

A Study To Assess The Knowledge Related To Warning Signs Of Cervical Cancer Among Women At Mch Centre, Tirupati.

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Abstract: The aim of the study was to assess the knowledge on warning signs of cervical cancer among women at MCH center, Tirupati.

Statement Of The Problem

A Study To Assess The Knowledge Related To Warning Signs Of Cervical Cancer Among Women At Mch Centre, Tirupati.

Objectives Of The Study

- ❖ To assess the knowledge of women related to warning signs of cervical cancer.
- ❖ To determine the association between knowledge of women related to warning signs of cervical cancer with their selected demographic variables.

Methodology

The term research design refers to the plan organization of scientific investigation. The research design selected for the present study was "descriptive design." This research design could assess the knowledge related to warning signs of cervical cancer among women in MCH center at Tirupati.

Results

This study showed that out of 100 women's majority of them had moderate knowledge 48(48%), 40(40%) had poor knowledge, 12(12%) had adequate knowledge on cervical cancer.

Further it showed that 43(43%) had moderate knowledge, 33(33%) had in-adequate knowledge, 24(24%) had adequate knowledge on warning signs of cervical cancer. It is revealed that there was a significant association between level of knowledge related to warning signs of cervical cancer among women and the demographic variables like Menstrual History, Age, Education, Age at menarche, Marital status, Income for month and Number of children at $p < 0.05$ level. Religion and Sources of information were associated at $p < 0.01$ level.

Conclusion

It was concluded that among the aspects like risk factors, signs and symptoms, diagnosis and management related to cancer cervix was moderate level. So there is a need to educate the women to increase awareness about warning signs of cervical cancer and enlightenment of population by trained personnel is recommended.

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I. Introduction

Back ground of the study:

Cancer is a disease in which cells in the body grow out of control. There are five main types of cancer that affect women's reproductive system namely cancer of the cervix, ovary, uterus, vagina and vulva. Of these, the most common ones are cervical and breast cancer. About 99.7% of cervical cancer is caused by persistent infection with high risk of Human Papilloma Virus (HPV). Globally, every eight minutes at least one woman dies from cervical cancer¹.

Cervical cancer is a major public health problem in the world. According to American Cancer Society (ACS), 'cervical cancer starts in the cells lining the cervix the lower part of the uterus'. The cervix is the organ that connects uterus and vagina. It is usually slow-growing cancer that can be found by regular cytological method of screening known as Pap test². The warning signs and symptoms of cervical cancer are Vaginal bleeding between periods, Lower back pain, Persistent vaginal discharge that smells bad, Discomfort or pain during sex, Vaginal bleeding during or after sex, Menstrual period that is heavier or longer, than usual, Vaginal bleeding after menopause, Blood in stool or urine, Persistent diarrhea, Persistent pelvic pain and Unexplained weight loss³.

NEED FOR THE STUDY:

Developed nations showed more than 70% reduction in the incidence rate of cervical cancer in the past 50 years. Never-the-less in developing nations the issue seems to be on the rise. Developing nations have high age-specific incidence rate per 100,000; Eastern Africa (42.7), Melanesia (33.3), Southern (31.5) and Middle Africa (30.6). On the other hand, rates are lower in developed nations such as Australia/New Zealand (5.5) and Western Asia (4.4)⁴. In Nigeria 36.59 million women aged are greater are equal to 15 years in Nigeria are at risk of developing cervical cancer. Every year in India, 134,420 women are diagnosed with cervical cancer and 72,825 die from the disease. India has a population of 432.2 million women aged 15 years and older who are at risk of developing cancer⁷.

There are 9922 cases diagnosed annually with 8030 deaths, Humanpapilloma virus(HPV) prevalence is 24.8%. Incidence of cervical cancer in Nigeria is 250/1000,000 women⁵.

HYPOTHESIS:

- **H1:** There is inadequate knowledge on warning signs of cervical cancer among women
- **H2:** There is significant association between knowledge score of warning signs of women with their demographic variables.

ASSUMPTIONS:

- Women may have less knowledge regarding to the warning signs of cervical cancer and women may gain some knowledge regarding warning signs of cervical cancer.

LIMITATIONS:

This study is limited to women who are,

- willing to participate .
- women attending to MCH centre Tirupati.
- Able to speak and understand Telugu.
- present during data collection.
- The sample is limited to 100 women.

II. Methodology

The present study was aimed to assess the knowledge related to warning signs of cervical cancer among women in MCH center at Tirupati. Research methodology indicates the general pattern of organizing the procedure for gathering valid and reliable data for the problem under investigation. This chapter deals with research approach, research design, variables, setting, population, sample, sample size, sampling technique, inclusion and exclusion criteria, development and description of tool, content validity, reliability, pilot study, the procedure for data collection and the plan for data analysis.

