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Cancer Scenario in a Health Care Setting - An Observational Study

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ABSTRACT

Introduction: Cancer can affect all living cells in the body, at all ages and both genders are affected with Cancer. There is a multifactorial causation and the disease process differs at different sites. The World Cancer Report documents that cancer rates are set to increase at an alarming rate globally.
Aim and objectives: To assess the cancer scenario in a tertiary care setting, GMC Kathua
Methodology: This was a hospital-based retrospective study undertaken in the tertiary care center Kathua. GMC, Kathua is one among the five new medical colleges established in Jammu & Kashmir. The records of cancer patients generated from 1st April 2019 to 31st March 2020 were analyzed. All the cancer cases who reported either for diagnosis in any of the hospital OPD or for the treatment (radiotherapy/ chemotherapy/ surgery) were included. Data was entered in the MS Excel for analysis
Results: A total 254 patients were registered during this 1 year period. Females accounted for 56.2% and males for 43.07% .Majority of the cases (114) were found in the age group 41-60. CA breast was the common (16.54%) reported cancer among females followed by CA cervix whereas in males, CA lung (9.92%) was the most common reported cancer among males
Conclusion: The prevalence of cancer cases was found to be higher in females as compared to males. The major age group fell in between 41-60 years. The lung was a leading site of cancer among males and breast was a leading site of the cancer among the females.

Keywords: Cancer, Breast cancer, Lung cancer.

INTRODUCTION

Non communicable diseases (NCDs) these days are responsible for the majority of global deaths. [1] Cancer incidence and mortality are rapidly growing worldwide, both in the developed and developing countries and is currently the second leading cause of death in the world.[2] The reasons are complex and includes higher life expectancy and adoption of cancer linked lifestyle such as smoking and physical inactivity.[3] situation is made worse by the lack of early detection and access to treatment.[4] According to Globocan 2018, an estimated of 18.1 million new cancer cases (17.0 million) and 9.6 million cancer deaths (9.5 million) deaths were reported. The most common cancer diagnosed were lung cancer 2.09 million (11.6%), followed by cancer breast 2.08 million (11.6%). The most common cause of cancer deaths were cancer lung (18.4%), colorectal cancer (9.2%), cancer stomach (8.2%), cancer liver (8.2%) and cancer breast (6.6%). [5] Prevalence of cancer in India is estimated to be 3.9 million and reported incidence to be about 1.1 million. [6] There is wide variation in the distribution of the cancer throughout the world. In India most common cancer is cancer lung among males and cancer breast among females. Cancer of stomach is very common in Japan whereas it has low incidence in United States. These and other international variations in the pattern of the cancers are attributed to multiple factors such as environmental factors, food habits,

lifestyle, genetic factors or even inadequacy in detection and reporting of cases.[7,8] The present study was undertaken to determine the pattern and scenario of cancer cases reporting to tertiary care hospital located in this region. An epidemiological study helps to know the common cancers prevalent in particular segments of the population and risk factors involved. This helps in planning the facilities required in a hospital.

METHODOLOGY

This was a hospital-based retrospective study undertaken in the Government Medical College Kathua. GMC, Kathua is one among the five new medical colleges established in Jammu & Kashmir. The records of cancer patients generated from 1st April 2019 to 31st March 2020 were analyzed. All the cancer cases who reported either for diagnosis in any of the hospital OPD (Medicine, Gynae and Obs, pediatrics, Surgery, orthopedics, ENT, ophthalmology etc) or for the treatment (radiotherapy/ chemotherapy/ surgery) were included. Information regarding age, sex, residence, diagnosis, plan of treatment and follow up was collected. Data was entered in the MS Excel and descriptive analysis was done.

RESULTS

A total 254 patients were registered during this 1 year period. Females accounted for 56.2% and males for 43.7% (Fig.1). Majority of the cases (114) were found in the age group 41-60. Out of this 114, 72 were females and 42 males. Least cases were found in the age group 0-20 (Table1, Fig2).

CA breast was the common (16.54%) reported cancer among females followed by CA cervix. Maximum cases of breast cancer were in the age group 41-60. 1 case each of CA oral cavity, rectum, thyroid and cranial cavity was reported. (Table 2) Whereas in males, CA lung (9.92%) was the most common reported cancer among males followed by CA larynx (4.04%). Lung cancer was most common in the age group of 61-80 years. (Table 3)

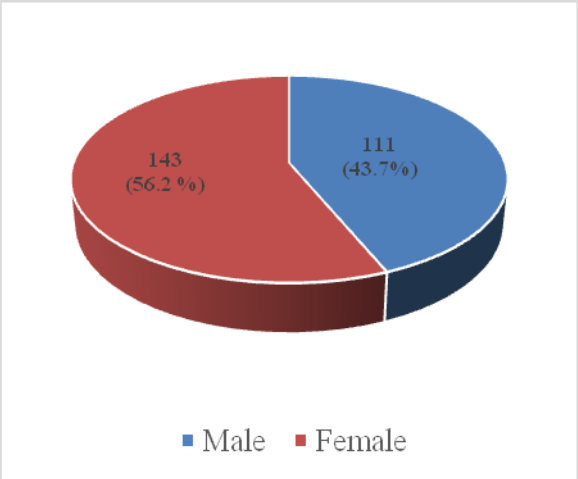

Fig 1: Sex wise distribution of the registered patients

Table 1: Age wise distribution of the cancer cases

Age groups (years)	Males	Females	Total
0-20	1	2	3(1.1%)
21-40	11	26	37(13.6)
41-60	42	72	114 (44.8%)
61-80	50	43	93(36.6)
>80	4	3	7(2.5%)

