



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

AWARENESS OF CANCER CERVIX AMONG WOMEN AND EFFECTIVENESS OF A STRUCTURED TEACHING PROGRAMME

KEY WORDS: Cancer cervix

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INTRODUCTION

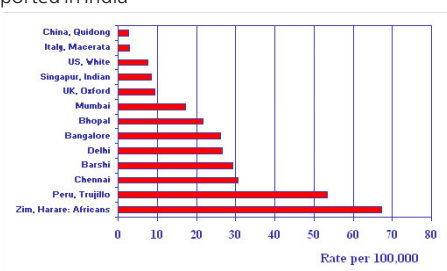
Cancer incidence is now in an increasing trend probably due to life style changes and also due to increasing human life expectancy thanks to the advancements of modern medical field. Cancer spells agony and despair due to the anxiety the patient and their relatives face fearing pain and death making it one of the dreaded diseases. In the light of present knowledge, early detection and prompt treatment of cancer and precancerous conditions provide the best possible way towards its protection. Among females, the most common sites affected by cancer are the breast and cervix. In India, cancer cervix tops the list among cancers affecting women and causing 23.3% of all cancer deaths in women. Globally, there are around 450,000 new cases being detected each year with 3,00,000 deaths of which nearly 1/5 to 1/6 cases are from India accounting to around 1 lakh new cases per year. Early reporting of symptoms and regular screening attendance can go a long way in avoiding the occurrence of cancer cervix among women.

Almost all cervical cancers contain traces of in Human Papilloma Virus (HPV) and it has been identified as the culprit in the causation of cancer cervix. About 75% of people of the reproductive age are infected with the Human papilloma virus and sexual contact is the commonest mode of spread. Other factors that predispose to cancer cervix are early age of marriage, multiple sexual partners, multiparity, unhealthy menstrual hygiene and poor nutritional status, all of which are common in low socioeconomic group.

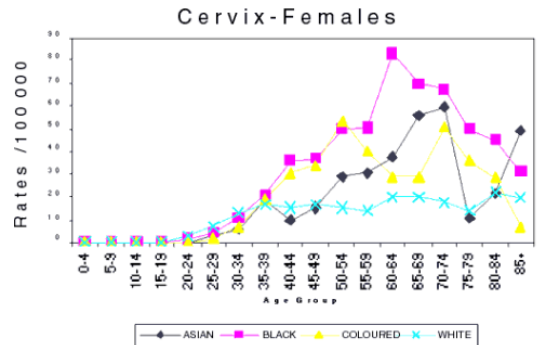
Promotion of knowledge among women regarding cancer cervix, its prevention and early detection will help to prevent occurrence of distressing complications. Adequate education of our women population regarding the risk factors and about the possibility of early detection can pave way to reducing the incidence of the disease and avoidance of complications of advanced stage disease. Availability of early detection by regular screening is a boon to the society as a whole as reduction of morbid conditions helps improve the longevity and productivity of the community. This study was done in a research institute for cancer specialty to analyze the extent of knowledge women have regarding cancer cervix, to give them an orientation regarding causation and early diagnosis of cancer cervix and to emphasize on the fact that necessary steps if taken to educate women on cancer cervix would encourage women to undergo screening for cancer cervix.

**REVIEW OF LITERATURE
INCIDENCE OF CANCER CERVIX**

The incidence of occurrence of cancer cervix varies with different regions of the world. It is the most common type of cancer in women of Asian and African countries. The country based incidence of cervical cancer is given in the following chart. It is estimated that during 2008, 134,420 new cases of Cancer Cervix were reported in India



The commonest age groups that are affected with cancer are women above 40 years and the well advanced stage of cancer manifests in women when they are 55-60 years old



SIGNS AND SYMPTOMS OF CANCER CERVIX:

- Early Stages:** None
- Intermediate Stage:** Foul smelling vaginal discharge
Bleeding or spotting in between periods- metrorrhagia
Painful coitus and bleeding after coitus
Post-menopausal bleeding

- Late / Advanced Stage:** Severe back pain
Weight loss and loss of appetite
Generalized weakness and fatigue
Kidney failure

STAGING OF CANCER CERVIX:

Cancer cervix is staged into 5 stages of severity depending on the size and spread

- Stage 0 -** Carcinoma in-situ: Precancerous stage
- Stage 1 -** Cervical carcinoma confined to the cervix

1A- Invasive carcinoma diagnosed only by microscopy; stromal invasion with a maximum depth of 5.0 mm measured from the base of the epithelium and a horizontal spread of 7.0 mm or less; vascular space involvement, venous or lymphatic, does not affect classification

