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Study of profile and pattern of cancer patients attending a rural medical college of North India

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Abstract

In our study, majority of the Cancer patients belonged to the age group 41-60 years (54%). In the present study, males were more affected than females (54%). The present study had majority of the patients were from rural areas (79%). Majority of the patients were married (79%). Majority of the patients had diagnosis of lung Cancer (18%). The present study, majority of the patients were of below poverty line (80%), monthly per capita household income (For J&K: Rural=Rs.1102, Urban=Rs.1192)

Keywords: Cancer, Profile, Sociodemographic

Introduction

Cancer is the second leading cause of death and disability around the world. More number of people now die of cancer than from all cases of AIDS, tuberculosis and malaria put together. According to World Cancer Report, there is high incidence rate of cancer throughout the world and it may reach about 20 million by 2030.More than half of new cancer patients and two-thirds of cancer related deaths now occur in developing countries. Cancer has become one of the major causes of death in India. Every year, about 0.4 million deaths occur in India due to cancer (1,2). Households with a cancer patient experienced significantly higher Out of pocket (OOP) expenditure per capita as compared with households having a noncancer patient. The likelihood of experiencing catastrophic health expenditure (CHE) in case of cancer was 160% more than for any other disease in India. In case of rural households affected with the cancer, the incidence of borrowing, financial gifts from relatives/friends, and selling of assets are higher as compared to urban households. Lower income group face distress financing even seeking treatment in public sector (3, 4).

Results

Age wise distribution of patients

In our study majority of the patients, 54.0% (n=270) belonged to the age group 41-60 years followed by 27.0% (n=135) patients belonging to the age group 21-40 years and 16.0% (n=80) patients belonged to age group 61-80 years. Only 3.0% (n=15) patients belonged to age group 0-20 years (Table 1, Figure1).

Age in years	Frequency	Percentage
0-20	15	3.0%
21-40	135	27.0%
41-60	270	54.0%
61-80	80	16.0%
Total	500	100.0%

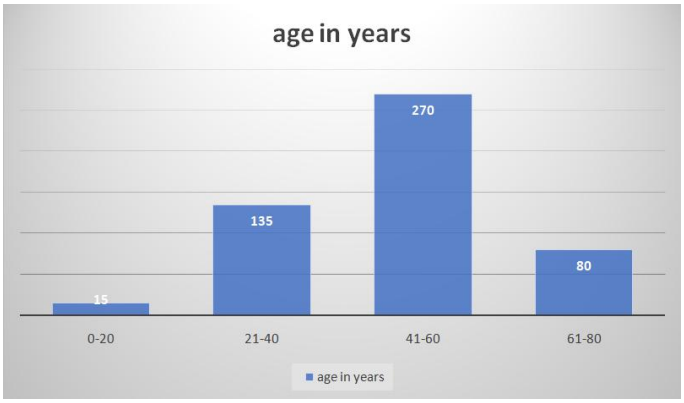

Figure 1: Showing age distribution of cancer patients

Gender wise distribution of patients

In our study, 54.0% (n=270) patients were males and 46.0% (n=230) patients were females (Table 2, Figure 2)

Table 2: Gender wise distribution of patients

Gender	Frequency	Percentage
Male	270	54.0%
Female	230	46.0%
Total	500	100.0%

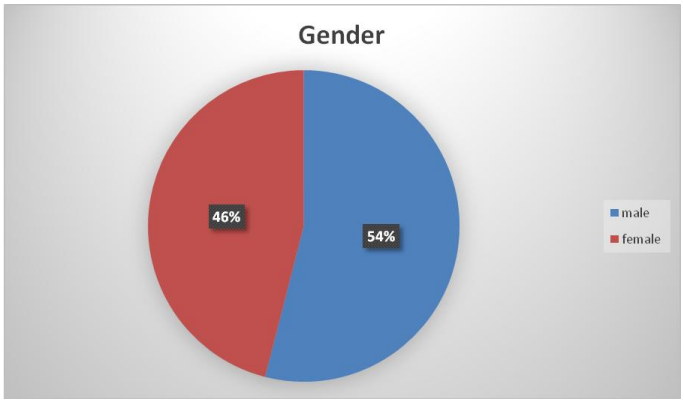

Figure 2: Showing gender of cancer patients.

Domicile of patients

In our study, 79.0% (n=395) patients were from rural areas and 21.0% (n=105) patients were from urban areas (Table 3, Figure 3).

