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Original Article

Study of Socio Demographic Profile of Cancer cervix patients in Tertiary Care Hospital, Karimnagar (Andhra Pradesh)

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ABSTRACT

Introduction: Carcinoma cervix worldwide accounts for 15% of all (9) cancers it is second most common cancer in woman globally and 80% of them occur in developing countries. In India it is estimated that approximately 1,00,000, woman develops cervical cancer each year(3). In woman cervix cancer were the leading fatal (3) causes in both rural and urban area, higher rate in rural area. **The aim of the present study is to identify the socio demographic profile of patients with carcinoma cervix in rural Karimnagar at Sushruta cancer hospital Bommakal. Methodology:** Record based retrospective study was conducted in Sushruta cancer hospital, and socio demographic profile of all cancer cervix patients who got admitted and treated in Sushruta hospital during 2007 November to 2012 April was collected with a pretested semi-structured questionnaire. **Results:** It was found that majority of patients were in the age group of 65, occupation wise unskilled workers have more percentage of cancer cervix followed by housewife, agriculture and less frequent in skilled workers. And majority of study subjects were married (91.2%), 57% of study subjects were lower class people have more frequency of cancer cervix(62%). About 67.9% of study subjects were from rural and it was found that illiterate people are having more frequency of cancer cervix (80.3%). Only about 8.7% of patients were received surgical treatment and about 16.2% of cases were diagnosed at their late stage. **Conclusion:** Further epidemiological studies are needed to prove the effect of demographic factors on occurrence of cancer cervix among rural population.

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1. Introduction

Cervical cancer is the fifth most common cancer in the World. Of the estimated 4,60,000 new cases each year, three quarterly occur in developing countries. In India annually 16% of the World total cases occur, only 5% are reported in the early stages(1).

In India also it is estimated that approximately 1,00,000, woman develops cervical cancer each year(3).

In woman cervix cancer were the leading fatal (3) causes in both rural and urban area, higher rate in rural area.

Cervical cancer is the commonest cancer among Indian woman. Approximately 20,000 new cases were detected in India in the year 2000(5).

The incidence and mortality from this disease in developing countries is very high. Woman of low socio-economic status and minority woman are at particular risk(3).

The risk of cervical cancer in muslim woman was noted internationally(7), circumcision carry Muslim men which reduces the sexual transmission of HPV it is likely explanation other factors also might accounts to the differences.

Human Papilloma Virus (HPV) types of 16 and 18 are responsible for 70% cervical cancer cases. Countries like India where huge section of the population are from below poverty line and there is lack of awareness and facilities for cervical cancer screening in India.

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Cervical cancer is a disease most frequently found in poverty stricken communities and reflects a problem of equity at both levels gender and regional(6). Social and economic development inequalities almost half a million new cases cervical cancer are diagnosed each year worldwide.

Human Papilloma Virus (HPV) recognised as one of the leading cause and is associated with 90% cases, However other risk factors eg:age, first sexualcontact, number of sexual partners, multiparity, diet, genetic, predisposition and environment are also associated with cervical cancer(7).

Death toll of approximately 2,37,500 women each year cervical cancer is the primary cause of cancer deaths of any woman in developing countries (1).

This similiar study was undertaken to find out the magnitude of precancerous lesions among woman in the age group 15-60 years and to identify the various and reproductive risk factors of cervical cancer among those with cervical lesions in this remote.

2. Methodology:

After obtaining permission from the Director of Sushruta cancer hospital, Karimnagar the data collected six hundred fifty woman cancer cervix patients age group of 15-60years admitted and treated in Sushrutha Hospital during November,2007 to April,2012 was collected with a pretested semi-structured questionnaire. The data was analysed by using descriptive statistics like frequency and percentage to explain the socio demographic profile of cancer cervix patients.

The close ended questionnaire contained questions relating to correlates of cervical cancer that was related to the socio-demographic situation prevailing in this area.

All the adult woman in the age group of 15-60years were screened by one qualified doctor conducted papsmear test and clinical examinations, cytopathological investigations were carried out in the designated pathological laboratory. Collected information on socio-demographic and marital, religion, literacy information on cervical cancer was disseminated in health education session to complement the finding of study and graded the cervical cancer I, II, III, IV and advanced stage.

Simple and inexpensive methods based on visual examination of cervix are for cervical screening(10). Visual inspection of the cervix after application of 3%-5% of acitic acid (VIA) and Magnified Visual inspection after application of acetic acid (VIAM)(11) had significantly higher sensitivity than cytology in our study. The specificity of cytology was higher than that of VIA and VIAM.

