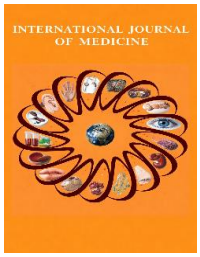

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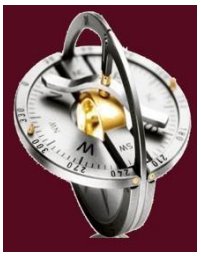

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Original Research

Observational Study of Cancer Patients in a Semi-Rural Community Center

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Abstract

Background: Cancer is one among the most serious disease in humans is on the increase. Although several observational studies on cancer have been conducted worldwide, there are relatively few such studies in India. The aim of the study is to research their prof iles, diagnose, family history, geographical location, social and financial support and treatment plan. ***Methods& Results:*** A one - month observational study was conducted on 150 cancer patients, using in-depth interviews and Goggle form questionnaires, to explore their personal, disease and support systems. The study reveals a significant prevalence of blood and breast cancer, with individuals aged 20 -30 more prone to blood cancer and those over 40 more likely to develop breast cancer. The majority of patients were from rural areas, traveling an average of 300 km for treatment. ***Conclusion:*** The prevalence of blood cancer is found to be higher in individuals in the age ranging from 20 to 30 years than in older people though and this could be a selection bias. According to statistics, females who are prone to breast cancer are found to be over the age of 40 years. Majority of the patients with breast cancer were house wives without awareness of cancer. Their family norms are stopping them to visit a doctor and get treated. Statistics also tell that chemotherapy is the most common treatment given to majority of the patients. Many patients were diagnosed with cancer in less than 3 months and are on a regular chemotherapy sessions. One of the importa nt factors that were observed in this study was that the majority of the patients were without a past medical and familial history of cancer. Governm ent is supporting majority of the people under AYUSHMAN scheme, which will cover the treatment expenses totally.

Keywords: *Cancer, observational study, Rural healthcare, Chemotherapy treatment, Breast cancer, Blood cancerlet.*

Introduction

In India, around 100 out of every 100,000 people are diagnosed with cancer (1). As per Global Cancer Observatory, India fact sheet from 2022, number of new cancer cases in India are 1,413,316 and number of deaths are 916,827(2). The study's objectives are to determine the prevalence pattern of various types of cancers, gather information on the risk factors and consequences of the disease, and categorize patients according to their demographics, past medical and family histories, food, social habits, and line of work.

Materials and Methods

As a student volunteer at TYAcan foundation, I have conducted a study on cancer patients at a rural cancer academic center inSri Aurobindo Institute of Medical Sciences (SAIMS)of Indore, in Madhya Pradesh, India. Indoreand nearby regioncaters the urban and semi urban community. The area covers 530 square kilometers and is estimated 2024 population of 3.1 million (municipal corporation) and 3.5 million (urban agglomeration)(4) with diverse ethnic, religious, cultural, socio-economic, and linguistic backgrounds.

An extensive interview schedule was part of a one-month study, and an English-language information sheet was created. Every patient who had been diagnosed with a different kind of cancer was contacted. Hindi, the indigenous language, was used for all interviews, and I have taken the notes. A questionnaire created by the SAIMS was used for the interview. Every one of the 150 people who were approached agreed to take part in the study. A methodical stacking of information was obtained by periodically inspecting the data gathering. Age group, type of cancer, symptoms, when cancer was diagnosed, family medical history of diseases, type of treatment, personal loss due to disease, patient caretaker, healthcare support, hospital experience were among the study variables. During the survey, I understood that most of the patients are from rural& sub-urban areas and with lower socioeconomic status. Laboratory reports, patient case notes, record reviews, and treatment charts were among the data sources. Due to the short study period, there was no study follow-up.

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Results

Of the total 150 patients enrolled in the observational study(figure 1), top 5 cancers were found to be Blood (43%), Breast (17%), Lung (9%), Ovary (6%) and Stomach (6%). Majority of the patients were diagnosed within the previous 3 months (74%). Patients were inquired for family history of cancer and was noted that 93% of them do not have any history of cancer in their family.

