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Original Research Paper

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FACTORS THAT CONTRIBUTE TO DELAYED DIAGNOSIS AND TREATMENT OF GYNECOLOGICAL MALIGNANCIES IN A TERTIARY CARE CENTRE - A CROSS SECTIONAL STUDY

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ABSTRACT

Background: The diagnosis and management of primary gynecological cancers are often delayed in low- and middle-income countries. Women mostly seek help in well advanced stages when treatment options are limited. Early diagnosis and treatment will ensure a better quality of life. **Materials & Methods:** A cross sectional study design was used to screen women attending the Outpatient Department (OPD) of Gynaecology at Government Medical College, Thrissur for gynaecological cancers, during the study period. All those admitted for evaluation and treatment for a primary genital tract malignancy were recruited. Demographic particulars, symptoms, time from onset of symptoms to seeking professional help, interval from diagnosis to treatment and reasons for delay in initiating treatment were recorded and analysed. **Results &Discussion:** Eighty-four women met the criteria for the study. Most (71.4%) of the women with cancer were 50 years old or more. Many of them (70.3%) were from families that were Below Poverty Line. Educational status, lack of awareness of preventive public health programs, ignorance about warning symptoms, financial issues, lack of care givers, fear and embarrassment about symptoms were found to be contributory factors for the delay in seeking treatment. Referral and treatment delays and diagnoses at an advanced stage . **Conclusion:** Scaling up of public awareness of early warning symptoms and the available preventive programs are essential to enable optimal utilization of health services for early diagnosis and treatment of gynaecological cancers.

KEYWORDS : Delayed diagnosis, Preventive programmes, gynecological cancers.

Introduction

Population based registries in India have shown that cancer incidence among females in India is about 52 -128 per 100,000 of which 80% occur in women aged between 35 and 64 years.[1] Among these malignancies, 50 to 60% arise from the cervix, uterus, ovaries and breast. 70% of these women are diagnosed in well advanced stages of the disease when optimal therapeutic options are limited and additional interventions may become essential.[1] Delayed diagnosis and management of gynaecological cancers continue to adversely affect women in the low- and middle-income countries resulting in greater morbidity and mortality. They have poorer 5-year survival rates compared to women in the developed countries.[2]

Delay in diagnosis and the initiation of treatment affects the overall outcome and quality of life of these patients. Delays can occur at several levels and these include: 1. Patient delay: number of days from first onset of malignancy related symptoms to being seen by a general practitioner. 2. General practitioner delay: time taken for referral to a specialist 3. Referral + secondary care / system delay: initiation of specific treatment for the malignancy.[3]

Lack of awareness of preventive measures, absence of well-organized national screening programs, ignorance about the warning symptoms, delay in help seeking behaviour, lack of access to appropriate health care facilities and financial and social hinderances to initiate and comply with treatment are some of the reasons stated.

We need to better understand the factors that might influence the time taken by patients to seek help for their malignancy related symptoms. We have to evaluate the reasons for delay to finally reach an appropriate health care provider for definitive treatment. It is essential to facilitate development of effective new strategies to reduce the time interval wherever feasible. Hence, we decided to evaluate the reasons for diagnostic and treatment delays in women with newly diagnosed gynaecological malignancies who reported to our hospital.

MATERIALS & METHODS

A cross sectional analytical study design was used to evaluate the reasons for delayed diagnosis and treatment in gynecological malignancies. All women who attended the Gynaecology Out Patient Department (OPD) of Government Medical College, Thrissur during the study period of 12 months from January 2019 to December 2019 were screened for newly diagnosed genital malignancies including ovarian, uterine, endometrial, cervical, vulval and vaginal cancers. Those who were admitted for further evaluation and management were recruited into the study using a convenient sampling method. Their clinical symptoms, physical examination findings, investigations and procedures that were used to confirm the diagnosis were noted. Women with recurrent cancers or metastatic secondaries from malignancies were excluded. Those in advanced stages of malignancy at initial diagnosis in the OPD where further interventions were not feasible in the Gynaecology Department were referred to the Radiotherapy Department and not included in the study.

