

**CURRENT CANCER TRENDS AND THE NEED FOR
PALLIATIVE CARE AT A CANCER CARE CENTRE IN SOUTH
INDIA**

**1. Dr.J.PRASHANTI,MD. ASSOCIATE PROFESSOR
DEPARTMENT OF RADIOTHERAPY, GOVERNMENT GENERAL HOSPITAL,
ANANTHAPURAMU, ANDHRA PRADESH, INDIA**

**2. Dr.J.SHARADA, MD.ASSOCIATE PROFESSOR
DEPARTMENT OF PSYCHIATRY, GOVERNMENT GENERAL HOSPITAL,
ANANTHAPURAMU, ANDHRA PRADESH, INDIA**

**3.Dr.S.NISSAR BEGUM, MS.ASSOCIATE PROFESSOR
DEPARTMENT OF GYNAECOLOGY, GOVERNMENT GENERAL HOSPITAL,
ANANTHAPURAMU, ANDHRA PRADESH, INDIA**

**4.Dr. V.V.RAMABAI, MS.ASSOCIATE PROFESSOR
DEPARTMENT OF SURGERY, GOVERNMENT GENERAL HOSPITAL,
ANANTHAPURAMU, ANDHRA PRADESH, INDIA**

CORRESPONDING AUTHOR

**Dr. V.V.RAMABAI, MS.ASSOCIATE PROFESSOR
DEPARTMENT OF SURGERY, GOVERNMENT GENERAL HOSPITAL,
ANANTHAPURAMU, ANDHRA PRADESH, INDIA**

ADDRESS:DR. V. V.RAMABAI,

FLAT.NO.304,

MADHUKUNJ APPARTMENT,

MARUTI NAGAR 3RD CROSS

ANANTAPUR,515001

MOBILE: 9441498969

E- MAIL.ID: vvrामabai@gmail.com

ABSTRACT:

Cancer has emerged as a major cause of morbidity and mortality in Lower middle income countries where patients are more likely to be diagnosed with advanced cancer than in High income countries. The WHO's Global Report categorises India as lacking integrated palliative care, with patchy activity. Lack of prioritisation of palliative care at the governmental level hampers adequate policy responses, resulting in restrictive regulation. Optimal development and implementation of cancer control systems requires an understanding of existing patterns of disease, treatment, and outcomes in LMICs.

A Retrospective study was undertaken in the Department of radiotherapy and oncology, Government medical college, Anantapuramu, Andhrapradesh, India between the period of

January 2021 to December 2022 to study the current trends of carcinoma in patients presenting with advanced cancer and their need for palliative care services at a tertiary care cancer hospital.

More than 50% of the subjects belong to 41 to 60 years age group (51.6%) followed by greater than 60 years age Female to male ratio was 2.2:1.65.83% of patients presented with stage III and stage IV cancers, with physical, psychosocial and emotional problems.

In view of presentation of advanced cancers at Medical college attached cancer hospital there is a need to develop palliative care services at Medical college cancer departments as per national cancer control program (NCCP) and WHO guidelines.

Key words: advanced cancers –psychological- palliative care services

INTRODUCTION

Cancer and other non-communicable diseases have emerged as major public health problems in India. Cancer control needs a multidisciplinary approach, and palliative care is an important component of this approach. Despite its limited coverage, palliative care has been present in India for about 20 years. It is estimated that one million new cases of cancer occur each year in India, with over 80% presenting at stages III and IV. The need for palliative care in India is immense. [1] Less than 1% of its population has access to pain relief and palliative care. [2] Over the last four decades, palliative care in India has seen steady growth and development, from the early hospice movement in the 1980s to specialist and subspecialist palliative medicine in the 2020s. [3] Cancer brings tremendous social distress, physical and psychological suffering, and hardship to patients and their relatives. [4] The most recent iteration of the WHO Universal Health Coverage Goals calls for the ‘full spectrum of essential, quality health services, from health promotion to prevention, treatment, rehabilitation, and *palliative care*’. There were an estimated 815100 cancer deaths in India during 2016. The WHO’s Global Report categorises India as lacking integrated palliative care. [5] WHO defines palliative care as an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial, and spiritual. [6] Every year, over seven million new patients need palliative care in India, with less than 4% having access to these services. Lack of access to palliative care results in poor symptom control, poor quality of life, inappropriate end-of-life care, and increased economic burden. Over 3.5–6.2% of the population in India becomes poorer every year due to enhanced health expenditure at the end of life. Evidence indicates that referral to palliative care results in reduced healthcare spending for patients with cancer and other chronic illnesses. The modified National Cancer Control Programme of India emphasised the need for palliative care at the primary care level and led to the establishment of outpatient pain clinics in cancer centres, government, and private hospitals, stand-alone hospices, outreach clinics, and homecare services. [7]