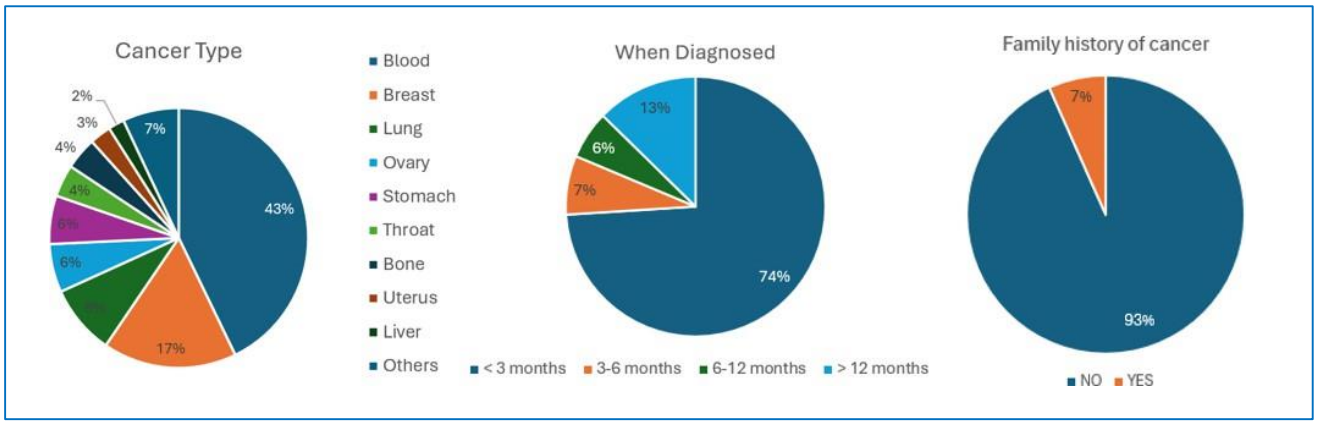

Figure 1. Cancer type, when diagnosed and family history of cancer

Figure 2,Swelling (31%) was ranked high in the symptoms occurrence followed by cough (11%), fever (9%), Body pains (7%), fati gue (7%), abdominal pain (7%), weight loss (7%), weakness (5%), Bleeding (5%), Stomach pain (5%), headache (2%), chest pain (2%) and others were (2%). The patients in this study were undergoing treatment Chemotherapy (94%), Surgery (5%) and Radiation (1%). Most of the patients were from rural and lower socioeconomic status, and 95% received government health care support, Ayushman Bharat.

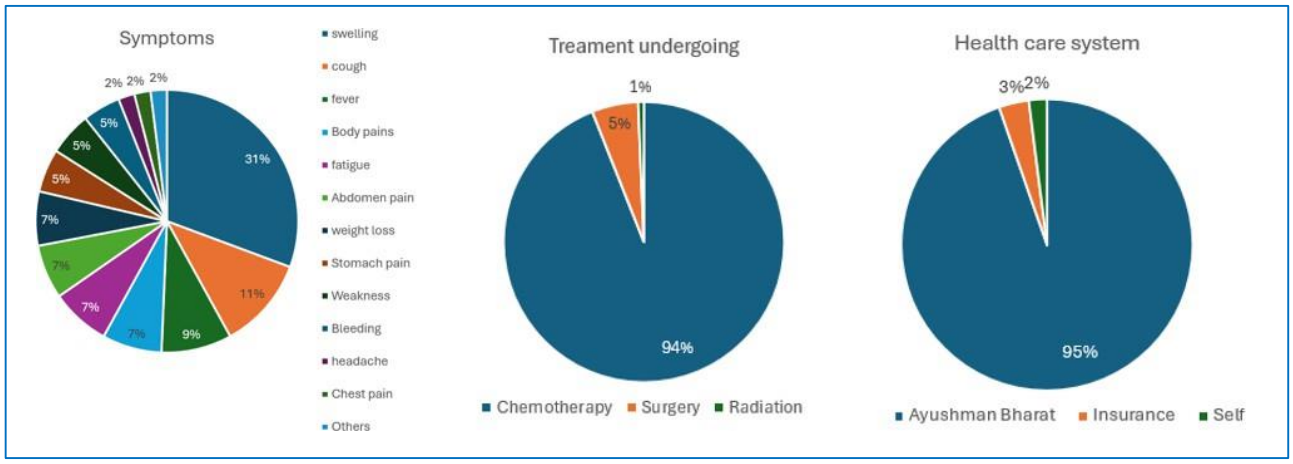

Figure 2. Patient symptoms, treatment undergoing and health care system

Figure 3 shows that during the diagnosis and treatment phase they was emotionally supported by father (38%), husband (31%), mother (9%), son (9%), wife (5%), relatives (5%). Due to the disease, patients were disturbed in several ways and their personal life loss was highest (60%), followed by concerns about employment (23%)and education (16%).

