



THE SYMPTOM -TO-TREATMENT DELAY IN CARCINOMA CERVIX: WHERE WE STAND AMONG DEVELOPING COUNTRIES

Oncology

Dr.Abhishek Shrivastava	Senior Resident, Department of Radiation Oncology, Gandhi Medical College, Bhopal 462001.
Dr.Veenita Yogi*	Associate Professor, Department of Radiation Oncology, Gandhi Medical College, Bhopal 462001.*Corresponding Author
Dr.O.P.Singh	Professor & Head, Department of Radiation Oncology, Gandhi Medical College, Bhopal 462001.
Dr.Varsha Mandloi	Senior Resident, Department of Radiation Oncology, Gandhi Medical College, Bhopal 462001.
Dr.Megha Choudhary	Post Graduate Resident, Department of Radiation Oncology, Gandhi Medical College, Bhopal 462001.

ABSTRACT

AIM: The aim of this study is to analyse the relationship between the time delays from the first symptom to the time of definitive treatment in patients of cervical cancer.

MATERIAL & METHOD: 413 patients with cancer cervix were analysed retrospectively and prospectively between January 2013 and June 2017 at Department of Radiotherapy and Oncology, Gandhi Medical College Bhopal.

Patients were interviewed at their first presentation to our hospital. Dates were recorded according to the patient's recollection, written information in the doctor's records during diagnosis process, and the hospital files. Details from the patient's first symptoms and course of diagnosis and treatment were recorded.

The overall delay in months was recorded from appearance of the first symptoms to the date when the patient was started with definitive cancer specific treatment (end point), and this delay was divided as: (1) time of appearance of the first symptom to first contacting the health care system (patient delay). (2) time from first contacting the healthcare system to histopathological diagnosis (histopathological delay). (3) time from histopathological diagnosis to the end point (treatment delay).

RESULTS: Median age was 49 years. Most common symptoms were bleeding per vagina in 93% patients, white discharge in 89% patients, and abdominal pain in 80% patients. The mean delay from first symptom to end point was 145 days. Total symptom- to-treatment was due to: patient delay (85.7%), histopathological delay (7.2%), and treatment delay (7.1%).

CONCLUSION: Patient delay is the most important factor. Personal care, community education programs and socioeconomic support may help in their early presentation to the hospital for better Quality of life.

KEYWORDS

Carcinoma Cervix, Treatment Delay, Quality Of Life.

INTRODUCTION: Cervical cancer is the third most commonly diagnosed cancer in women worldwide with more than 85.0% burden in developing countries^[1]. Although, cervical cancer can be cured if detected at earlier stage^[2,3], it continues to be a major public health threat to women in India, where it is still the leading cancer among them with high morbidity and mortality. There has been a rising trend among the cases of cervical cancer in Indian women from 79,827 cases in 2001 to 125,821 cases in 2016^[4].

One of the most important prognostic factors for cervical cancer is how early the disease is detected and how far it has spread^[5,6]. Early diagnosis of cancer results in lower stages of the cancer, less intensive treatment and improved survival^[5,7,8].

OBJECTIVES: The aim of this study is to analyze the relationship between the time delays from the first symptom to the time of definitive treatment in patients of cervical cancer.

MATERIAL AND METHODS:

This is an analytical study conducted at the Government Medical College of Central India which included 413 patients of carcinoma cervix registered between January 2013 and June 2017.

Patients were interviewed at their first presentation to our hospital. Dates were recorded according to the patient's recollection, written information in the doctor's records during diagnosis process, and the hospital files. Details from the patient's first symptoms and course of diagnosis and treatment were recorded. The overall delay in months was recorded from appearance of the first symptoms to the date when the patient was started with definitive cancer specific treatment (end point), and this delay was divided as: (1) time of appearance of the first symptom to first contacting the health care system (patient delay). (2)

Time from first contacting the healthcare system to histopathological diagnosis (histopathological delay). (3) Time from histopathological diagnosis to the end point (treatment delay).

Statistical analysis: Data analysed using SPSS ver. 16 (SPSS Inc., Chicago, Ill., USA).

RESULTS:

413 patients with cervical cancer, irrespective of the stage at presentation were included in the study. The median age of the patients when they first developed symptoms was 49 years, ranged 30-65 years. There were 272 (65.83%) patients below 50 years of age and 141 (34.17%) patients above 50 years of age. Most common symptoms in descending order were bleeding per vagina in 93% patients, white discharge in 89% patients, lower abdominal pain 80% patients and pain in lower extremities 23%. According to FIGO staging, stage at presentation was divided into four stages and their sub-stages. 24 (5.8%) patients presented at stage II A and 103 (25%) in stage II B, there were 17 (4.16%) patients in stage III A and 206 (50%) patients in stage III B and there were 63 (15%) patients that presented at stage IV A. Thus, showing the burden of delayed presentation, none of them presented with stage I. Maximum women 384 (88.33%) were illiterate and only 29 (11.67%) were literate, thus suggesting the magnitude of limited knowledge about cervical cancer among these women. 337 (81.67%) women came from a rural background where the health resources are scarce and the accessibility to health care facilities is limited, only 76 (18.33%) women came from an urban background. A woman conceiving more than once is called as multiparous, but in Indian scenario has more number of grand multiparous women, we took parity 4 as our criteria to divide them into 2 groups. 259 (61.67%) patients had parity less than 4 and 154 (38.33%) patients had parity more than 4.