The approval of the Institutional Ethics Committee was obtained. After obtaining written, informed consent from the subjects, the data was collected using a structured proforma. Demographic details, information about symptoms, interval between symptom onset and seeking help, reasons for delay in seeking treatment and interval from diagnosis to initiation of treatment were collected. The data was analyzed and the results were expressed as means and percentages

RESULTS:

Eighty-four women met the criteria during the study period of one year and were recruited. Most (71.4%) of the women diagnosed with cancer, were above the age of 50 years. The rest were between 30 and 50 years of age. 70.2% of the women were married and living with their spouse, 19% were single and 10.7% of women were widowed. 31% of the women with gynaecological cancers were nulliparous, 25% had 1 child, while the rest were multiparous

A large majority (70.3%) of the women were from families that were Below Poverty Line (BPL) with or without a ration card and no health insurance coverage. 28.6% were beneficiaries of the health insurance coverage by the National Health Insurance Programme (RSBY: Rashtriya Swasthya Bima Yojana). There

were 16 (19%) illiterate women, while 53 (63.1%) were educated up to the primary level. Most (51.2%) of the women were semi-skilled workers, 47.6% were unemployed. 19% of the women were living alone, while the rest lived with their family members.

Except for one woman who came to our hospital directly for evaluation of her symptoms, all the others (83) were referred from peripheral clinics with symptoms suggestive of a genital malignancy. Two of them were referred from elsewhere after the diagnosis of a gynaecological malignancy was made, while in all the others (97.6%) the diagnosis was arrived at after evaluation at our hospital.

Abnormal bleeding per vaginum was the most common (52.4%) symptom among these women. This was followed by discharge per vaginum, nonspecific symptoms like low back ache and abdominal pain. (Table 1)

Abnormal bleeding per vaginum was often the presenting symptom for which these women approached a medical facility. Among them 26 (60.5%) had post-menopausal bleeding, 8 (18.6%) women had heavy menstrual bleeding, 6 (14%) had intermenstrual bleeding, while 3 (7%) had post coital bleeding

The interval between the onset of symptoms and seeking medical help was more than 6 months in most of them. (Table 2) Most (46.4 %) sought help 6 to 12 months after the onset of symptoms, while 39.3% attended the hospital a year after the onset of symptoms.

The reason stated for the delay in seeking professional help was most commonly a lack of awareness of the significance of their symptoms (41.7%) (Table 3). Financial constraints, lack of caregiver support, self-care and downplaying of symptoms in the hope that there will be spontaneous resolution, trying out other indigenous treatment alternatives, embarrassment in approaching medical help, fear regarding treatment and the expenses involved were other reasons stated.

Carcinoma of the ovary was the most common malignancy among these women accounting for 39.3% (33 women) of the gynaecological malignancies. This was followed by endometrial cancer which was diagnosed in 30 (35.7%) women. Cervical cancer was present in 20 (23.8%) women and there was one (1.2%) woman with a vulval malignancy.

Following a diagnosis of their condition, most of the women (73.8%) needed less than 2 weeks for initiation of treatment. Delay in starting treatment due to a prolonged gap for getting essential pre-treatment investigations done or hospital admission associated delays was seen in a third (33.3%) of the women studied.

Once diagnosed, several of the women had other personal and social reasons to delay treatment. The most common reason for this was financial constraints in 41.7% of them. Other reasons included a lack of family /caregiver support (15.5%), trying out traditional or other alternative systems of medicine (17.9%), fear to start treatment (14.3%) and being diagnosed in well advanced stages of the disease (10.7%).

Discussion:

Effective screening programmes, awareness about early warning symptoms and detection of malignancies in their early stages facilitate effective treatment and reduce the severity of morbidity in incurable diseases. Financial burden and educational status influence the outcomes in women suffering from any malignancy. This is true in our study too, where a large number (70.3%) of the women were from BPL families that had not registered themselves for health insurance coverage. A large majority of the women were either illiterate or educated up to the primary level only. Being widowed or single (29.7%) further influenced the promptness with which these women tried to get medical help. Socioeconomic status and level of education are barriers to effective preventive measures and early detection of cancer. It has been seen that these global inequalities specific to cervical cancer are associated with the differences in human development, social inequality and living standards. A reduction in these inequalities, improvement in socioeconomic conditions and social status of women with proper preventive measures in place, will help to reduce the morbidity due to cervical cancer.[4] In a study in Iran by Behnamfar et al it was seen that being less educated, coming from a poor socioeconomic background, not having a Pap smear test done had a higher probability of cervical cancer being diagnosed at a late stage.[5] Women who were widowed / divorced and with a lower level of education were found to present in advanced stages of cervical cancer in a study done in a major cancer center in South India.[6]