The highest percentage (26%) belongs to age group 20 to 30 years, categorized as young adults followed by (25%) belong to age group 50 to 60 years. Young adults who are at a critical phase of their life, either in education, married life, or making career needed emotional support and continue to fight the disease. A non-profit organization“Teenage Young Adult Cancer Foundation” (TYAcan) is dedicated and focused on treating young adults cancer patients and provide them medical care, emotional support and educational programs to enhance th e lives of young patients and their families. TYAcan organize and conduct wide range of initiatives to address pressing issues faced by young adult cancer patients(5).

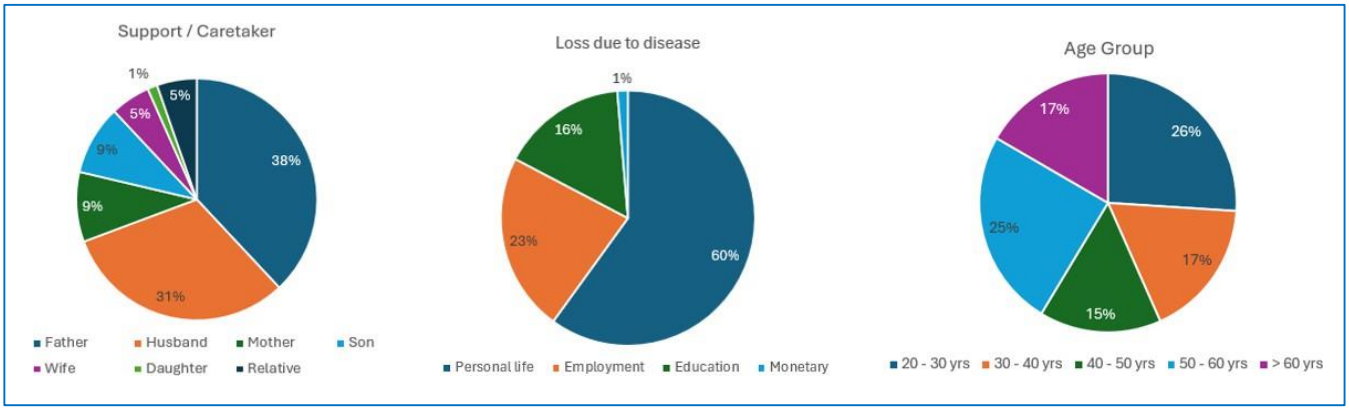

Figure 3. Patient support/caretaker, loss due to disease and patient age group

Discussion

This observational study has delved into the personal experiences, cancer-related and support systems of cancer patients admitted to a semi rural cancer center in India. The National Cancer Registry Programme (NCRP) and the National Institute of Cancer Prevention & Research (NICPR) are crucial in tracking cancer incidence and trends since 1982. The Indian government has implemented policies, strategic

interventions, and financial assistance schemes to improve prevention, early detection, treatment, and patient care.Ayushman Bharat is a historic health program that was introduced in 2018 with the goal of ensuring universal health coverage, especially for underprivileged and rural populations. The program is crucial in guaranteeing that cancer patients receive therapy within 30 days. The program provides economically disadvantaged families with cancer care that includes chemotherapy, radiation therapy, and surgical oncology. More than 90% of registered cancer patients have started treatment under this program as of 2024, saving millions of dollars in out-of-pocket costs and is helping to reduce “terminal debt situations” in several rural families, due to health-care costs.

Conclusion

The study analyzed the top cancers diagnosed and theirsymptoms.Patients from rural areas travelled on an average of 4 hours from their villages to reach hospital for the treatment. As per the data collected, young adults in the age group of 20 to 30 years were the highest in percentage who were diagnosed with cancers and undergoing treatment. As the proverb says “Awareness and prevention is better than cure”, awareness about cancers and cancer screening procedures will help in early diagnosis and subsequent treatment and a better outcome (6).India commemorates National Cancer Awareness Day each year on November 7th, aligning with Marie Curie's birthday, to address the increasing prevalence of cancer. The day underscores the significance of early detection and good lifestyle choices to mitigate cancer chances. The government advises individuals to prioritize their health through regular examinations, a balanced diet, and exercise, as cancer cases are expected to increase (7). Cancer foundations such as TYAcan are making a positive impact onlife by regularly organizing community programs to raise public awareness about the disease and its prevention in young adults.

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