Table 3: Domicile wise distribution of patients

Domicile	Frequency	Percentage
Rural	395	79.0%
Urban	105	21.0%
Total	500	100.0%

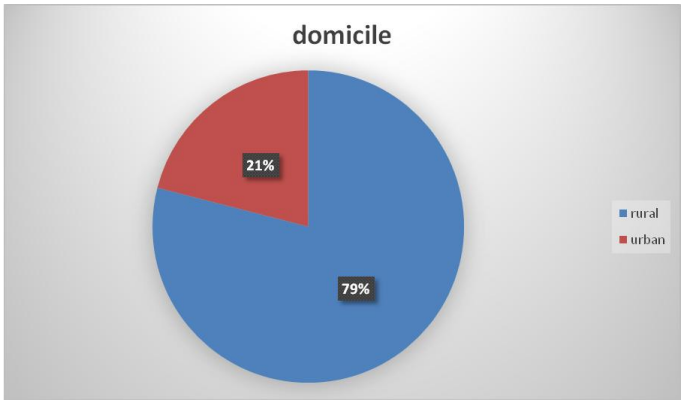

Figure 3: Showing domicile of cancer patient

Marital Status

It was observed that, 79.6% (n=398) patients were married and only 20.4% (n=102) patients were unmarried (Table 4, Figure 4).

Marital status	Frequency	Percentage
Married	398	79.6%
Unmarried	102	20.4%
Total	500	100.0%

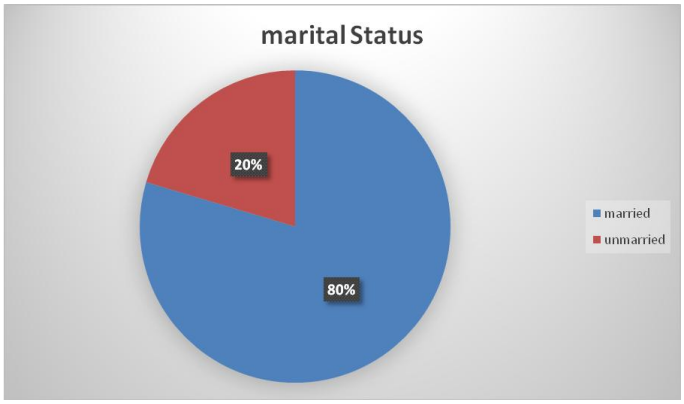

Figure 4: Showing marital status of cancer patients.

Category of patients

In our study, 82.0% (n=410) patients belonged to privileged (BPL) category and 18.0% (n=90) patients belonged to non-privileged (APL) category (Table 5, Figure 5).

Table 5: Category of patients

Category	Frequency	Percentage
Privileged (BPL) category	410	82.0%
Non-privileged (APL) category	90	18.0%
Total	500	100.0%

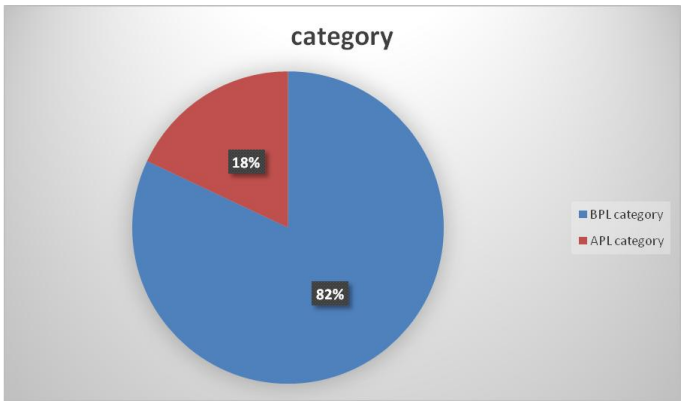

Figure 5: Showing category of cancer patients as per below poverty linecriteria.

Socio economic Status

In our study majority of the patients, 40% (n=200) belonged to the lower class followed by 35.6% (n=178) patients belonging middle class and 24.4% (n=122) patients belonged to age group 61-80 years. (Table 6, Figure 6).