RESEARCH APPROACH:

The research approach adopted was non-experimental approach to achieve the objectives of the study, which was felt to be most appropriate in the field of education for its practicability in real life situation. It has the advantage of practicability, feasibility, and to a certain extent for generalization.

RESEARCH DESIGN:

The term research design refers to the plan organization of scientific investigation. The research design selected for the present study was “descriptive design.” This research design could assess the knowledge related to warning signs of cervical cancer among women in MCH center at Tirupati.

VARIABLES OF THE STUDY:

INDEPENDENT VARIABLE: A presumed cause was referred to as independent variable. The elements on cervical cancer included for assessing the knowledge related to warning signs of cervical cancer among women in MCH center at Tirupati are the independent variable.

DEPENDENT VARIABLE: Level of knowledge regarding warning signs of cervical cancer among women.

EXTRANEIOUS VARIABLE: The extraneous variables considered by the investigator were age, religion, education of women, marital status, number of children, menstrual history, type of family and husband occupation.

SETTING OF THE STUDY:

The study was conducted at MCH center, Tirupati. The setting was chosen on the basis of investigator's feasibility in terms of availability of required sample and the co-operation extended by the management and health personnel.

POPULATION:

The population includes women of age group of 20-65 years who were attended to the MCH center, Tirupati.

SAMPLE:

Women who fulfilled the inclusion criteria during the period of the study were selected as the sample.

SAMPLE SIZE:

Sample size consisted of 100 women, who were available at the time of data collection in MCH center, Tirupati.

SAMPLE TECHNIQUE:

Non-probability purposive sampling technique was adopted based on inclusion criteria.

CRITERIA FOR SAMPLE SELECTION:

INCLUSION CRITERIA: Women who were:

- In the age group of 20-above 60.
- Attending to MCH center.
- Willing to participate in the study.
- Present during data collection.

EXCULSION CRITERIA:

- Women who were not willing to participate.

DEVELOPMENT AND DISCRIPTION OF THE TOOL:

The tool selected was structured tool prepared by the investigator with guidance from the experts in the field of nursing and medicine.

The tool consists of three sections:

Section-I : consists of demographic data.

Section-II: consists of 22 questionnaires with related to knowledge regarding cervical cancer. Based on quartile deviation, the scoring < 50-59 (30%) was given as inadequate level of knowledge, 60-69 (40%) moderate level of knowledge and 70-79 (30%) adequate level of knowledge.

Section-III: Consists of check list on warning signs of cervical cancer. It consists of 20 positive statements. The scoring is given as yes (1), no (0). Based on quartile deviation, the scoring < 50-59 (33%) was given as inadequate level of knowledge, 60-69 (43%) moderate level of knowledge and 70-79 (24%) adequate level of knowledge.

CONTENT VALIDITY:

Content validity was obtained for questionnaire, from 8 experts, including 6 experts from nursing field, 2 experts from obstetrics and gynecology department .Necessary changes were made in the tool according to the expert's advice and the tool was finalized. The finalized tool was translated to in Telugu language and appropriateness of it was obtained from a Telugu pundit.

RELIABILITY OF THE TOOL:

The tool was administered to 10 women who were attending the MCH center and who were not included in the main study. The reliability was established by Cronbach's Alpha method for correlation coefficient formula. The obtained r score was =.798 which shows that the instrument was reliable. Hence the tool was reliable for proceeding with the pilot study.

PILOT STUDY:

Pilot study was conducted to assess the feasibility of the study and to plan for statistical analysis of the data among women at MCH center at Tirupati, with a sample size of ten with formal prior permission was obtained from the Medical Officer of MCH center at Tirupati. The results of pilot study were found feasible to conduct main study.

PROCEDURE FOR DATA COLLECTION:

The investigator obtained prior permission from the Medical Officer of MCH center at Tirupati for conducting the study. By using non probability purposive sampling technique 100 women were selected as the sample, with a minimum of 5-10 cases per day from 9am to 1pm for data collection. The investigator introduced herself to the women, maintained rapport by explaining about the purpose of the study, and took written consent from all the women. The investigator made the women to sit comfortably and their knowledge levels were assessed by using structured questionnaire as per the women's response. Doubts were clarified, it took 15-20mins for each person to collect the data.

PLAN FOR DATA ANALYSIS:

It was planned to analyze the data by using descriptive and inferential statistics.

