# Referral Patterns of Gynecological Cancer Patients to a Palliative Medicine Unit: A 2 Years Retrospective Analysis

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# Abstract

**Introduction:** Patients with advanced gynecological malignancies often present with a high burden of symptoms endangering their quality of life. **Objective:** This study aims at assessing the symptom prevalence in patients with gynecological malignancies referred to palliative care and identify factors that predict high symptom burden. **Methodology:** This was a retrospective data analysis of gynecological cancer patients referred to palliative medicine department. We reviewed the electronic medical records of patients to obtain data on (1) demography (age, residence); (2) clinical information (diagnosis, stage of cancer, the reason for referral to palliative care service, symptoms, and performance status). The data were reported as frequency and percentages and analysis performed using Chi-square. *P* <0.05 was considered to be statistically significant. **Results:** We analyzed 196 patients with advanced gynecological cancers presenting to palliative medicine department. The pain was the most common symptoms (70.04%) followed by anorexia (34.13%), constipation (28.57%), and fatigue (28.06%). There was a trend toward higher symptom burden in patients younger than 60 years. Among cancer diagnosis, patients with cervical cancer had a higher prevalence of pain (76.66%) followed by ovarian (70.79%) and endometrium (60.97%). Anorexia was the next commonly prevalent symptoms in ovarian (40.45%), endometrium (29.27%), and cervical cancer (28.33%). **Conclusion:** Considering the high symptom burden among advanced gynecological cancer patients it becomes imperative that patients receive adequate screening for symptoms and appropriate palliative care referral be offered to ensure overall well-being of the patients.

Keywords: Gynecological cancer, palliative care, symptom prevalence

### **INTRODUCTION**

In India, gynecological malignancies comprise of 10%-15% of all forms of cancers and 50%-60% of women related cancers.<sup>[1,2]</sup> Over 70% of women in the country report at an advanced stage of the disease left with limited options for disease-directed therapy endangering survival and quality of life.<sup>[1]</sup> Patients with gynecological malignancies suffer a significant burden of physical and psychological symptoms during the disease; from diagnosis to end of life. Thus, symptom management becomes an essential component of care. Palliative care when initiated concomitantly with the disease-directed therapy will ensure good quality of life for patients and family.<sup>[3]</sup> Society of Gynecologic Oncology suggests that "for women with advanced or relapsed gynecologic cancer, basic level palliative care should not be delayed, and when appropriate, referral should be provided for specialty palliative medicine."[4] In a large cohort of oncology patients in which 8.8% of the population was gynecologic

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cancers, most prevalent symptoms were fatigue (75%) and depression (53%) and the predictors of high symptom burden were a late stage of disease, low-income, the presence of comorbidities and female gender.<sup>[5]</sup> Thus, realizing the symptoms and their effective management becomes crucial in the course of the disease treatment. Integrating palliative care with gynecologic oncology will help prioritize patient needs and establish goals of care. Thus, the present retrospective study was conducted to assess the frequency of symptoms in gynecological malignancies presenting to the palliative medicine clinic. This study is a prelude to the ongoing study for initiating early palliative care for gynecological malignancy.

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# METHODOLOGY

Patients presenting to the outpatient clinic of the Department of palliative medicine, Tata Medical Center, Kolkata over 2 years from 1<sup>st</sup> January 2015 to 31<sup>st</sup> December 2016 were included in the study. All patients with gynecological malignancies referred to palliative care were included in the study. This was a retrospective data analysis of gynecological cancers referred to palliative medicine department. We reviewed the electronic medical records of patients to obtain data on (1) demography (age, residence); (2) clinical information (diagnosis, stage of cancer, the reason for referral to palliative care service, symptoms, and performance status).

#### **Statistical analyses**

Analyses were performed with descriptive summaries of demographic, clinical variables and patient circumstances at the time of referral to palliative care data. The data were reported as frequency and percentages and analysis performed using Chi-square. The value of P < 0.05 was considered statistically significant.