1A1- Measured stromal invasion ≤ 3.0 mm in depth and ≤ 7.0 mm in horizontal spread

1A2- Measured stromal invasion > 3.0 mm and ≤ 5.0 mm with a horizontal spread ≤ 7.0 mm

1B- Clinically visible lesion confined to the cervix or microscopic lesion greater than 1A1/IA2

1B1- Clinically visible lesion ≤ 4.0 cm in greatest dimension

1B2- Clinically visible lesion > 4.0 cm in greatest dimension

Stage 2- Cervical carcinoma invades beyond uterus but not to pelvic wall or to lower third of vagina

2 A1 – Tumor without parametrial invasion- Clinically visible lesion ≤ 4.0 cm in greatest dimension

2 A2 - Clinically visible lesion > 4.0 cm in greatest dimension
 2 B - Tumor with parametrial invasion

Stage 3- Tumor extends to pelvic wall and/or involves lower third of vagina and/or causes hydronephrosis or nonfunctional kidney

3 A - Tumor involves lower third of vagina, no extension to pelvic wall

3 B - Tumor extends to pelvic wall and/or causes hydronephrosis or nonfunctional kidney

Stage 4- Cancer has spread to distant organs like liver, lungs, brain and bones.

SCREENING:

The recommendations on cervical cancer screening were released on August 21, 2018, by the United States Preventive Task Force

The USPSTF recommends screening for cervical cancer every 3 years, with cervical cytology alone for women who are 21 to 29 years of age.

For women who are 30 to 65 years of age, screening every 3 years with cervical cytology alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV testing in combination with cytology (cotesting).

Screening in women who are older than 65 years is not recommended if they have had adequate prior screening and are not at high risk for cervical cancer.

The USPSTF recommends against screening for cervical cancer in women who are younger than 21 years.

EARLY DETECTION

- Downstaging
- Papanicolou smear
- VIA/VILI.
- Colposcopy
- Cervicography
- Tissue biopsy

MANAGEMENT OF CANCER CERVIX:

Surgical-Removal of the uterus – possible for stage 1A,1B and 2A only

- Radiotherapy
- Chemotherapy
- Supportive therapy.

PREVENTION

Though prevention of any type of cancer is not entirely possible these steps can help prevent cancer cervix

- Regular screening by Pap smear
- Good hygienic practice
- Barrier type contraception
- Avoiding multiple sexual partners
- Prohibiting early marriage and early sexual intercourse prior 18 years of age
- Limit the number of children to Two
- Vitamin C and A rich food consumption

VACCINATION FOR CANCER CERVIX

Modern medicine has ultimately found the key to prevent development of cancer cervix by vaccination against Human Papilloma virus. The vaccine is recommended for female children at the age of 9-11 years. Three doses against the high risk types of HPV are given at intervals of 0,1 and 3 months, it helps to prevent infection with HPV which is the primary causative factor for development of cancer cervix.

AIM OF STUDY

This study was aimed to determine the association between the

demographic variables of cancer cervix and to assess the level of knowledge of women have regarding risk factors, signs and symptoms, screening and early detection of cancer cervix and to assess the effectiveness of a structured teaching programme regarding the signs and symptoms and early detection and preventive methods for cancer cervix.

SETTING

The study was conducted at the Gynec-oncology OPD of Govt.Aringar Anna Memorial Cancer & Research Institute, Kancheepuram, Tamil Nadu. 100 women with cancer cervix who attended the Gynaec oncology OPD were included in the study. The structured teaching programme with pre and post-test questions were asked in the vernacular language to women using visual aids such as flip cards and the responses were diligently recorded.

Demographic data consisted of Age, Marital status, Educational status, Religion, Monthly income, Occupation of Husband, Source of Health Information, Parity and Family history of cancer cervix.

A questionnaire was prepared regarding the general aspects, signs and symptoms, early detection methods and prevention of cancer cervix and the knowledge level of these among the sample group of women were tested initially by a Pre-test. The same questionnaire was used for the Post-test assessment of the improvement in the knowledge regarding cancer cervix after a structured teaching programme.

The structured questionnaire was adapted for this study. The questions were of Multiple choice type. A total of 20 questions were given. Correct answer was scored as one and a wrong answer as zero.