AIMS & OBJECTIVES:

To study the current trends of carcinoma in patients presenting with advanced cancer and their need for palliative care services at a tertiary cancer care hospital.

MATERIAL AND METHODS :

Study design: Retrospective study.

Study period: January 2021 to December 2022

The data was collected from the hospital information system of a cancer hospital attached to a medical college in the Anantapuramu district of Andhrapradesh, India, from January 2021 to December 2022. The patients demographic data , the stage at the time of presentation and the diagnosis of the cases was recorded, categorized and analysed using SPSS software.

RESULTS:

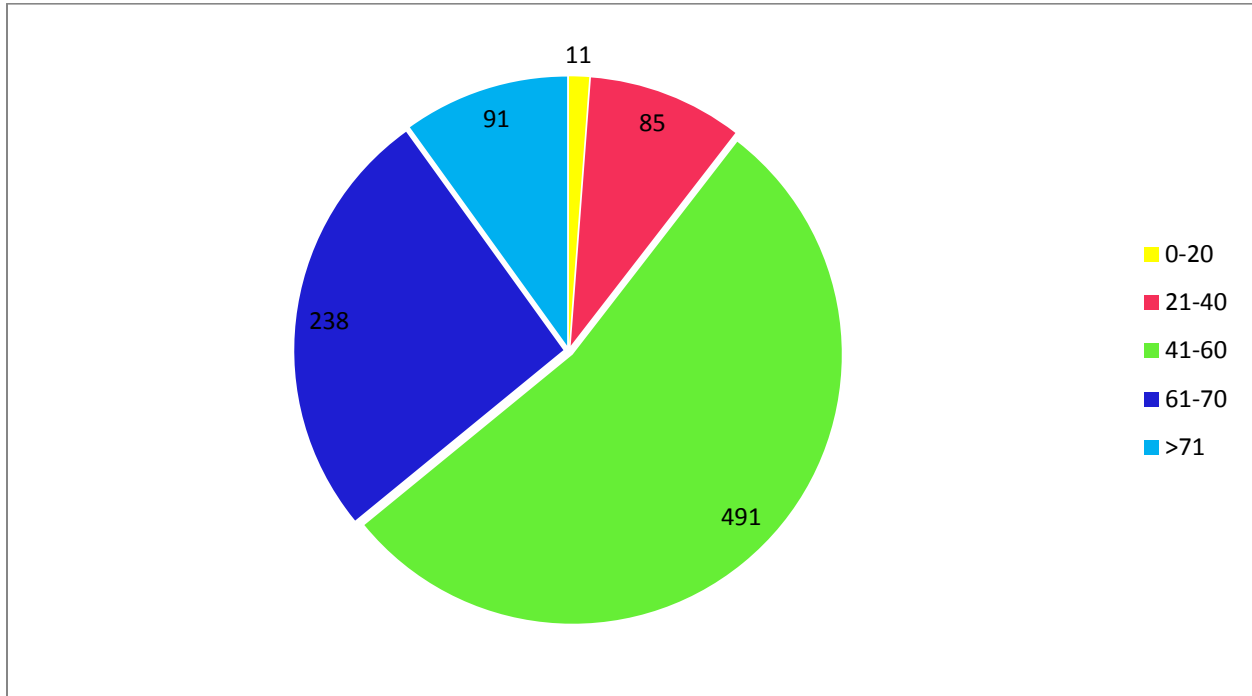
Age-wise distribution

The age group of people between the ages of 41 and 60 accounts for more than 50% of the subjects (51.6%), followed by people over the age of 60. Hepatoblastoma and other childhood cancers make up only 1.2% of instances of cancer in people under 20.