### RESULTS

A total of 196 patients with gynecological cancers presented to palliative care unit from 1st January 2015 to 31st December 2016. Median age at presentation was 53 years with 67 patients (34.18%) belonging to 51-60 years age group followed by 45 patients (22.96%) in 61-70 years. Our data also revealed that (n = 12, 6.12%) patients belonged to younger age group of patients (11-30 years age group). Of the patients referred to palliative care, 153 patients (78.06%) were in Stage III and IV and 43 patients (21.93%) were in the early stages (Stage I/II) of the disease [Table 1]. Pain management was the most common reason for referral to palliative care (n = 99), 50.51%) followed by "progressive disease" in (n = 89,45.41%) patients. Pain was the most common symptom manifestation among our patients (n = 138, 70.04%) followed by anorexia (n = 67, 34.13%), constipation (n = 56, 28.57%), and fatigue (n = 55,28.06%) [Figure 1]. The younger patients (<60 years) had higher frequencies of symptoms as compared to older patients ( $\geq 60$  years). However, this was statistically significant for only nausea/vomiting and fatigue [Table 2]. Among cancer diagnosis, ovarian cancer accounted for large proportion of referrals (n = 89, 45.41%) followed by cervical cancer (n = 60, 30.61%). Patients with cervical cancer had the highest frequency of pain (n = 46/60, 76.66%) as compared to ovarian (n = 63/89, 70.79%) and endometrial cancers (n = 25/41, 60.97%); however, this was not statistically significant. This was followed by anorexia in (n = 36/89, 40.45%)of ovarian cancer patients as compared to 12/41 (29.27%) and 17/60 (28.33%) patients with endometrial and cervical cancers, respectively, which was statistically significant. Fatigue was reported by 14/41 (34.15%) of endometrial cancer patients as compared to 25/89 (28.09%) and 16/60 (26.66%) of endometrial and cervical cancer, respectively, and was not found to be statistically significant [Table 3].

# Table 1: Patient characteristics of 196 gynecologic oncology patients (n=196)

<b>571</b> (	
	n (%)
Median age	53
Age	
11-20	3 (1.53)
21-30	9 (4.59)
31-40	13 (6.64)
41-50	36 (18.37)
51-60	67 (34.18)
61-70	45 (22.96)
>70	23 (11.73)
Residence	
India	183 (93.37)
West Bengal	166 (90.71)
Other neighboring states	17 (9.29)
Bangladesh	9 (4.59)
Bhutan	4 (2.04)
Cancer diagnosis (separate)	
Ovarian cancer	89 (45.41)
Cervical cancer	60 (30.61)
Endometrial cancer	41 (20.92)
Vaginal cancer	4 (2.04)
Vulval cancer	2 (1.02)
Stage of cancer	
1	20 (10.20)
2	23 (11.73)
3	60 (30.61)
4	93 (47.46)
Various terminologies for referral to palliative care	
Advanced disease	17 (8.67)
Progressive disease	89 (45.41)
Recurrence	32 (16.33)
Pain	99 (50.51)
Symptom management	10 (5.10)
Symptoms affecting the activities of daily living	13 (6.63)
ECOG	
0	5 (2.55)
1	68 (34.69)
2	54 (27.55)
3	39 (19.90)
4	30 (15.31)

ECOG: Eastern Cooperative Oncology Group

Table 2: Age-wise prevalence of symptoms						
Age/symptoms	<60, <i>n</i> (%)	≥60, <i>n</i> (%)	Р*			
Pain	92 (48.94)	46 (41.81)	Not significant			
Nausea/vomting	28 (14.89)	12 (10.91)	<0.05 (put the value)			
Anorexia	39 (20.74)	26 (23.64)	Not significant			
Fatigue	29 (15.43)	26 (23.64)	< 0.05			
*Chi square test u	ac used					

\*Chi-square test was used

### DISCUSSION

Patients with advanced gynecological malignancies who are referred to palliative care often suffer a huge burden of symptoms affecting their quality of life. In the present study, we

Table 3: Prevalence of symptoms among the cancersubtypes						
Malignancy/ symptoms	Cervix (n=60), n (%)	Ovary (n=89), n (%)	Endometrium ( <i>n</i> =41), <i>n</i> (%)	Р*		
Pain	46 (76.66)	63 (70.79)	25 (60.97)	Not significant		
Nausea/vomting	15 (25.00)	23 (25.84)	2 (4.87)	Not significant		
Anorexia	17 (28.33)	36 (40.45)	12 (29.27)	< 0.05		
Fatigue	16 (26.66)	25 (28.09)	14 (34.15)	Not significant		

\*Chi-square test was used



**Figure 1:** Graphical representation of symptom burden in gynaecological patients

have demonstrated that large proportion of patients presenting to our department had high symptom burden. Among the symptoms, pain (70.04%) was the most common followed by anorexia (34.13%) and fatigue (28.57%). The prevalence of pain in our study population corroborated with another study where the authors reported a prevalence of 71%. A systematic review of 46 studies including 25000 patients belonging to the palliative cancer subpopulations reported fatigue as the most common symptom (74%) followed by pain in 71% of patients, dyspnea in 35% of patients (7.14% in our study), and nausea in 31% (15.81% in our study) of patients.<sup>[6]</sup> Among 45,118 cancer patients (including 3985 gynecologic cancer patients), Barbera *et al.* found the following symptom prevalence among all cancer patients: Fatigue 75%, anxiety 57%, depression 44%, and pain 53%.<sup>[5]</sup>