Table 6: Distribution of cases as per socioeconomic status

Socio economic Status	Frequency	Percentage
Upper	122	24.4%
Middle	178	35.6%
Lower	200	40.0%
Total	500	100.0%

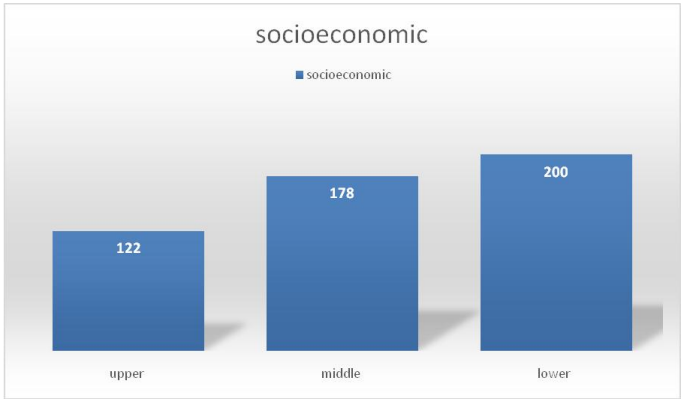

Figure 6: Distribution of cases as per socioeconomic status

Personal Habits

In our study, 77.4% (n=387) patients were smoker category and 22.6% (n=113) patients were non smokers. (Table 7, Figure 7).

Table 7: Distribution of Personal Habits

Personal Habits	Frequency	Percentage
Smoker	387	77.4%
Non Smoker	113	22.6%
Total	500	100.0%

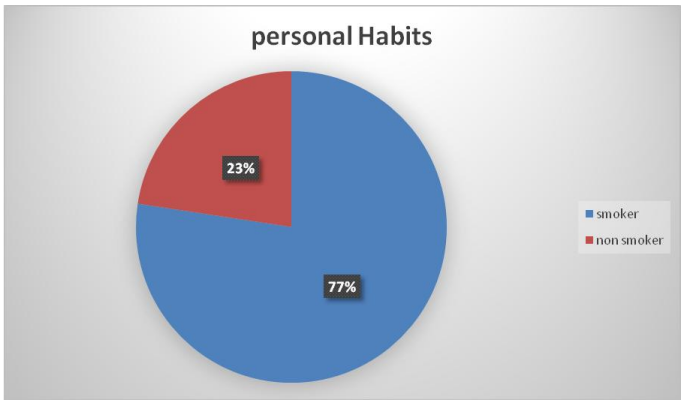

Figure 7: Distribution of cases as per personal habits

Benefits availed of Government Schemes

In our study majority of the patients, 82% (n=410) had availed benefit of ABPMJAY followed by 9.0% (n=45) patients availed benefit of RAN and 6.6% (n=33) patients benefitted from other schemes. Only 2.4% (n=12)

patients have not availed the benefit of any government Scheme.(Table 8, Figure 8).

Table 8: Distribution of cases as per benefit availed

Benefit availed	Frequency	Percentage
ABPMJAY (Ayushman Bharat)	410	82.0%
RAN (Rastriya Arogya Nidhi)	45	9.0%
Others (Endowment etc)	33	6.6%
None	12	2.4%
Total	500	100.0%

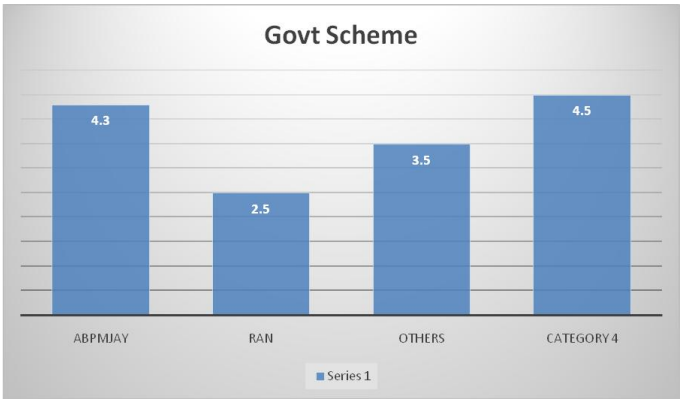

Figure 8: Distribution of cases as per benefit availed

Referral

In our study majority of the patients, 68% (n=340) were referred from OPD followed by 16.4% (n=82) patients from wards and 15.6% (n=78) patients from emergency. (Table 9, Figure 9).