Knowledge aspects	Number of questions	Score
General aspects	9	9
Signs and Symptoms	4	4
Early Detection	3	3
Prevention	4	4
Total	20	20

Knowledge score interpretation:

- < 50% - Inadequate Knowledge
- 50-75% - Moderately Adequate Knowledge
- > 75% - Adequate Knowledge

Table I: Distribution Of Demographic Variables Among Women

S. No	Demographic Variables		Frequency	Percentage
1.	AGE (Years)	a.35-40	17	17%
		b.41-45	18	18%
		c.46-50	42	42%
		d.51-55	23	23%
2.	MARITAL STATUS	a. Married	88	88%
		b.Widow	12	12%
		c.Unmarried	0	0
3.	EDUCATIONAL STATUS	a.Iliterate	22	22%
		b.Primary schooling	61	61%
		c.Secondary schooling	7	7%
		d.Graduate	10	10%
4.	RELIGION	a. Hindu	63	63
		b.Christian	26	26%
		c.Muslim	11	11%
5.	MONTHLY INCOME(Rs)	a.<5000	2	2%
		b.5001-7000	37	37%
		c.7001-9000	46	46%
		d.>9001	15	15%
6.	SOURCES OF HEALTH INFORMATION	a. Health workers	9	9%
		b.TV/Radio	58	58%
		c.Newspaper/Magazines	21	21%
		d.Neighbours	12	12%

7.	OCCUPATION OF HUSBAND	a.Labour	52	52%
		b.Govt.employee	10	10%
		c.Private employee	17	17%
		d.Business	21	21%
8.	PARITY	a. Nil	4	4%
		b. One	8	8%
		c. Two	37	37%
		d. Three and above	51	51%
9.	FAMILY HISTORY OF CANCER CERVIX	a. Grand mother	3	3%
		b. Mother	2	2%
		c. Sister	3	3%
		d. None	92	92%

TABLE 2: Distribution Level Of Level Of Knowledge Among Women On Cancer Cervix In Pre-Test

Different aspects of knowledge	Inadequate (<50%)		Moderately Adequate (50-75%)		Adequate knowledge (>75%)	
	Number	%	Number	%	Number	%
General aspects	92	92	8	8	-	-
Signs and Symptoms	90	90	10	10	-	-
Early Detection	93	93	7	7	-	-
Prevention	96	96	4	4	-	-
Overall	93	93	7	7	-	-

TABLE – 3: Distribution Of Level Of Knowledge Among Women Regarding Cancer Cervix In The Post-Test

Different aspects of knowledge	Level of knowledge					
	Inadequate (<50%)		Moderately Adequate (50-75%)		Adequate (>75%)	
	Number	%	Number	%	Number	%
General aspects			43	43	57	57
Signs and Symptoms	2	2	83	83	15	15
Early Detection			66	66	34	34
Prevention			72	72	28	28
Overall	2	2	66	66	32	32

TABLE 4: Effectiveness Of The Structured Teaching Programme On Knowledge Regarding Cancer Cervix Among Women

Different aspects of knowledge on cancer cervix	Knowledge Improvement score		Paired "t" test value (P value)
	Mean	Standard Deviation	
General aspects	45.44	15.50	24.77 P<0.001 (significant)
Signs and Symptoms	48.27	19.29	19.40 P<0.001 (significant)
Early Detection	51.67	25.94	21.55 P<0.001 (significant)
Prevention	52.61	24.27	16.63 P<0.001 (significant)
Overall	49.49	21.22	29.26 P<0.001 (significant)

DATA INTERPRETATION

There was a significant improvement in knowledge level between pre-test and post-test at a p<0.001 level in all aspects like the general aspects, signs and symptoms, early detection and prevention and in overall knowledge regarding cancer cervix among women. The incidence of cancer cervix was also demographically proved to be higher in women over the age of 55years and in the low socioeconomic group which was corresponding to the previous studies done on cancer cervix in India.

CONCLUSION AND SUMMARY OF FINDINGS

The study has showed that the overall knowledge on cancer cervix is inadequate among women as evidenced by the pre-test questioning of the sampled women.

It is also evidenced by the post-test questioning that after the

structured teaching programme there was a significant improvement in knowledge among women regarding the signs and symptoms, early detection and prevention of cancer cervix.

In comparison of the Mean and Standard deviation of the overall knowledge on cancer cervix, the pre-test mean score was 25.5 with a standard deviation of 20.33 and in the post-test the overall knowledge score the mean was 77.08 with a standard deviation of 21.30 The improvement of knowledge on cancer cervix in the post test, the mean value was 51.55 with a standard deviation of 13.64 and a paired 't' value of 29.26 which was highly significant at p<0.001 level.

Correlation of the demographic variables with the improvement in knowledge score regarding cancer cervix showed that there was a significant association with demographic variable like educational status and source of health information. The outcome of this study would be useful for health administrators and hospital managements to conduct cancer awareness programmes and also an useful background for doing further research projects on cancer cervix.

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