Table 1: Age-wise distribution

Age	No.of.cases	%
0-20	11	1.2
21-40	85	9.28
41-60	491	53.6
61-70	238	25.98
>71	91	9.94
Total	916	100

Figure 1 :Age-wise distribution of cases (n=916)



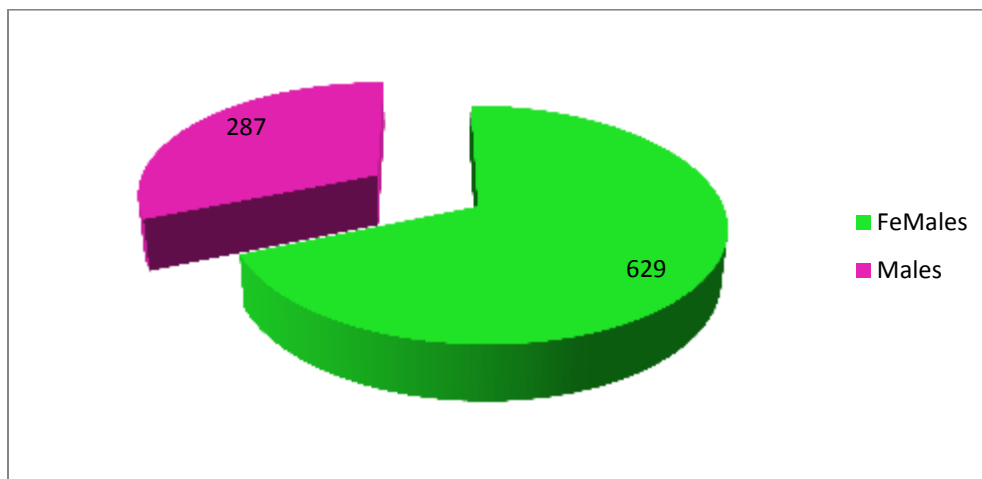
Sex-wise distribution of subjects:

In the current study, 287 people were male, and 629 (68.66%) of the 916 participants were female. The female-to-male ratio was 2.2:1.

Table 2: Sex wise distribution of cases

Sex	No.of.cases	%
Females	629	68.66
Males	287	31.33
Total	916	100

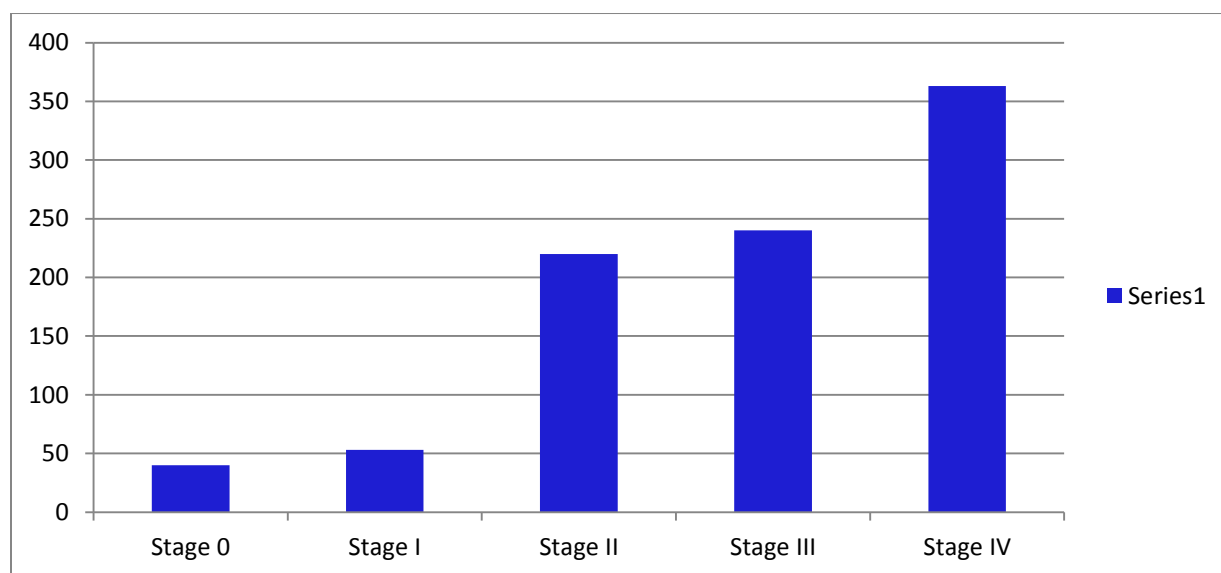
Figure 2 Table 2: Sex wise distribution of cases (n=916)