DESCRIPTIVE STATISTICS:

- Frequency and percentage were used to assess the demographical variables, initial assessment of knowledge related to warning signs of cervical cancer among women.
- Percentage, mean distribution and standard deviation were used for knowledge related to warning signs of cervical cancer among women.

INFERNIAL STATISTICS:

Chi-square test was used to associate the level of knowledge on warning signs of cervical cancer with selected demographic variables. item-wise analysis on knowledge score of women on warning signs of cervical cancer was done .

ANALYSIS AND INTERPRETATION:

TABLE-1: Distribution of knowledge scores on warning signs of cervical cancer among women at MCH center at Tirupati

knowledge regarding warning signs of cervical cancer among women	Frequency	Percentage
Inadequate	40	40.0%
Moderate	48	48.0%
Adequate	12	12.0%
Total	100	100%

Table-1. Shows that out of 100 women majority of them had moderate knowledge 48(48%), 40(40%) had poor knowledge and 12(12%) had adequate knowledge.

TABLE:2. Distribution scores on warning signs of cervical cancer by check list among women in MCH center at Tirupati

Check regarding warning signs of cervical cancer among women	Frequency	Percentage
Inadequate	33	33.0%
Moderate	43	43.0%
Adequate	24	24.0%
Total	100	100%

Table-2: Shows that 43(43%) had moderate knowledge, 33(33%) had in-adequate knowledge, 24(24%) had adequate knowledge on warning signs of cervical cancer.

TABLE-3 :Associations of knowledge scores regarding warning signs of cervical cancer with demographic variables of the women

S.No	Demographic Variables	knowledge regarding warning signs of cervical cancer among women								Chi-square X ²	'p' Value
		Inadequate		Moderate		Adequate		Total			
1.	Age										
	Below 30 Years	2	5.0	8	16.7	0	0.0	10	10.0	16.078*	0.013
	31 – 40 years	5	12.5	10	20.8	7	58.3	22	22.0		
	41 – 50 years	16	40.0	14	29.2	3	25.0	33	33.0		
	Above 50 years	17	42.5	16	33.3	2	16.7	35	35.0		
	Total	40	100	48	100	12	100	100	100		
2.	Educational Standard										
	Illiterate	13	32.5	19	39.6	9	75.0	41	41.0	13.636*	0.033

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	Primary	17	42.5	9	18.8	2	16.7	28	28.0		
	Secondary	5	12.5	10	20.8	1	8.3	16	16.0		
	Degree	5	12.5	10	20.8	0	0.0	15	15.0		
	Total	40	100	48	100	12	100	100	100		
3.	Religion										
	Hindu	19	47.5	29	60.4	10	83.3	58	58.0	10.038	0.123
	Muslim	8	20.0	12	25.0	2	16.7	22	22.0		
	Christian	11	27.5	7	14.6	0	0.0	18	18.0		
	Others	2	5.0	0	0.0	0	0.0	2	2.0		
	Total	40	100	48	100	12	100	100	100		
4	Age at Menarche										
	10 – 11	15	37.5	10	20.8	3	25.0	28	28.0	4.398	0.355 Ns
	12 – 13	18	45.0	32	66.7	7	58.3	57	57.0		
	14 & Above	7	17.5	6	12.5	2	16.7	15	15.0		
	Total	40	100	48	100	12	100	100	100		
5	Marital Status										
	Married	22	55.0	36	75.0	10	83.3	68	68.0	9.755*	0.045
	Unmarried	3	7.5	6	12.5	0	0.0	9	9.0		
	Widower	15	37.5	6	12.5	2	16.7	23	23.0		
	Total	40	100	48	100	12	100	100	100		
6.	Age at Marriage										
	Below 15 years	9	22.5	11	22.9	3	25.0	23	23.0	1.268	0.867 Ns
	16-20 years	27	67.5	33	68.8	9	75.0	69	69.0		
	21 – 25 Years	4	10.0	4	8.3	0	0.0	8	8.0		
	Total	40	100	48	100	12	100	100	100		
7.	Husband's occupation										
	Govt. Employee	1	2.5	1	2.1	2	16.7	4	4.0	10.011	0.124 Ns
	Cooli	17	42.5	18	37.5	4	33.3	39	39.0		
	Private employee	16	40.0	13	27.1	3	25.0	32	32.0		
	Merchant	6	15.0	16	33.3	3	25.0	25	25.0		
	Total	40	100	48	100	12	100	100	100		
8.	Income per month										
	Below 8000	18	45.0	20	41.7	5	41.7	43	43.0	4.889	0.299
	Rs8001 – Rs.12000	19	47.5	17	35.4	6	50.0	42	42.0		
	Above 12000	3	7.5	11	22.9	1	8.3	15	15.0		
	Total	40	100	48	100	12	100	100	100		
9.	NO. of children										
	One	4	10.0	5	10.4	0	0.0	9	9.0	4.298	0.636 Ns
	Two	18	45.0	25	52.1	5	41.7	48	48.0		
	Three	14	35.0	14	29.2	4	33.3	32	32.0		
	More than 3	4	10.0	4	8.3	3	25.0	11	11.0		
	Total	40	100	48	100	12	100	100	100		
10.	Type of family									8.824*	0.031