3. Results:

Table 1, describes the frequency distribution of cancer cervix patients according to their age category. It was found that majority of patients were in the age group of 65 and above followed by 45-54, 55-64. And about 14.6 %of cases were from the age group of 25-34.

Table 2, describes the distribution of study subjects according to their occupation. It explains unskilled workers have more percentage of cancer cervix followed by housewife, agriculture and less frequency in skilled workers.

Table 3, depicts the marital status of study subjects, and it describes that majority of study subjects were married (91.2%) followed by widows about 7.3%.only 1.5% were unmarried.

Table 4, describes the distribution of study subjects according to their religion and shows that majority of study subjects were Hindus(57), followed by muslims(16) and Christians(15.3).

Table 5, depicts the distribution of study subjects according to their socio economic status.it was found that lower class people have more frequency of cancer cervix(62%), followed by middle class(23.4%) and very less among higher class(14.6%).

Table 6, describes the distribution of study subjects according their residency, it shows that 67.9% of study subjects were from rural area and the remaining were from urban area.

Table 7, describe the distribution of study subjects according to their literacy, it was found that illiterate people are having more frequency of cancer cervix (80.3%) when compared with literate people(19.7%)

Table 8, describes the frequency distribution of treatment modalities received by cancer cervix patients, and it was observed that 38.7% of patients received combined therapy that is both chemo and radio therapy. About 8.7% of patients received surgical treatment.

Table 9, describes the distribution of study subjects according to the staging of disease and about 16.2% of cases were diagnosed at their late stage where only palliative treatment is the only chance. About 40.1% of patients were diagnosed at an early stage.

Table – 1: Age wise distribution

Agegroup	2007-08	2008-09	2009-10	2010-11	2011-12
25-35	6	5	4	3	2
35-45	8	4	6	5	3
45-55	10	5	4	6	5
55-65	12	6	3	4	2
>65	14	8	5	3	4

Total = 360 case sheets

Carcinoma of cervix = 137

Collection data from: Susrutha Cancer Hospital, Karimanagar
CAIMS, Karimanagar

Table – 2: Occupation wise distribution

Occupation	2007-08	2008-09	2009-10	2010-11	2011-12
Agricultural	8	5	2	5	3
Housewife	15	2	4	4	2
Semiskilled	5	6	3	2	1
Skilled	2	5	1	3	2
Unskilled	20	10	12	7	8
Total:	50	28	22	21	16

Table – 3: Marital status of study subjects:

Marital status	2007-08	2008-09	2009-10	2010-11	2011-12
Married	50	28	22	21	16
Unmarried	-	-	-	-	-
Widower / Divorced	No specific information available				

Table – 4: Religion wise distribution

Religion	2007-08	2008-09	2009-10	2010-11	2011-12
Hindu	32	16	12	10	8
Muslim	8	4	3	4	3
Christian	6	5	3	5	2
Others	4	3	4	2	3

Table – 5: Socio-economic status wise distribution:

Income group	2007-08	2008-09	2009-10	2010-11	2011-12
Higher Income Group (HIG)	8	5	3	2	2
Middle Income Group (MIG)	10	6	5	7	4
Lower Income Group (LIG)	32	17	14	12	10

Table – 6: Area wise distribution

	2007-08	2008-09	2009-10	2010-11	2011-12
Rural	35	18	16	14	10
Urban	15	10	6	7	6

Table – 7: Educational wise distribution

	2007-08	2008-09	2009-10	2010-11	2011-12
Literate	5	7	4	5	6
Illiterate	45	21	18	16	10

Table – 8: Modality of treatment received by patients:

	2007-08	2008-09	2009-10	2010-11	2011-12
CT	10	8	5	6	7
RT	10	3	10	8	5
CT+RT	25	15	4	6	3
Surgical	5	2	3	1	1

CT: Chemo Therapy, RT: Radio Therapy

Table – 9: Stage / Grade of Cancer

	2007-08	2008-09	2009-10	2010-11	2011-12
Grade-I	20	10	11	8	6
Grade-II	15	5	4	3	4
Grade-III	10	7	5	4	3
Advanced Stage	5	6	2	6	3

CT: Chemo Therapy, RT: Radio Therapy

4. Discussion:

The data collected from Susurutha Cancer Hospital, Karimnagar. 650 woman are enrolled majority of them had the cervical lesions out of 137 women in our study population of Karimnagar (A.P.), overwhelming majority had cervical lesion. Of the cervical smear taken from these clinically suspected women, varying grades of inflammation was evident which was proved malignant on cytopathological screening of the cervical smear. Significant difference was noted among those with or without lesions among women below 30 years of age with those above, among illiterate women with literates, age at marriage and child birth.

