

An Observational Study on Clinical Profile on Patients with Cancer Cervix in a Tertiary Care Hospital in Southern District Of Odisha**Manoj Kumar Murmu¹, Subhrajit Mandal², Monisha Mohapatra³**¹Post Graduate Student, Department of Obstetrics & Gynaecology, MKCG Medical College and Hospital, Berhampur²Assistant Professor, Department of Obstetrics & Gynaecology, PRM Medical College and Hospital, Baripada³Senior Resident, Department of Obstetrics & Gynaecology, PRM Medical College and Hospital, Baripada

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Conflict of interest: Nil

Abstract**Objectives:** Cancer cervix is a cancer of female genital tract. Around 77,000 people die every year due to cervical cancer in India. It accounts for 9.5% of all cancers diagnosed in India every year. The aim of the study is to determine the prevalence, clinical presentation, risk factor and stage distribution of cervical cancer in the study population.**Method:** An observational descriptive study had been conducted in Department of Obstetrics & Gynaecology, MKCG Medical College & Hospital, Berhampur, and Odisha from December 2022 to December 2024.**Results:** The most common age of presentation of cancer cervix is between 41-60 years majority of patients presented with complaint of post coital bleeding.**Conclusion:** Efforts to build a sustainable infrastructure for the dissemination of cancer prevention measures and provision of cancer care in transitioning countries is critical for global cancer control.

A multidisciplinary approach involving early diagnosis, effective treatment, and preventive measures is crucial in addressing the burden of cervical cancer. Strengthening healthcare infrastructure, increasing awareness, and promoting vaccination programs can significantly lower mortality rates and improve patient prognosis in cervical cancer cases.

Keyword: Cancer, cervix, post coital bleeding, female genital tract, prevention.**DOI:** 10.25258/ijcpr.18.2.157This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.**Introduction**

Globally, cervical cancer is the fourth most common cancer in women after lung, breast and colorectal cancer. According to GLOBOCAN 2020, nearly 6,62,301 new cases of Cervical Cancer are diagnosed every year and around 341,831 patients die due to the disease every year [1]. In India, cervical cancer ranks as the second most common cancer among women. In India around 1,27,526 new cases of cervical cancer are diagnosed every year which accounts for one-fifth of the global burden. Around 77,000 people die every year due to cervical cancer in India. It accounts for 9.5% of all cancers diagnosed in India every year [2]. It is estimated that cervical cancer will occur in approximately 1 in 53 Indian women during their lifetime and in every 10 minutes one Indian woman is dying of cancer cervix.

Material and Methods

An observational descriptive study had been conducted in Department of Obstetrics & Gynaecology, MKCG Medical College & Hospital, Berhampur, and Odisha from December 2022 to December 2024. The study included all the patient admitted through outdoor and labour room with a diagnosis of carcinoma cervix were evaluated.

The study included all the women of any age group with the definitive diagnosis of cancer cervix of any stage and excluded women denying for treatment or follow up. Necessary approval from the Institutional Ethical Committee of the M.K.C.G. Medical College has been taken before start of the study. Eligible women have been included in the study after taking a written and informed consent.

All the cases recruited as per the above criteria had undergone thorough and meticulous history taking including socio-demographic factors like age, education, occupation, economic status, age at marriage, multiple sexual partner, family history. The chief complaints with respect to duration, frequency and intensity and obstetrics history were recorded.

All the patients underwent thorough general, systemic and clinical examination. All the necessary routine investigations, imaging modalities and diagnostics procedure including the histopathological study were conducted. The staging of the cancer cervix was done on the basis of clinical examination finding, imaging and pathological findings. The patient were treated

based on their performance status and staging of the cancer. Statistical analysis was performed using Microsoft excel sheet v2010. The results were calculated and interpreted through appropriate statistical analysis with the help of a statistician and presented with table.

Results

A multidisciplinary approach involving early diagnosis, effective treatment, and preventive measures is crucial in addressing the burden of cervical cancer.

Strengthening healthcare infrastructure, increasing awareness, and promoting vaccination programs can significantly lower mortality rates and improve patient prognosis in cervical cancer cases.