	Nuclear	17	42.5	24	50.0	5	41.7	46	46.0		
	Joint	14	35.0	21	43.8	7	58.3	42	42.0		
	Extended	9	22.5	3	6.3	0	0.0	12	12.0		
	Total	40	100	48	100	12	100	100	100		
11.	Area of living										
	Rural	4	10.0	2	4.2	0	0.0	6	6.0	3.526	0.474Ns
	Urban	32	80.0	44	91.7	11	91.7	87	87.0		
	Semi-urban	4	10.0	2	4.2	1	8.3	7	7.0		
	Total	40	100	48	100	12	100	100	100		
12.	Source of Information										
	News paper	0	0.0	1	2.1	2	16.7	3	3.0		
	Books	1	2.5	4	8.3	0	0.0	5	5.0	18.171**	0.006
	Television	18	45.0	10	20.8	6	50.0	34	34.0		
	Friends/ neighbours	21	52.5	33	68.8	4	33.3	58	58.0		
	Total	40	100	48	100	12	100	100	100		

Significance:

**=Significance at 0.01 level.

*=significance at 0.05 level.

NS=not significant.

Table 3: It reveals that there was a significant association between level of knowledge regarding warning signs among women with cervical cancer and demographic variables like Age, Education, Marital status and Type of family, at p<0.05 level and Source of information, associated at p<0.01 level.

TABLE:4. Association scores of check list scores regarding the warning signs of cervical cancer with demographic variables

S.No	Demographic Variables	Check regarding warning signs of cervical cancer among women								Chi-square X ²	'p' Value
		Inadequate		Moderate		Adequate		Total			
1.	Age										
	Below 30 Years	2	6.1	4	9.3	4	16.7	10	10.0	16.044*	0.014
	31 – 40 years	4	12.1	7	16.3	11	45.8	22	22.0		
	41 – 50 years	14	42.4	13	30.2	6	25.0	33	33.0		
	Above 50 years	13	39.4	19	44.2	3	12.5	35	35.0		
	Total	33	100	43	100	24	100	100	100		
2.	Educational Standard										
	Illiterate	10	30.3	24	55.8	7	29.2	41	41.0	19.317*	0.004
	Primary	14	42.4	10	23.3	4	16.7	28	28.0		
	Secondary	5	15.2	7	16.3	4	16.7	16	16.0		
	Degree	4	12.1	2	4.7	9	37.5	15	15.0		
	Total	33	100	43	100	24	100	100	100		
3.	Religion										
	Hindu	11	33.3	26	60.5	21	87.5	58	58.0	23.839**	0.001
	Muslim	13	39.4	6	14.0	3	12.5	22	22.0		
	Christian	7	21.2	11	25.6	0	0.0	18	18.0		
	Others	2	6.1	0	0.0	0	0.0	2	2.0		
	Total	33	100	43	100	24	100	100	100		
4	Age at Menarche										
	10 – 11	8	24.2	9	20.9	11	45.8	28	28.0	9.647*	0.047
	12 – 13	17	51.5	27	62.8	13	54.2	57	57.0		
	14 & Above	8	24.2	7	16.3	0	0.0	15	15.0		
	Total	33	100	43	100	24	100	100	100		
5	Marital Status										
	Married	20	60.6	26	60.5	22	91.7	68	68.0	8.827*	0.054
	Unmarried	4	12.1	4	9.3	1	4.2	9	9.0		