Stage-wise distribution:

Locally advanced and metastatic cancers at presentation (Stage III and Stage IV) constitute 65.83% (603 patients out of 916), compared to early stage cancers (Stage 0, Stage I, and Stage II), which constitute 34.17% (313 out of 916).

Figure 3: Stage-wise distribution of cases.



Diagnosis wise distribution of cases:

In the present study, cervical cancer is the most common type of case, affecting 239 out of 916 patients (26.09%), followed by breast cancer (16.59%; 152 out of 916) and head and neck cancers. Table 3 displays how the cases were distributed according to diagnosis.

Table 3: Diagnosis wise distribution of cases

Type of cancer	No.of.cases
Oral Cavity and Oro pharyngeal cancers	131
Salivary gland malignancies	3
Nasopharyngeal cancers	1
Hypopharyngeal cancers	21
Esophageal cancers	25
Stomach	40
Small bowel	3
Carcinoma colon	8
Carcinoma Rectum& Anal canal	24
Carcinoma liver,gallbladder &pancreas	33
Carcinoma Larynx	22
Carcinoma Lung	48
Carcinoma of Breast	152
Carcinoma of skin &Adnexa	14
Sarcomas	10
Carcinoma vulva &vagina	11
Carcinoma cervix	239
Carcinoma ovary	28
Endometrial Carcinoma	15
Carcinoma of penis	4
Carcinoma of prostate	9
Testicular malignancy	5
Carcinoma of kidney	3
Carcinoma of Ureter &Urinary bladder	11
Brain tumors	6
Thyroid malignancy	20
Unknown primary	15

Acute leukemias	4
Chronic leukemias	5
Multiple myeloma	2
Lymphoma	4
Total	916

DISCUSSION:

Patients with cancer generally have a poorer prognosis in low- and middle-income countries, including India, because of relatively low cancer awareness, late diagnosis, and the lack of or inequitable access to affordable curative services compared with patients in high-income countries. India has a population of 1.3 billion spread across 29 states and seven union territories, and many of the states are as large as other countries, with varying degrees of development, population genetics, environments, and lifestyles, leading to a heterogeneous distribution of disease burden and health loss. [8]

It is estimated that about 2.25 million people are living with cancer in India, with one million new cases every year and over 0.88 million deaths annually. A majority of them present with advanced metastatic disease, experience moderate-to-severe pain, and require palliative care. [7]

The rise of the private sector in Indian health care has some salient links to palliative care. First, many people who need palliative care have undergone or are pursuing treatments at costly private hospitals, putting them and their families at risk of catastrophic financial loss. Because this loss may be among the most significant causes of suffering and poor quality of life for their patients, palliative care providers in India must grapple with how to address this in their activities. [9]

The present study is a retrospective analysis depicting prominent cancer types, gender distribution, age distribution, and stage at presentation. Based on our research, more than 50% of the subjects belong to the 41–60 age group (51.6%), followed by those greater than 60 years old, which is in concordance with the study done by Manjit.k.Rana et al. [10] and Sandhya et al. [4].

Cancer incidence in females (68.66%) was much higher than in males (31.33%) in our study. This is in alignment with various previous studies conducted by several groups, like Bal et al. (2015) [male 35%; female 65%], Thakur et al. (2008) [male 25.2%; female 74.7%], and Aggarwal et al. (2015) [male 39.1%; female 60.9%]. [11,12,13].