Table 9: Distribution of cases as per referral

Referred from	Frequency	Percentage
OPD	340	68.0%
Ward	78	15.6%
Emergency	82	16.4%
Total	500	100.0%

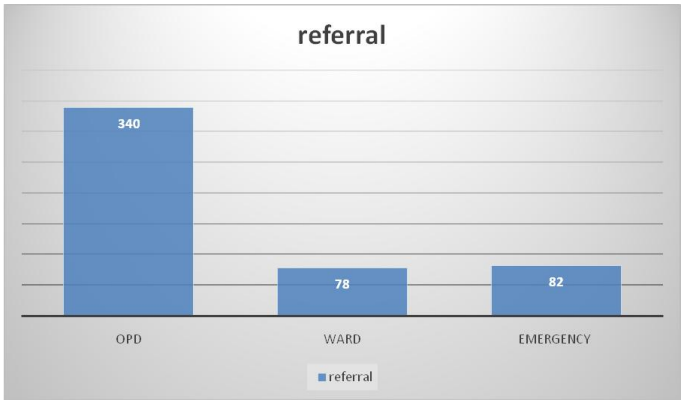

Figure 9: Distribution of cases as per referral

Diagnosis

It was observed that majority of patients, 18.0% (n=90) had lung cancer followed by 12.0% (n=60) patients had breast cancer, 11.0% (n=55) had carcinoma stomach, 10.0% (n=50) had carcinoma esophagus. (Table 10)

Table 10: Distribution of cases as per diagnosis

Diagnosis	Frequency	Percentage
ALL	17	3.4%
AML	13	2.6%
Carcinoma Breast	60	12.0%
Carcinoma Colon	15	3.0
Carcinoma Oesophagus	50	10.0%
Carcinoma Gall bladder	14	2.8%
Carcinoma Gastro Oesophageal Junction	21	4.2%
Carcinoma lung	90	18.0%
Carcinoma ovary	20	4.0%
Carcinoma Pancreas	17	3.4%
Carcinoma Prostrate	13	2.6%
Carcinoma Rectum	15	3.0%
Carcinoma stomach	55	11.0%
Carcinoma Thyroid	10	2.0%
CLL	11	2.2%
CML	5	1.0%
Glioblastoma	5	1.0%
Hepatocellular carcinoma	20	4.0%

Hodgkin Lymphoma	3	0.6%
Multiple Myeloma	16	3.2%
Non Hogdkin Lymphoma	30	6.0%
Total	500	100.0%

Discussion

Health care delivery in India is going through a process of transition, more so the tertiary specialty care of chronic diseases like diabetes, hypertension, cardiac diseases, kidney or liver failure, mental illness and cancer(5). Patients, more commonly those from the lower economic strata, have difficulty in availing the health care services because of the costs involved in diagnostic and curative procedures. Even in public hospitals where the cost of care is low, patient had to bear several direct and indirect costs, commonly referred to as out-ofpocket expenditure (OOPE), which impoverish them further. As a result, patients with life threatening diseases requiring tertiary care often go untreated even if they are aware of the availability of high quality services (6). It can also lead to delay in diagnostic and curative procedures and even causing deaths of several thousands of poor patients. This issue has been a concern for nation's health policy, whichshould address the cost, quality and accessibility of health care (5). In our study, majority of the Cancer patients belonged to the age group 41-60 years (54%). The results are similar to the study by Jayant D Deshpande et al who observed two-thirds of Cancer patients in the age group 41-70 years (7). The results are also similar to Kesavan Sreekantan Nair et al who observed two-thirds ofCancer patients were between the ages of 35-64 years (8). In the present study, males were more than females (54%). The results are similar to the study by Mehotra et al (2008) who reported male: female ratio of 1.5:1 inNorth India (9). Similarly, the study by Vijay Kumar Barwal et al observed males are more than females (10). The present study had majority of the patients were from rural areas (79%). Kesavan Sreekantan Nair et al in their study observed that 60% of the patients were from rural areas (8). In our study, majority of the patients were married (79%). The study by Vijay Kumar Barwal et al (80.20%) observed that majority of the Cancer patients were married (10). In the present study, majority of the patients had diagnosis of lung Cancer (18%). The similar results were obtained in the study by Jayant D Deshpande et al who observed most of males and females had lung carcinoma as diagnosis (7). The present study, majority of the patients were of below poverty line (80% i), monthly per capita household income (For J&K: Rural=Rs.1102, Urban=Rs.1192). BidhuKalyan Mohanti et al in their study also reported 50% patients had monthly per capita household income less than Rs. 1000 (5).

Summary

In our study, majority of the Cancer patients belonged to the age group 41-60 years (54%). In the present study, males were more affected than females (54%). The present study had majority of the patients were from rural areas (79%). Majority of the patients were married (79%). Majority of the patients had diagnosis of lung Cancer (18%). The present study, majority of the patients were of below poverty line (80%), monthly per capita household income (For J&K: Rural=Rs.1102, Urban=Rs.1192)

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