

## A Clinical Study on Socio Demographic Co-Factors in Cancer Cervix in Women of Rural Haryana, North India

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### ABSTRACT

Cervical cancer is the commonest cancer of female genital tract in India with profound impact on the morbidity and mortality. This study was undertaken to understand the socio demographic factors affecting occurrence of cancer cervix among the rural population of Haryana, North India.

The study showcased a surprising lack of knowledge of cancer cervix and those many modifiable socio demographic factors were present which act as cofactors in cervical carcinogenesis.

**Keywords:** Cervical cancer, Carcinoma, HPV, Screening, Pap smear, Sociodemographic, Epidemiological

**Abbreviations:** CIN: Cervical Intraepithelial Neoplasia; CIS: Carcinoma in Situ; HPV: Human Papilloma Virus; HIV: Human immune Virus; AIDS: Acquired Immunodeficiency Syndrome

### INTRODUCTION

India is the second most densely populated country in the world. Cervical cancer is the most common cancer of female genital tract and fourth most common cancer in females overall after breast, colorectal and lung [1,2]. Many sociodemographic factors like poverty, lack of education and health awareness, early age at marriage, repeated childbirths, lack of proper hygiene and proper education have been linked to the high incidence of cancer and morbidity and mortality associated with the same [1,3,4]. It has been established that incidence of cervical cancer increases with increasing age, number of childbirths and prolonged period of sexual intercourse [1,3,4]. Cancer cervix is often referred to as a cancer of the poor, uneducated and undeserved [4], mostly because women coming from poor and uneducated social background often have no or less awareness about health education, wellbeing and less likely to avail routine checkup and screening [1,9-11].

Early age at first sexual intercourse and prolonged duration of sexual intercourse is directly proportional to development of cervical cancer [1]. Environmental co-factors depend on the socioeconomic condition of the patient e.g., early age at marriage and first childbirth and multiple childbirths, poverty, poor hygiene, active and passive smoking, oral contraceptive pills use is important in cervical carcinogenesis. Other factors e.g., multiple sexual partners, HIV/AIDS, HPV infections.

### MATERIALS AND METHODS

- **Aim of the study:** To evaluate the sociodemographic co factors on cervical cancer in the rural population of Haryana, in North India.
- **Study Period:** Jan 2018- Jan 2021
- **Study Duration:** 3 years

A total of 150 patients of histopathologically diagnosed carcinoma cervix were encountered in the said study period. All the data regarding the patients' particulars especially the socio-demographic factors eg age, parity, socio-economic status, education, age at marriage and first pregnancy, occupation and stage of the disease at diagnosis were collected, tabulated and statistically analyzed.

### RESULTS AND OBSERVATION

The results and observations were as follows (**Tables 1-6**):

#### A. Socio Demographic Variables

##### Table 1. Age.

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**Table 1.** Age.

Age (years)	Number (n)	Percentage (%)
<40	30	20
41-50	55	36.6
51-60	25	16.6
>60	40	26.6
Total	150	

**Table 2.** Parity.

Parity	Number (n)	Percentage (%)
1	20	13.3
2	25	16.6
3	40	26.6
>4	65	43.3
Total	150	100.0

**Table 3.** Education Level.

Level	Number	Percentage (%)
Nil	65	43.3
Primary level	56	37.3
Secondary school level	20	13.3
Graduation & above	9	6.0
Total	150	100.0

**Table 4.** Occupation.

Occupation	Number	Percentage (%)
Housewife	58	38.6
Agriculture	30	20
Animal husbandry	29	19.3
Labourer	25	16.6
Professional	8	5.3
Total	150	100.0

**Table 5.** Age at Marriage.

Years	Number	Percentage (%)
<18 years	68	45.3
18-25	42	28
26-30	30	20
>30	10	6.6
Total	150	100.0

**Table 6.** Stage of Cancer Cervix at Diagnosis.

Stage	Number	Percentage (%)
Stage I	30	20%
Stage II	75	50%
Stage III	21	14%
Stage IV	24	16%
Total	150	100.0

## DISCUSSION

Globally Cancer Cervix accounts for 12% of all female cancers, but is the commonest female genital cancer in India [1,2]. Cancer Cervix has a prolonged precancerous stage which gives us a golden opportunity to use for screening for the disease even before the frank cancer has occurred. Also, diagnosis at an early-stage results in better prognosis and 5-year survival rate of the patients. In our study we observed most of the patients belonged to lower and lower middle-income group, rural population, uneducated, married at early age (<18 year), had early sexual intercourse, had numerous childbirths (>4), had active and passive smoking exposure with tobacco, used no contraception, didn't undergo screening tests for cancer cervix. These observations tallied with those from various other studies from the Indian sub-continent, India, Bangladesh, Nepal and Pakistan [1-3,6,7,9,10]. Cancer cervix is rightly referred to as the 'cancer of poor, uneducated and undeserved'. Most cases were diagnosed at advanced stages of the disease (III and IV). This can be attributed to the lack of health awareness and proper and easy access to screening methods and health facilities [11,15-19]. Often it is seen that incomplete and improper knowledge about the disease leads to improper diagnosis and treatment especially in the hands of inexperienced, underqualified and unqualified practitioners increasing the likelihood of mistreatment and undertreatment of the disease so that in the meantime crucial time is lost and most of the patients came at advanced stages of cancer cervix with poor prognosis.

## CONCLUSION

This study helped us in understanding many sociodemographic factors which have an important bearing in

cervical carcinogenesis. Some of these factors are easily modifiable and if addressed at the grass root level, will help in prevention, early diagnosis of cervical cancer which will ultimately help in reducing the burden of morbidity and mortality due to cervical cancer.

#### CONFLICT OF INTEREST

Nil.

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