In our study, the number of cases presenting with cervical cancer ranks high, i.e., in 239 patients out of 916 (26.09%), followed by breast cancer (16.59%; 152 out of 916) and head and neck

cancers. However, according to the previous studies done by Sandhya et al. (2009) and Bal et al. (2015), the most prevalent cancer was breast cancer (30.3%–26.8%), followed by cervical cancer (13%) in females [4, 11]. The reason for the increased incidence of cervical cancer in our study might be because of their low socioeconomic status and their lack of knowledge about cervical screening programmes.

In our study locally advanced and metastatic cancers at presentation (Stage III and stage IV) constitute 65.83% (603 patients out of 916) compared to early stage cancers (Stage 0, Stage I and Stage II), which constitutes 34.17 % (313 out of 916). In the study conducted by Mathew et al 2019, only 8% to 14% of patients presented with early-stage disease—that is, stage I/localized disease. Whereas 10% and 13% of patients with breast and cervical cancer presented with stage IV disease, the rate of metastatic disease at diagnosis was much higher for those with oral cavity (40%) and lung (46%) cancers. Overall, the proportion of patients with advanced disease—that is, stage III and IV or regional/metastatic—was 37% for breast, 39% cervix, 67% oral cavity, and 88% lung cancer. [14]

The oncologist's care of cancer patients requires complex multidisciplinary interventions. These interventions include diagnosis of the disease and determination of its stage, development of a complex treatment plan in coordination with other team members (e.g., radiation and surgical oncologists), and management of cancer treatment and its complications. These are time-consuming tasks that make it increasingly difficult for a busy oncologist to address multiple supportive and palliative care needs in the same visit. The lack of time is becoming an even larger concern as the body of knowledge and available interventions become more complex in oncology and palliative/supportive care. [15]

Recent clinical trials examining the effects of early integration of specialty palliative care show marked improvements in patient satisfaction, mood, quality of life, health care utilisation, and overall survival. For example, patients who received early in-home palliative care services in addition to usual care had fewer emergency department visits, hospital admissions, and lower medical costs. [16]

Multiple oncology and palliative care organisations are actively developing education programmes that are aimed at enhancing the repertoire of palliative care skills among oncologists. Importantly, patients with a higher level of distress or care needs should be referred to specialist interprofessional palliative care teams. There is now a growing body of evidence and interest to support the routine integration of early palliative care for patients with advanced cancer. [17]

CONCLUSION:

More than 60% of cancer patients in the Anantapuramu district of Andhrapradesh present with locally advanced and metastatic disease, where definitive therapy plays a minor role and pain management and supportive care play a major role. The increased incidence of cervical cancer in our study suggests a strict implementation of pap smear screening programmes and cervical cancer awareness programmes. Palliative care services must be included in medical college cancer departments because a majority of the subjects reside in rural and suburban areas, which makes it crucial to give care to those who cannot travel far to regional cancer centres.

LIMITATIONS OF THIS STUDY:

This study's limitations comprise the interpretation of data from a single institution, which shows that our particular patient population reports to the hospital rather than the community at large.

CONFLICT OF INTEREST: No conflict of interest.

FINANCIAL RESOURCES: No funding sources

REFERENCES:

1. Khosla D, Patel FD, and Sharma SC Palliative care in India: current progress and future needs *Indian J Palliat Care*. 2012 Sep;18(3):149–54. doi: 10.4103/0973-1075.105683. PMID: 23439559; PMCID: PMC3573467.
2. Cancer control 2015, The current status of palliative care in India Dr.MR Rajagopal.
3. Salins N, Bhatnagar S, Simha S, Kumar S, and Rajagopal MR Palliative Care in India: Past, Present, and Future. *Indian J Surg Oncol*. 2022 Dec;13(Suppl 1):83- 90. doi: 10.1007/s13193-022-01556-0. Epub 2022 Jun 9. PMID: 36691499; PMCID: PMC9859967.
4. Sandhya, M., Shanthi, M., Fareed, Nusrath, Sudhir, K., and Krishna Kumar, RVS Retrospective analysis of hospital records at a cancer institute in Nellore District, Andhra Pradesh *Journal of the Indian Association of Public Health Dentistry*. 2011;9(18):161–166
5. Harding R, Nair S, and Ekstrand M. Multilevel model of stigma and barriers to Cancer palliative care in India:a qualitative study *.BMJOpen*2019;9:e024248. doi:10.1136/bmjopen-2018-024248
6. "WHO Definition of Palliative Care". World Health Organization. Retrieved March 16, 2012.
7. Rao SR, Salins N, Goh CR, Bhatnagar S. "Building palliative care capacity in cancer treatment centres: a participatory action res.arch". *BMC Palliat Care*. 2022 Jun 4;21(1):101. doi: 10.1186/s12904-022-00989-2. PMID: 35659229; PMCID: PMC9166521.