Table 1: Cervical Carcinoma In Relation To Age Group

Age Group	No of cases	Percentage
21-40	47	23.5%
41-60	112	56%
61-80	41	20.5%
Total	200	

The above table shows that out of 200 cases 47 (23.5%) cases were seen in (21-40) age group, 112(56%) cases in (41-60) age group and 41 (20.5%) in the (61- 80) age group women.

Table 2: Baseline Characteristics of the Study Population (N=200)

Parity	No of Cases	Percentage
1	10	5%
2	57	28.5%
3	66	33%
4	38	19%
5	22	11%
6	7	3.5%
Socio Economic Status	No of Cases	Percentage
Upper	1	0.5%
Upper Middle	2	1%
Lower middle	20	10%
Upper lower	96	48%
Lower	81	40.5%
Religion	No of Cases	Percentage
Hindu	180	90%
Muslim	11	5.5%
Others	9	4.5%
Family History	No of Cases	Percentage
Yes	17	8.5%
Nil	183	91.5%
Educational Status	No of Cases	Percentage
Illiterate	105	52.5%
Primary school	61	30.5%
Secondary school	26	13%
Graduation	8	4%

The above table shows that out of 200 cases 10(5%) cases are having parity1, 57(28.5%) cases having parity 2, 66(33%) cases having parity3, 38(19%) having Parity 4, 22(11%) having parity 5 and 7(3.5%) having parity 6. Majority of the cases

belong to upper lower class (48%) and lower socioeconomic status (40.5%). 180 cases (90%) are hindu female and 11(5.5%) are muslim female and 9(4.5%) are from other religions. Major proportion of study population (91.5%) have no

family history of cancer in their family.

In this study 105(52.5%) cases are illiterate and only 8(4%) cases has completed graduation.

Table 3: Cervical Cancer and Multiple Sexual Partner

Multiple Sexual Partner	No of Cases	Percentage
Yes	8	4%
No	192	96%

The above table shows that out of 200 cases 8(4%) are having multiple sexual partner and 192(96%) are having single sexual partner.

Table 4: Cervical Cancer and Chief Complain

Chief Complain	No Of Cases	Percentage
Post coital bleeding	53	26.5%
Postmenopausal bleeding	51	25.5%
White discharge	19	9.5%
Vaginal discharge	26	13%
Pmb+Rectalbleeding	39	19.5%
Intermenstrual bleeding	12	6%
Total	200	

The above table shows that out of 200 cases 53(26.5%) are having C/O post coital bleeding, 51(25.5%) are having Postmenopausal bleeding, 26(13%) having vaginal discharge, 19(9.5%) are having white vaginal discharge, 39(19.5%) are having postmenopausal bleeding+rectal bleeding and 12(6%) having inter menstrual bleeding.

Table 5: Survival Rate Based on Stage of Disease

Stage	Total No. of Patients	No. of Death	Remaining Alive	Survival Percentage
Stage I	22	7	15	68.18%
Stage II	62	31	31	50%
Stage III	100	64	36	36%
Stage IV	16	14	02	12.5%
Total	200	116	84	42%

The above table show that out of 200 cases survival rate of stage I is-(68.18%), stage II is-(50%), stage III is-(36%) and stage IV is (12.5%).

Table 6: Cause of Death in Cancer Cervix

Cause of Death	Number of Cases	Percentage
Uremia	72	62.06%
Infection	08	6.89%
Organ Failure	31	26.72%
Severe anemia	05	4.31%
Total	116	

The above table show that out of 116 death, 72(62.06%) cases death occurred due to uremia followed by Organ failure-31(26.72%) cases followed by Infection- 8(6.89%) cases and severe anemia-5(4.31%) cases.