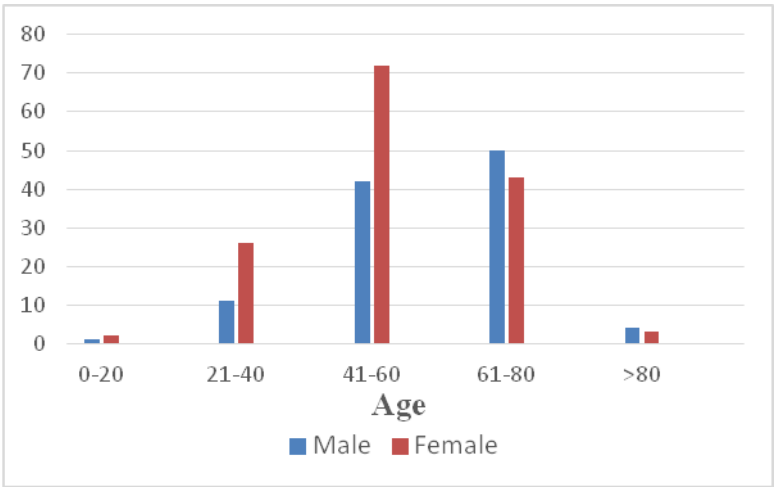

Fig 2: Age wise distribution of the cancer cases

Table 2: Frequency distribution of cancer cases among females (n-272)

	Age groups					
Type of cancer	**0-20**	**21-40**	**41-60**	**61-80**	**>80**	**n (%age)**
Breast	2	7	15	6		30(11.8)
Cervix			10	8		18(7.0)
Hematological		6	8	2		16(6.2)
Lungs			3	10		13(4.77)
Endometrial			7	5		12(4.41)
Gall bladder		1	7	3	1	12(4.41)
Ovarian		1	2	2		5(1.83)
RCC		1	2		1	4(1.47)
Esophageal			3	1		4(1.47)
Pancreas		1	1	1	1	4(1.47)
Stomach		1	2			3(1.10)
Larynx			1	2		3(1.10)
Bone		2		1		3(1.10)
Liver		1	1			2(0.73)
Colon			2			2(0.73)
Urinary bladder				2		2(0.73)
Oral cavity			1			1(0.36)
Rectum				1		1(0.36)
Cranial		1				1(0.36)
Thyroid			1			1(0.36)

Table 3: Frequency distribution of cancer cases among males (n-272)

	Age groups					
Type of Cancer	**0-20**	**21-40**	**41-60**	**61-80**	**>80**	**n(%age)**
Lungs			11	14	2	27 (9.92)
Larynx			6	5		11(4.04)
Hematological		3	2	6		11(4.04)
Oral cavity		1	6	2		9(3.30)
Prostate			1	6	2	9(3.30)
Esophagus			5	3		8(2.94)
Urinary Bladder			3	3		6(2.20)
Rectum		1	3	2		6(2.20)
Bone	1	3	1	1		6(2.20)
Gall bladder			3	1		4(1.47)
Colon			3	1		4(1.47)
Thyroid		1	1	2		4(1.47)
RCC				3		3(1.10)
Pancreas		1		2		3(1.10)
Liver		1		2		3(1.10)
Cranial			1	1		2(0.73)
Duodenum			1			1(0.36)

DISCUSSION

Epidemiological information on cancer including the pattern is an important basis for determining the priorities for cancer control in any population group. A total 254 patients were registered in the hospital over 1 year period. The most common cancer in adult females was found to be Ca breast followed by Ca cervix whereas in males Carcinoma lung was the most common cancer followed by Ca larynx. In present study with male female ratio was 0.77:1 indicating female predominance. Similar pattern was recorded by Cherian et al in Kerala (0.93:1) [9]; which was higher than Jabalpur study of Sinha et al (0.66:1)[10] and Kalyani et al in Kolar (0.7:1) [11]. Though male predominance was recorded by Sharma et al in Jaipur region (1.4:1) and Wani et al in Kashmir valley (3:2) [12,13] The most affected female age groups in our study were 41-60, with 50.3% occurrence ,while males in the age groups of 61-80, with 45.02% occurrence. According to the study by Zeb et al, for females, the most affected age group was 41–50, with 8.87% occurrence, and the second most affected age group was 51–60, with 6.88% occurrence. For males, the most affected age group was 51–60, with 12.3% occurrence, followed by 61–70, with 10.32% occurrence. [14] In males, lung cancer was the most common followed by larynx. Cancers in males are mostly tobacco related. Lung was found to be the most common site in Jammu study, whereas larynx malignancies

were more in Ludhiana & Bankura in West Bengal [14,15,16] Report from hospital based cancer registry 2007-11 under NCRP showed lung to be the top site for malignancy in males in Chandigarh & Thiruvananthapuram, whereas it is the second most common carcinoma in Mumbai & Chennai registries [17]. Carcinoma breast (11.8%) was the most common cancer in adult females in our study followed by Ca cervix (7%). Breast cancer is proportionately on the increase and is related to late marriage, birth of the first child at a late age, fewer children and shorter period of breast feeding which are increasingly common practices among educated urban women. Our data was comparable to 22.46% in Ambajogai, 20.44% in Jaipur, 21.05% in Ludhiana & 19.4% in Eastern Rajasthan.[8, 18, 19]

CONCLUSION

The prevalence of cancer cases was found to be higher in females as compared to males. The major age group fell in between 41-60 years. The lung was a leading site of cancer among males and breast was a leading site of the cancer among the females.

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Nil

Conflicts of Interest

There are no conflicts of interest

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Ethical Approval: Approved

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