8. Dhillon PK, Mathur P, Nandakumar A, Fitzmaurice C, Kumar GA, Mehrotra R, et al. The burden of cancers and their variations across the states of India: the Global Burden of Disease Study 1990-2016. *Lancet Oncol.* 2018;**19**(10):1289–1306. doi: 10.1016/S1470-2045(18)30447-9.
9. Schear, S. E. (2017). “Our Duty and Our Right”: Perspectives on Advancing Palliative Care in the Indian States of Kerala and Uttarakhand. *UC Berkeley: /UCSFJoint Medical Program*. Retrieved from <https://escholarship.org/uc/item/38g3k09r>
10. Rana M K, Barwal T S, Sharma U, et al. (June 21, 2021) Current Trends of Carcinoma: Experience of a Tertiary Care Cancer Center in North India. *Cureus* 13(6): e15788. DOI 10.7759/cureus.15788
11. Bal MS, Bodal VK, Kaur J, Kaur M, Sharma S: Patterns of cancer: a study of 500 Punjabi patients. *Asian Pac J Cancer Prev.* 2015, 16:5107-10. 10.7314/apjcp.2015.16.12.5107
12. Thakur JS, Rao BT, Rajwanshi A, Parwana HK, and Kumar R. Epidemiological study of high cancer among rural agricultural communities of Punjab in Northern India. *Int J Environ Res Public Health.* 2008 Dec;**5**(5):399–407. doi: 10.3390/ijerph5050399. PMID: 19151435; PMCID: PMC3700000.
13. Aggarwal R, Manuja, Aditya K, and Singh GP Pattern of cancer in a tertiary care hospital in the Malwa region of Punjab in comparison to other regions in India *Journal of Clinical and Diagnostic Research: JCDR.* 2015 Mar;**9**(3):XC05-XC07. DOI: 10.7860/jcdr/2015/11171.5685. PMID: 25954691; PMCID: PMC4413141.
14. Mathew A, George PS, Ramadas K, Mathew BS, Kumar A, Roshni S, Jayakumar KNL, Booth CM. Sociodemographic Factors and Stage of Cancer Diagnosis: A Population-Based Study in South India *J Glob Oncol.* 2019 Jul;**5**:1-10. doi: 10.1200/JGO.18.00160. PMID: 31322993; PMCID: PMC6690651.
15. Bruera E., Yennurajalingam S. Palliative care in advanced cancer patients: how and when? *Oncologist.* 2012;**17**(2):267-73. doi: 10.1634/theoncologist.2011-0219. Epub 2012 Jan 17. PMID: 22252934; PMCID: PMC3286176.
16. Agarwal R., Epstein AS. The Role of Palliative Care in Oncology *Semin Intervent Radiol.* 2017 Dec;**34**(4):307-312. doi: 10.1055/s-0037-1608702. Epub 2017 Dec 14. PMID: 29249853; PMCID: PMC5730447.
17. Hui D, Finlay E, Buss MK, Prommer EE, Bruera E. Palliative Oncologists: Specialists in the Science and Art of Patient Care *J Clin Oncol.* 2015 Jul **10**;33(20):2314–7. doi: 10.1200/JCO.2014.60.3274. Epub 2015 Apr 27. PMID: 25918292; PMCID: PMC4979217.