Discussion

As we know cervical cancer has bimodal age distribution that is 30-34 years and 65-69 years. In the present study it was observed that cervical cancer was more commonly reported in (41-60) year's age group followed by (21-40) years. The age distribution of patients in this study was similar to that of the study done by Haghdel in Iran⁶ with majority presenting in the fifth decade followed by decline in incidence. Another study found the rate of decline after age 60 [7]. Early marriage often

leads to earlier sexual activity, early childbearing and increase chance of HPV infection. The exact mechanisms by which high parity increases cervical cancer risk are not fully understood, but several hypotheses exist. Some studies suggest that vaginal birth could cause trauma to the cervix, potentially leading to changes that increase cancer risk. Hormonal fluctuations during pregnancy might contribute to cervical cell changes. HPV infection is a significant risk factor for cervical cancer and high parity may increase the risk of HPV persistence or progression to cancer. In my study, maximum cases have parity 3(33%) followed by (28.5%) cases having parity 2, (19%) having parity 4, (11%) having parity 5, (5%) cases are having parity 1and (3.5%) having parity [6]. Sobhan et al in their study also found 0.9%patient

nulliparous in NICRH [9]. In contrast, a study done by Pretorius R et al showed that 18% of the patients were nulliparous [10]. It was observed in the present study that (48%) are of upper lower class followed by (40.5%) of lower socioeconomic status, (10%) cases are of lower middle class, (1%) are of upper middle class and (0.5%) case is of upper class which is found to be comparable with the study conducted at Mexico [7]. It was observed in the study that a major proportion of cases are illiterate (52.5%). In Shireen Masood (2024) survey, out of 666 participants 516 women (77.5%) were acquainted with the word “cervical cancer”.

It was observed in the study that (94.5%) are hindu female and 11(5.5%) are muslim female. The correlation between the detection of cancer cervix and religion is based on their belief and awareness. Many muslims patients do not undergo screening because of the taboos. It was observed in the study that (91.5%) are having no history of any cancer in their family followed by 8.5%) are having family history of cervical carcinoma. A study on 893 cases of all surgically treated cervical cancer by Wertheim–Meigs procedure at University Hospital of Leipzig, it was found that 737 women had positive family history. [8]

It was observed in my study that (96%) are having single sexual partner followed by (4%) are having multiple sexual partner. In 2015 Zhi-Chang Liu conducted a meta-analysis on forty-one studies by searching the databases of MEDLINE, PubMed and ScienceDirect published in English from January 1980 to January 2014.

It was observed that the number of sexual partners was associated with the occurrence of non-malignant cervical disease (OR=1.82, 95% CI 1.63-2.00) and invasive cervical carcinoma (OR=1.77, 95% CI 1.50-2.05) and the association remained significant after controlling for HPV infection (OR=1.52, 95% CI 1.21-1.83 for non-malignant disease; OR=1.53, 95%CI 1.30- 1.76 for invasive cervical carcinoma) even in subgroup analyses.[9] It was observed in my study that majority of patients presented with abnormal vaginal bleeding i.e. 53(26.5%) patients with post coital bleeding and 51 (25.5%) with postmenopausal bleeding which was found similar to other study [3].

Locally advanced cases are most-commoner in our institution which in turn affects overall survival. Survival drops as the stage increases. But in this analysis, a notable difference is, survival is low for all stages (stage I-68%, stage 2-50%, stage 3-36%, stage 4- 18%) compared to a study conducted at TATA memorial hospital, India (stage1-83.5%, stage 2-80.6%, stage 3-66%, stage 4- 37.1%). This difference in survival can be attributed to various other factors like socioeconomic status, the patient's geography (rural or urban), the patient's

general condition and nutrition, adherence to treatment protocol and follow up and finally advances in treatment modalities.

There are several causes of death in cervical cancer usually in advance stage disease. In this study out of 116 deaths, 72(62.06%) cases death occurred due to uremia followed by Organ failure- of 31(26.72%) cases.

Discussion

Cervical cancer remains a major public health concern, particularly in regions with limited access to screening and healthcare services.

A multidisciplinary approach involving early diagnosis, effective treatment, and preventive measures is crucial in addressing the burden of cervical cancer. Strengthening healthcare infrastructure, increasing awareness, and promoting vaccination programs can significantly lower mortality rates and improve patient prognosis in cervical cancer cases.

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