314(84.17%) women came from a lower socio-economic status, 100 (24.2%) women from middle socio-economic status and only 9 (0.02%) from higher socio-economic status.

The mean delay from first symptom to end point was 145 days. The following factors were contributed to delay- patient delay (85.7%), histopathological delay (7.2%), and treatment delay (7.1%).

DISCUSSION:

Hospital management of women with cervical cancer remains a challenge in most developing countries because most women seek medical care after they have developed signs and symptoms. Almost all cervical cancers are caused by human papillomavirus (HPV), a common virus that can be passed from one person to another during sex^[9].

During the early stages of infection, HPV does not show any symptoms and signs, thus, the women do not know that they have been infected. For most women, HPV will go away on its own however, if it does not, over time, it causes cervical cancer^[9]. When women develop cervical cancer, they present with various symptoms, the common ones being per vaginal discharge, lower abdominal pains, backache, post coital bleeding, postmenopausal bleeding, dyspareunia and vaginal bleeding^[10]. Every year approximately 500,000 new cases of cervical cancer are diagnosed worldwide and over 250,000 women die^[11]. Approximately 80% of the disease burden and mortality is in the developing countries where it is the second most common form of cancer in women and the leading female cancer in sub-Saharan Africa, Central and South America and Southeast Asia^[12]. The higher incidence of cervical cancer in the developing countries compared to the developed countries is due to lack of effective screening programs aimed at detecting precancerous conditions and treating them before they progress to invasive cancer^[9].

In this study we investigated on the various periods of delays and the factors associated with them. Patient related factors seem to be of major concern as it was associated with 85.70% of the total period of delay.

We also evaluated different socio demographic factors associated with delayed diagnosis of cervical cancer. The rate of delayed diagnosis in our study was high (85.70%) which was similar to the study of Behnamfar et al.^[13] The rate was higher than that reported in Sudan (72%) and Nepal (80.9%)^[14,15].

The degree of education is indirectly linked with the average income, knowledge and understanding of nature of the disease, its related risk factors and health education. Many studies in our investigated field have reported that literacy of women is considered as an independent risk factor for delayed diagnosis of the cancer. In our study majority of the patients with advanced disease were illiterate. The findings of our study is in accordance with other studies which were conducted to determine the factors associated with delayed diagnosis of cervical cancer, indicating that higher education and having symptoms of the disease specially abnormal vaginal bleeding as early symptom are related to lower delayed diagnosis of the cancer^[15,16]. However a study by Ibrahim et al. in Sudan did not find any association between educational level and treatment delay^[14].

Urban-rural divide is still great nowadays in India. Medical consultations in urban areas is more convenient and they have more access to medical services than residents of rural areas, which would in turn make them more likely to seek prompt medical care for any health problems. In our study, patients who presented late were mostly (81.6%) from a rural background, this was consistent with the study done by Wang et al.^[17] and Ibrahim et al. The longer duration of symptoms till diagnosis supports the high prevalence of late stage diagnosis of cervical cancer.

76% of the patients in our study were from lower socioeconomic status. Ma et al. also supports the findings of our study, that lower education (primary school education or illiterate) and low annual income were the high risk factors for delayed reporting of cervical cancer^[18]. Patients with a higher SES had shorter health-care delay, were less likely to be diagnosed at a late stage, and had a higher likelihood of undergoing chemotherapy and radiotherapy after surgical resection^[16]. These findings are in accordance with our study, where there were very few patients from upper socioeconomic strata.

The longer patient delay may have resulted due to the influence of patient's characteristics such as high level of illiteracy, poor health

awareness, poor economic condition, their problematic health seeking behavior, ignoring the mild gynaecological symptoms as well as dependency on traditional health care practices^[19,20,21]. Factors such as unavailability to routine screening, inadequate follow-up of abnormal Pap smears and possibly low awareness of women's population regarding the course of the disease could explain the higher mortality of the cancer in our community^[22]. The participation of patients in health related programs including screening or prevention activities is lower in those with lower socioeconomic status (SES). The association between SES and delayed cervical cancer diagnosis has been demonstrated in prior studies^[23,24,25]. The implication of this finding in our study is that the prevention or diagnostic programs should be target general population with more attention to those with lower socioeconomic conditions

It is recommended to assess more educational programs regarding the importance of the cancer, its prevention and early diagnosis especially in population with low socioeconomic conditions.

CONCLUSION:

The results of this study indicated the mean duration related to delayed diagnosis of cervical cancer. Patient delay is the most important factor. Women with mentioned risk factors should be targeted for implementation of specialized educational programmes for improving knowledge and screening test. In addition the findings of this study could serve as baseline information for planning further large studies and performing large scale educational programs for general population. The consequences will be early detection, proper management and reducing disease related mortality. Personal care, community education programs and socioeconomic support may help in their early presentation to the hospital for better Quality of life.

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