Cancer cervix showed a rise with increasing age and parity and prolonged sexual period. The incidences of both cervical cytopathologies were also higher in women of low socioeconomic status. The study emphasizes the need for proper education to women of low socioeconomic class for creating awareness regarding hazards and risk factors of cervical cancer as well as mangement and cure of the disease. (13)

Indian population from the data published in cancer Incidence in Five Continents for various Indian registries, it was observed that cancer of the uterine cervix was the second most common cancer among women in the world after breast cancer. It was the most common cancer among Indian women. Cervical cancer revealed that the disease increase from 35 years and reaches a peak between the ages 55 and 64 years. For women beyond 64 years, the disease incidence showed an increasing trend or minimal decrease.

Cervical cancer continues to be an important cause of avoidable cancer deaths in older women. Despite the benefits of screening in reducing morbidity and mortality, older patients are under-represented in screening programmes. Most professional groups recommend an annual Pap-smear for all women, with no upper age limit. In most cases, women can safely undergo triennial screening is well accepted among older patients, as up to 92% will accept a Pap-smear offered in a clinical setting. To insure that screening is cost-effective, use of sensitive and specific testing methods and limit screening to appropriate candidates.(16)

Cervical cancer can be detected at an early stage through regular advantage of screening. To explore perspectives on cervical cancer screening. Lack of knowledge about the importance of prevention, influence of family and community, and health-provider issues affected the women's access to screening.(19) The effectiveness of cervical cancer screening programmes differs widely in different populations. In India, most women presented with cancer of uterine cervix extending beyond the cervix. The majority of women belong to the lower socioeconomic status, are rural, aged 35 and 64 years and highly noncompliant for complete treatment and follow-up.

The cost-effectiveness cervical cancer screening and emphasis on important qualitative themes to consider in designing cervical cancer intervention policies may have saved million from this preventable malignancy. There is a need for changes on cervical cancer screening. Policies, standards, quality control, monitoring and evaluation, and integration of new screening alternatives: (a) to address unprivileged rural women; (b) ensuring extensive coverage as well as comparable quality of coverage in every state; and (c) to use screening strategies matching health care resources. In countries like India, with a great regional heterogeneity regional centres had to be set up as a strategy, finally, the screening programme should have met the expectations of its beneficiaries, and inculcate behaviour change communication (BCC) in cervical cancer-related matters. It holds the potential to be used as a tool to identify women, at risk for subsequent development of cervical cancer.

Carcinoma of the cervix continued to be an important cause of avoidable cancer deaths in older women in the developing countries including India. There was an imperative need for identifying prevalence of asymptomatic cervical dysplasia in all population. Low cost methods for cervical cancer prevention have a place in reducing the incidence of this deadly disease. We screened all women in the reproductive age group in our population for other reasons also, viz., to sensitize the female population regarding cervical cancer, its risk factors and the test available for early diagnosis of precancerous lesions, which was reason for including young females too.

We have to create wider awareness about the importance of early detection and encourage more people for screening of cervical cancer. Second, we should have some productive advertisements to motivate the general mass for the cervical cancer in to focus on the relations of the cervical cancer with early marriage, early

pregnancy repeated childbirth as well as unhygienic lifestyle and above all on the importance of screening. Third, the continuity of obtaining better health services and receiving recommendations from physicians remain the core motivating factors that are significantly associated with the success of the screen and treat philosophy in cancer. Making people aware of recent findings, e.g., frequent and regular screening is associated with a lower risk of cancer progression will be added advantage.

5. Conclusion:

1. Precaution measures and administration of HPV screening for treatment of population of illiterate, low socio-economic and rural woman.
2. Early detection screening for cervical cancer in rural / urban areas.
3. Health education, promotion condom usage and health hygiene, practice is the cost effective, approach to reduce the incidence of cervical cancer, resources crunched society.
4. Govt. Responds to need of the hour and strengthen, information, education, communication effects on cervical cancer along with providing, wide spread screening facilities.
5. Should have productive advertisement to motivate the general mass for cervical cancer, for early marriage, early pregnancy, repeated child birth as well as unhygienic.
6. Better health services screening treatment philosophy cancer.
8. Behavioural changes, improve knowledge about cervical cancer particular lesser educational level any people general and woman in particular by improving educational tools preferably based on audio visual technique.

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