	Widower	9	27.3	13	30.2	1	4.2	23	23.0		
	Total	33	100	43	100	24	100	100	100		
6.	Age at Marriage										
	Below 15 Years	8	24.2	10	23.3	5	20.8	23	23.0	7.157	0.128 Ns
	16 – 20 Years	24	72.7	31	72.1	14	58.3	69	69.0		
	21 – 25 Years	1	3.0	2	4.7	5	20.8	8	8.0		
	Total	33	100	43	100	24	100	100	100		
7.	Husband's occupation										
	Unmarried	1	3.0	2	4.7	1	4.2	4	4.0	5.884	0.436 Ns
	Cooli	10	30.3	22	51.2	7	29.2	39	39.0		
	Private employee	11	33.3	11	25.6	10	41.7	32	32.0		
	Merchant	11	33.3	8	18.6	6	25.0	25	25.0		
	Total	33	100	43	100	24	100	100	100		
8.	Income per month										
	Below Rs.8000	12	36.4	22	51.2	9	37.5	43	43.0	10.231*	0.037
	Rs.8001 – Rs.12000	17	51.5	18	41.9	7	29.2	42	42.0		
	Above 12000	4	12.1	3	7.0	8	33.3	15	15.0		
	Total	33	100	43	100	24	100	100	100		
9.	NO. of children										
	One	1	3.0	2	4.7	6	25.0	9	9.0	14.924*	0.021
	Two	15	45.5	19	44.2	14	58.3	48	48.0		
	Three	13	39.4	16	37.2	3	12.5	32	32.0		
	More than 3	4	12.1	6	14.0	1	4.2	11	11.0		
	Total	33	100	43	100	24	100	100	100		
10.	Type of family										
	Nuclear	10	30.3	24	55.8	12	50.0	46	46.0	5.774	0.217 Ns
	Joint	17	51.5	16	37.2	9	37.5	42	42.0		
	Extended	6	18.2	3	7.0	3	12.5	12	12.0		
	Total	33	100	43	100	24	100	100	100		
11.	Area of living										
	Rural	4	12.1	1	2.3	1	4.2	6	6.0	4.320	0.364 Ns
	Urban	28	84.8	38	88.4	21	87.5	87	87.0		
	Semi-urban	1	3.0	4	9.3	2	8.3	7	7.0		
	Total	33	100	43	100	24	100	100	100		
12.	Source of Information										
	News paper	0	0.0	3	7.0	0	0.0	3	3.0	24.530**	0.000
	Books	1	3.0	4	9.3	0	0.0	5	5.0		
	Television	8	24.2	9	20.9	17	70.8	34	34.0		
	Friends/ neighbours	24	72.7	27	62.8	7	29.2	58	58.0		
	Total	33	100	43	100	24	100	100	100		

Significance:

**=Significance at 0.01 level

*=significance at 0.05 level

NS=not significant

Table 4: It reveals that there was a significant association between level of knowledge related to warning signs of cervical cancer among women and demographic variables like Menstrual History, Age, Education, Age at menarche, Marital status, Income for month and No. children at $p < 0.05$ level and Religion and Sources of information were associated at $p < 0.01$ level.

III. Discussion:

In the study of Abdulaziz s et.al (2016) at Saudi Arabia, it was shown that women were not aware of the early warning signs, symptoms and risk factors. On an average 43.7% of the teachers were not aware of signs and symptoms, 58.2% of teachers did not have knowledge about the signs and symptoms and risk factors of cervical cancer. 66.2% of teachers were not aware of the availability of screening program and most of the teachers were not aware of availability of vaccine against human papillomavirus. The study concluded that majority of teachers had inadequate knowledge about early warning signs and symptoms, risk factors and prevention of cervical cancer

The second objective of the study was to notify the association between the demographic variables and knowledge related to warning signs of cervical cancer among women. A study was conducted by interviewing through knowledge related questionnaire and the collected data were analysed with regard to the study objectives. It revealed that there was a significant association between level of knowledge regarding warning signs among women with Age, Education, marital status and Type of family at $p < 0.05$ level and source of information at $p < 0.01$ level.

IV. Summary

MAJORITY FINDINGS OF THE STUDY:

- In this study out of 100 women majority of them had moderate knowledge 48(48%), 40(40%) had poor knowledge and 12(12%) had adequate knowledge on cervical cancer.
- In this study out of 100 women, majority of them had moderate knowledge 43(43%), 33(33%) had inadequate knowledge and 24(24%) had adequate knowledge on warning signs of cervical cancer
- This study showed that the knowledge scores on warning signs of cervical cancer among women had mean scores of 16.31, standard deviation 5.983 and t-value was 6.234. Hence it indicated that it was significant at $p < 0.001$ level.
- The association between the demographic variables with the level of knowledge related to warning signs of cervical cancer among women with the variables like Menstrual History, Age, Education, Age at menarche, Marital status, Income for month and Number of children were at $p < 0.05$ level and religion and Sources of information were associated at $p < 0.01$ level.

V. Conclusion

It was concluded that knowledge of warning signs of cervical cancer risk factors, signs and symptoms, diagnosis and its management was moderate. So there is a need to educate the rural women to increase awareness about warning signs of cervical cancer enlightenment of population by trained personnel is essential.

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