Lack of awareness of early warning symptoms was a major contributor for the delay in seeking help on the part of the woman and her care givers in our study This "patient delay" due to ignorance about symptoms was present in 41.7 % of the women studied. Abnormal bleeding per vaginum was the most common symptom among the women studied and was present in 52.4% of the women. In a study in the South West of England by Johnson et al it was seen that about half the women with cancer claimed that they were not aware that abnormal vaginal bleeding could represent cancer. They therefore delayed seeking professional help for the same.[7]

As part of the British Government's Cancer Reform Strategy, the National Awareness and Early Diagnosis Initiative (NAEDI) program was initiated to improve cancer outcomes by looking into the reasons for a late diagnosis.[8] They found that a lack of awareness of the signs and symptoms of cancer among the public in general led to women seeking help at an advanced stage of the disease. This was considered as the "patient delay". The second step which resulted in a delay was seen when the general practitioner failed to consider cancer as a probable diagnosis or had lack of access to diagnostic tests to either confirm or refute the diagnosis of malignancy. System delays following referral to a specialist centre were also looked into.[8]

In the present study, it was seen that 46.4% of the women approached a medical facility for their symptoms, 6 to 12 months after their onset. An almost equally large number (39.3%) women reported to a specialist service a year after the onset of symptoms. Public information strategies and greater cancer awareness will help to pick up cancers early and improve outcomes.[7]

The vagueness and non-specific nature of symptoms of ovarian cancer are also a cause for the delay in diagnosis. Similar symptoms are caused by benign conditions and therefore they tend to be treated as a benign pathology until the disease is well advanced. Women in the perimenopausal age group attribute most of these symptoms to be part of natural menopause. Creating awareness of ovarian cancer may help, but may also lead to undue anxiety.[9] Ovarian cancer was the most common malignancy among our patients.

In a study in South East Nigeria, it was found that 76% of ovarian and 94% of cervical malignancies presented at well advanced stages of the disease when curative interventions were not possible and only palliative care could be offered.[10] Most of their patients with endometrial and vulval cancers underwent surgical interventions but did not comply with adjuvant chemotherapy and radiotherapy.

Reduction of poverty, greater investments into women's health and education, building up better economic power, financial and other resources for women are needed to optimize public health and improve cancer prevention and control efforts.[11]

Limitation

The compliance of our patients with further adjuvant chemotherapy or radiotherapy following surgical intervention was not looked into in this study.

Women with advanced cervical malignancy reporting to us with a biopsy report following a cervical biopsy elsewhere or from our OPD were not included in our study because further management was possible in our department.

Conclusion:

Increasing public awareness of symptoms related to gynaecological malignancies and prompt utilization of health services for early diagnosis, adequate utilization of preventive and screening programs will help us to reduce the morbidity and mortality among women with gynaecological cancer.

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Compliance with ethical standards

Conflict of interest

Authors have no conflict of interest in the findings of this study.

Ethical statement

This study was initiated after approval from the Institutional Ethics Committee.

Informed consent

Informed consent was obtained from all individual participants included in the study.

Table 1. Presenting Symptoms Of The Women

Presenting symptoms	Frequency	Percentage
Discharge per vaginum	9	10.7
Bleeding per vaginum	44	52.4
Abdominal Pain	8	9.5
Low Back Ache	8	9.5
Loss of Appetite	5	6.0
Cachexia	2	2.4
Abdominal Distension	6	7.1
Others	2	2.4
Total	84	100.0

Table 2. Interval Between Onset Of Symptom And Seeking Medical Help

Interval between symptom onset and seeking medical treatment	Frequency	Percentage
1-3 Months	2	2.4
3-6 Months	10	11.9
6-12 Months	39	46.4
> 1 Year	33	39.3
Total	84	100.0

Table 3. Reasons For Delay In Seeking Medical Treatment

Reasons for delay in seeking medical treatment for > 1month	Frequency	Percentage
Not knowing significance of symptoms	35	41.7
Financial difficulties	12	14.3
No care taker	13	15.5
Embarrassment	2	2.4
Fear	2	2.4
Considered symptoms as not unusual	12	14.3
Other reasons	8	9.5
Total	84	100.0

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