The younger patients had a higher prevalence of pain and other symptoms as compared to the older patients. However, the association between age and symptom prevalence is conflicting with some studies finding higher pain intensities among the younger age group<sup>[5,7,8]</sup> and others reporting no relationship between age and symptom intensity.<sup>[9-11]</sup> A possible explanation for younger patients to report more symptoms could be due to the administration of more aggressive treatment to the younger patients as compared to the older patients and a lesser number of older patients reporting cancer-related symptoms.<sup>[7,8]</sup>

Most common reasons for referral to palliative care was for pain management (50.51%) followed by "progressive disease" (45.41%). However, referral for symptom management other than pain was very low (5.10%); although, there was a high burden of symptoms at the time of assessment by the palliative care physician. This discrepancy could be explained by the oncologist's limitation at recognizing these symptoms as distressing which in turn could be due to a limitation in the time available for consultation and sparse resources.<sup>[12-14]</sup> Furthermore, the oncologists often delay the referral to palliative care in India as the felt need for palliative care service is often for the end of life care once all options for cure have been exhausted. A large proportion of patients (64.79%) referred to us had good performance status (Eastern Cooperative Oncology Group [ECOG] 0, 1, 2) which counters the traditional concept of referral when symptoms affect the activities of daily living (ECOG 3, 4, 5).

The median duration from the time of registration to the hospital to referral to palliative care was 123 days. In a study by Dalal et al., the median duration from registration in the hospital to referral to palliative care was 187 days.<sup>[15]</sup> There is evidence to prove that patients presenting to oncologists at the time of palliative intent of cancer directed treatment are as symptomatic as those who present to the palliative care outpatient clinic, warranting the need for early symptom management.<sup>[16]</sup> However, the delayed referrals to palliative care are compounded by multiple physician and patient-related factors.[16-18] The oncologists misconstrue that referring to palliative care could destroy hope in the patient.<sup>[19,20]</sup> This in addition to lack of clarity about the disease process, possibility of periods of remission, inadequate communication skill, and lack of knowledge about palliative care delay the referral to palliative care.<sup>[21]</sup> A study revealed that proportionately less number (<10%) of patients and family consider the option for palliative care.<sup>[22]</sup> This could be justified by their heightened expectations for survival, sense of denial and desire to focus on cancer directed treatment.<sup>[23,24]</sup> In a study at a US cancer center, one-third of physicians indicated that they would likely refer earlier if palliative care was renamed supportive care<sup>[25]</sup> and there was a demonstrable difference in the referral patterns of palliative care service.<sup>[26]</sup>

There has been a changing trend in referral patterns and acceptance for initiating early palliative care by some oncologists. Although large proportions 78.06% of the patients were in their late stage (Stage III/IV) of a cancer diagnosis; 21.93% of patients referred to palliative care belonged to early stage (Stage I/II) of cancer. The finding corroborates with a study by Dalal *et al.*, where the author reported a rising trend in the referral of patients with nonadvanced cancer to palliative care; from 12% in 2007 to 21% in 2013. Awareness about palliative care, the involvement of palliative care physician in the multidisciplinary team and changing attitudes and beliefs of referring oncologist could have contributed to this transition.<sup>[14,15]</sup>

The study had some limitations that it included retrospective analysis of data and it did not include other comorbidities that may have contributed to symptom burden. Our results are also limited by nonresponse bias including the possibility that patients with greater symptom burden may have presented to palliative care.

# CONCLUSION

High symptom prevalence in our patients represents a high burden of suffering that is amenable to intervention. It is thus imperative that a robust palliative care referral system be initiated at any stage in the disease trajectory for patients with physical or psychological symptoms. Successfully addressing this significant symptom burden will likely require a multipronged approach; with collaboration between gynecologic oncology teams providing "primary palliative care" and palliative care team to provide "specialty palliative care." This model will ensure that every patient with high symptom burden receives adequate screening of symptoms and appropriate referral to specialized palliative care with demonstrable improvement in the overall well-being of the patients.

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#### **Conflicts of interest**

There are no conflicts of interest.

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