes toward the screening, and associated factors. Total of 1137 women participated in this study. Nearly one-third, 30.3% (95% CI: 27.7, 32.9) of the women had knowledge of cervical cancer, and 58.1% (95% CI: 55, 62.2) had favorable attitude toward cervical cancer screening. In the multivariable analysis, having college and above education (AOR=7.21, 95% CI: 3.41, 15.29), knowing someone with cervical cancer (AOR =5.38, 95% CI: 2.38, 12.15), and having a history

Table 6: Association between the attitude regarding cervical cancer and the demographic variables

Socio-demographic variables	Total no. of samples	Level of attitude score			Df	*P*-value	χ^2-value	Result
		Poor	Average	Good				
		n	*n*	*n*				
Age								
30–40 years	83	47	21	15	6	0.909	2.12	NS
41–50 years	45	23	11	11				
51–60 years	9	5	3	1				
61 years and above	3	2	1	0				
Religion								
Hindu	68	40	17	11	6	0.912	2.08	NS
Muslim	49	24	13	12				
Christian	15	9	4	2				
Other	8	4	2	2				
Education								
Illiterate	20	14	4	2	6	0.000	25.9	S
Primary	43	19	6	18				
Secondary	56	35	16	5				
Graduate	21	9	10	2				
Occupation								
Housewife	57	33	21	3	6	0.000	31.8	S
Self employed	23	15	6	2				
Private job	34	20	6	8				
Government job	26	9	3	14				
Marital status								
Unmarried	7	3	2	2	6	0.624	4.39	NS
Married	92	52	27	18				
Divorcee	15	10	04	1				
Widow	21	12	03	6				
Number of children								
One	38	19	17	2	6	0.002	21.4	S
Two	41	20	10	11				
Three	49	27	8	14				
Four	12	11	1	0				
Type of family								
Joint	43	25	10	8	4	0.309	4.80	NS
Nuclear	74	37	19	18				
Extended	23	15	7	1				
Family history of cervical cancer								
Yes	53	29	16	8	2	0.486	1.44	NS
No	87	48	20	19				
Previous knowledge regarding cervical cancer								
Yes	38	24	9	5	2	0.421	1.73	NS
No	102	53	27	22				
If yes, the source of information								
Health professionals	15	4	6	5	4	0.906	1.02	NS
Friends	12	5	4	3				
Television/Media	11	4	3	4				

S: Significant; NS: Non-significant; *P* value is significant if it is *P*<0.05

of sexually transmitted diseases (AOR=2.75, 95% CI: 1.24, 6.04) were significantly associated with knowledge on cervical cancer. Meanwhile, college and above educational status (AOR=2.56, 95%CI: 1.14, 5.69), knowing someone with cervical cancer (AOR=3.24, 95%CI: 1.14, 9.15), and having knowledge of cervical cancer (AOR=3, 95%CI: 1.97, 4.29) were positively associated with favorable attitudes toward cervical cancer screening.[8]

Table 7: Association between practices regarding cervical cancer and the demographic variables

Socio-demographic variables	Total no. of samples	Level of practice score			Df	*P*-value	χ^2-value	Result
		Poor	Average	Good				
		n	*n*	*n*				
Age								
30–40 years	83	41	28	14	6	0.083	11.2	NS
41–50 years	45	32	11	2				
51–60 years	9	8	1	00				
61 years and above	3	2	1	00				
Religion								
Hindu	68	48	18	2	6	0.000	39.7	S
Muslim	49	30	16	3				
Christian	15	3	5	7				
Other	8	2	2	4				
Education								
Illiterate	20	12	8	00	6	0.000	27.5	S
Primary	43	24	15	04				
Secondary	56	39	14	03				
Graduate	21	8	4	09				
Occupation								
Housewife	57	32	22	03	6	0.002	20.5	S
Self employed	23	17	06	00				
Private job	34	18	11	05				
Government job	26	16	2	08				
Marital status								
Unmarried	7	3	02	02	6	0.001	22.1	S
Married	92	63	27	07				
Divorcee	15	2	10	03				
Widow	21	15	02	04				
Number of children								
One	38	26	9	03	6	0.230	8.11	NS
Two	41	24	12	05				
Three	49	28	17	04				
Four	12	5	03	04				
Type of family								
Joint	43	19	21	03	4	0.005	15.0	NS
Nuclear	74	45	18	11				
Extended	23	19	3	02				
Family history of cervical cancer								
Yes	53	19	22	12	2	0.000	21.6	S
No	87	64	19	04				
Previous knowledge regarding cervical cancer								
Yes	38	17	15	06	2	0.101	4.58	NS
No	102	66	26	10				
If yes, the source of information								
Health professionals	15	6	5	4	4	0.732	2.02	NS
Friends	12	5	4	3				
Television/Media	11	7	3	1				
Television/Media	11	7	3	1				

S: Significant; NS: Non-significant; *P*-value is significant if it is *P*<0.05

Conclusion

The findings of the present study indicated that women had poor KAP regarding cervical cancer. The KAP will be improved after providing the information booklet regarding cervical cancer to women who are attending Obstetrics and Gynecology OPD.

Acknowledgment

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