

PREVALENCE OF DISTRESS FINANCING AND CATASTROPHIC HEALTH EXPENDITURE IN CANCER PATIENTS: A STUDY FROM INDIA***¹Abas Khan, ²Farooq A Jan, ³Haroon Rashid, ⁴Arshad Manzoor Najmi and ⁵Imtiyaz Ahmed Wani**¹Department of Hospital Administration, SKIMS, Srinagar.²Department of Hospital Administration, SKIMS, Srinagar.³Department of Hospital Administration, SKIMS, Srinagar.⁴Department of Radiation Oncology, SKIMS, Srinagar.⁵Department of Nephrology, SKIMS, Srinagar.***Corresponding Author: Abas Khan**

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Article Received on 06/10/2020

Article Revised on 26/10/2020

Article Accepted on 16/11/2020

ABSTRACT

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. Households with a cancer patient experienced significantly higher Out of pocket (OOP) expenditure per capita as compared with households having a non cancer patient. The likelihood of experiencing catastrophic health expenditure (CHE) in case of cancer was 160% more than for any other disease in India. In our study of Cancer patients, 72% of the patients experienced distress financing while as 90.00% of the patients had catastrophic health expenditure.

KEYWORDS: Cancer, distress financing, Catastrophic health expenditure.**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]

With this background, the present study was undertaken with the idea to study the prevalence of distress financing and catastrophic health expenditure in cancer patients.

Aims and Objectives

1. To Study prevalence of distress financing in cancer patients attending SKIMS regional Cancer centre.
2. To Study prevalence of catastrophic health expenditure in cancer patients attending SKIMS regional Cancer centre.

MATERIAL AND METHODS**Study Design and Duration**

A retrospective study of 2 years was conducted among the Cancer patients registered with Regional Cancer Center (RCC), SKIMS between 1st October 2015 and 30st September 2017.

Sampling

Using simple random sampling, 20% of the patients registered with Regional Cancer Center (RCC) were studied.

Study tool

After obtaining the list of patients registered with Regional Cancer Centre (RCC), the patients were contacted, consent taken from them after explaining the scope and purpose of study and were subjected to a questionnaire which was pretested by conducting a pilot study. The response rate was 80%. The prevalence of catastrophic health expenditure and distress financing was studied.

Exclusion Criteria

Those patients who refuse to participate in the study were excluded from the study

Statistical Analysis

Data was analyzed with the help of SPSS software (version 23.0). All the categorical data was shown in the form of frequency and percentages & continuous data was shown in the form of averages and standard deviations.

RESULTS AND OBSERVATIONS

The pretested questionnaire was given to 625 Cancer patients registered with Regional Cancer Centre (RCC) SKIMS between 1st October 2015 and 30st September 2017. The response rate was 80.00%. A sample size of 500 Cancer patients was obtained for retrospective study.

Distress financing: It is defined as borrowing from family/friends, selling possessions, or taking out loans to fund expenditure of the disease.⁽⁵⁻¹¹⁾

Table 1: Showing Prevalence of distress financing.

Source of financing	Frequency(n=500)
Selling assets	341(68.2%)
Borrowing	360(72.0%)
Prevalence	72.0%

Catastrophic health expenditure

It is defined as monthly Out of pocket (OOP) health expenditure (excluding reimbursement, if any) \geq 40% of the total monthly non-food (non subsistence) expenditure of the household.

World Health Organization (WHO) also uses the following definitions of catastrophic health expenditure: monthly out of pocket health expenditure $>$ 10% or $>$ 25% of monthly total household expenditure or income.^[5-11]

In our study we used definition of Catastrophic health expenditure: monthly out of pocket expenditure $>$ 25% of monthly household income.

It was observed that 80% of the patients had monthly income less than or equal to 5000 rupees while as 84% of the patients had monthly expenditure more than five thousand rupees.(table 2,table 3)

Overall prevalence of catastrophic health expenditure was found to be 90%.

Table 2: Showing Monthly Income in Rupees.

Monthly Income in Rupees	Frequency(n=500)
1000-2000	260
2001-5000	140
$>$ 5000	100
Total	500

Table 3: Showing Monthly expenditure in Rupees.

Monthly expenditure in Rupees	Frequency(n=500)
$<$ 5000	80
5000-10000	120
$>$ 10000	300
Total	500

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.^[12] 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-of-pocket 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.^[13] 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, which should address the cost, quality and accessibility of health care.^[12]

One of the main goals of Universal Health Coverage (UHC) is to achieve equity in health service utilization. Even though inequity in service utilization is seen at all the levels of health care, tertiary care contributes to the maximum inequity because of the higher costs involved in the care.^[14] Even among those patients who utilize the services in view of life threatening diseases, OOPE is found to be high, leading to impoverishment. This is a clear deviation from the goal of providing financial protection to all families under UHC.^[12] Hence to achieve UHC, government of India and State government of J&K have started various patient financial assistance schemes to reduce the economic burden of life threatening diseases like Cancer and ESRD on poor and below poverty line patients.

Distress financing is defined as borrowing from family/friends, selling possessions, or taking out loans to fund expenditure of the disease while as **catastrophic health expenditure** is defined as monthly Out of pocket (OOP) health expenditure (excluding reimbursement, if any) \geq 40% of the total monthly non-food (non subsistence) expenditure of the household.^[5-11]

World Health Organization (WHO) also uses the following definitions of catastrophic health expenditure: monthly out of pocket health expenditure $>$ 10% or $>$ 25% of monthly total household expenditure or income.^[5-11] In our study Prevalence of distress financing was found to be about 72.0 % while as catastrophic

health expenditure was present in 90.00% of the cancer patients.

The prevalence of distress financing on Cancer patients was 72% in our retrospective study. Kesavan Sreekantan Nair et al in their study observed that 76% of cancer patients had distress financing.^[15] A study by Jain M and Mukherjee K had 51% patients with distress financing.^[16] Akashdeep Singh Chauhan et al observed 45% patients had distress financing in their study.^[17]

The prevalence of catastrophic health expenditure on Cancer patients was 90% in our retrospective study. Jain M and Mukherjee K in their study of Cancer patients observed catastrophic health expenditure of 84%.^[16] The study by Akashdeep Singh Chauhan et al.

observed catastrophic health expenditure in 34% of Cancer patients^[17]

SUMMARY

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. Households with a cancer patient experienced significantly higher Out of pocket (OOP) expenditure per capita as compared with households having a non cancer patient. The likelihood of experiencing catastrophic health expenditure (CHE) in case of cancer was 160% more than for any other disease in India. In our study of Cancer patients, 72% of the patients experienced distress financing while as 90.00% of the patients had catastrophic health expenditure.

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