



A descriptive study to assess the level of knowledge on management of childhood cancer among caregivers

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Abstract

Cancer is the disease that results when cellular changes cause the uncontrolled growth and division of cells. Some types of cancer cause rapid cell growth, while others cause cells to grow and divide at a slower rate. These cells can invade and damage nearby tissues and spread to other parts of the body. The spread of cancer from one part of the body to another is called metastasis. Cancer occurs in people of all ages and can affect any part of the body. It begins with genetic change in single cells that then grow into a mass (or tumour), invades other parts of the body and causes harm and death if left untreated. The present study aimed to assess the level of knowledge on management of childhood cancer among caregiver. A quantitative approach with descriptive research design was adopted for the present study. 30 caregivers were selected by using purposive sampling technique. A Self-structured questionnaire method was used to collect both the demographic data and the level of knowledge on management of childhood cancer among 30 study participants, The present result showed that 16(53.3%) of the caregiver had inadequate knowledge, 9(30%) of them had moderately adequate knowledge and 5(16.7%) of them had adequate knowledge on management of child hood cancers. Hence the findings of present study concluded that, caregiver had inadequate knowledge on management of childhood cancer.

Keywords: Childhood cancer, management, knowledge, caregivers

Introduction

Cancer is defined as a group of diseases that, which is caused due to uncontrolled division of abnormal cells, this abnormal replication of cells can take at any part of the body. Some type of cancer is progressive with rapid cell growth, while others cause cells to grow buy mitosis reaction rate is very slow ^[1]. These progeny of abnormal cells can invade and damage the surrounding tissues and also has ability to spread to other parts of the body which is called metastasis. It occurs due abnormal change in the nucleotide pattern in single cells that then grow into a mass (or tumour), and spreads to other parts of the body, enables drastic effect, even death if left untreated. It has been revealed that, 10,000 children die due to cancer per annum and out of which 90% of the children's background with socioeconomic status all type of cancer causes 10% of death. In this developing world, cancer is the second leading cause of death, compared to cardiovascular disease, were estimated withy 21% (2.5 million) of mortality. Globally, about 15% of population is affected by different types of blood disorders ^[2].

Childhood cancer is non-communicable disease with serious impact of health and life threatening condition, with marked rise globally and particularly in low resource settings. Children are diagnosed with different forms of cancer.

There are types of cancer that can affect the liver, muscle bones, kidney, eye, blood and brain. Commonly known adult cancers are breast cancer, lung cancer and colon cancer and etc. Childhood cancer is the second leading cause of death among children, particularly in the age group of 1-14, wobbling 167 children per million each year ^[3]. However, health care workers face long-term risks towards care of children health and wellbeing. Including recurrence, stunted growth and development or cognitive impairment and early death, and lower quality of life when child has been diagnosed with cancer, their family is catapulted into a new reality of life, that is both threatening and confusing. The child and their entire exposed to poor knowledge about prognosis, treatment, outcome, and impact. Each family member may undergo different kind of emotional response such as fear, confusion, disbelief, anger, anxiety, hope, concern, and shock ^[4].

The diagnosis of childhood cancer is complex. Inadequate knowledge on the warning signs of childhood cancer results, delayed from diagnosis and treatment. Early diagnosis of childhood cancer is a fundamental goal in paediatric oncology, for better comprehensive care ^[5]. Consequently, prognosis could be achieved during short period. The treatment of cancer includes chemotherapy, radiation therapy and surgery for solid localized tumors. These

therapies have been used as single treatments or in combination method. The child can undergo chemotherapy sessions and other follow-up, feels convince in home setting. Family members recruit their time and energy, which low man power as well as decreased stress.

Risks for side effect and reoccurrence of cancer during treatment are common in child hood cancer child and are determined by a number of factors of cancer. Some side effects don't show up takes months or years for exposure after treatment ends, that is known as late effects or long-term outcomes. The first step in prevention of Childhood cancer is not allowing anyone to use tobacco, smoke around children. Prevent the child for sunburns to prevent skin cancer. Avoid processed foods, to prevent growth of cancer cells in children. A healthy diet helps to helps in child physically, which removes harmful chemicals, prevents prognosis of cancer and regenerate cells and prevents damage of DNA [6].

Children with cancer often require routine treatment and informal caregivers are chief resource for optimal outcomes of treatment. Informal caregivers are target resource in the management of childhood cancer for better cooperation and treatment [7]. "Accessibility, affordability, lack of awareness about the nature of the disease is a major cause for cancer Family caregivers is essential partners in delivery of specialized care, they also manage the stress and anxiety caused due to treatment. Unlike professional caregivers such as physicians and nurses, informal caregivers, plays a typical role in management of cancer for children [7].

The objectives of the present study were

1. To assess the level of knowledge on management of childhood cancer among Caregivers.
2. To associate the level of knowledge with their selected demographic variables.

Materials and methods

A quantitative approach with non-experimental descriptive research design was adopted for the present study. After obtaining ethical clearance from the institutional ethical committee (IEC) from Saveetha Institute of Medical And Technical Sciences (SIMATS) and a formal permission from the administrative head of Saveetha College of Nursing, the main study was conducted. A total of 30 caregivers who met the inclusion criteria were recruited as the study participants by using purposive sampling technique. The eligibility criteria for the study participants were a) only caregivers of childhood cancer b) those who are willing to participate and c) who can read, write and understand English and Tamil. The study purpose was explained by the investigator to each of the study participant and a written informed consent was obtained from them. The demographic data and current level of knowledge on management of childhood cancer were gathered by exploiting a self- structured questionnaire and the collected data were tabulated and analyzed by using descriptive and inferential statistics. Demographic variables and level of knowledge were given in frequencies with percentage. Association between level of knowledge on management of childhood cancer among caregivers with their selected demographic variables was analyzed using Chi-Square test. $P < 0.05$ was considered as statistically significant.

Results

About 30 caregivers participated in the study. Based on the demographic variables 40% of the child were in the age group of 6-10 years, 63.3% of the child were females, 66.6% of the care givers had no formal education, 43.3% of the caregivers had a family monthly income of Rs.11000-20000, 66.7% of the caregivers of nuclear family, 70% of the caregivers had no family history of childhood cancer, 50% of the caregivers had 1-2 years of duration of cancer.

Table 1: Shows in Demographic Variables, Frequency and Percentage

Demographic Variables	Frequency (f)	Percentage (%)
Age of the child in years		
Less than 5 years	2	6.7
6-10 years	12	40.0
11-15 years	11	36.6
More than 15 years	5	16.7
Sex of the child		
Male	11	36.7
Female	19	63.3
Educational status of the caregivers		
No formal education	20	66.6
Primary education	3	10.0
Higher secondary	5	16.7
Degree	2	6.7
Monthly income of the family		
Less than 10,000	2	6.7
11000-20000	13	43.3
21000-30000	7	23.3
More than 30000	8	26.7
Type of the family of the child		
Nuclear	20	66.7
Joint family	3	10.0
Extended family	5	16.6
Separated family	2	6.7
Family history of cancer of child		

Yes	9	30.0
No	21	70.0
Duration of cancer		
<6 months	-	-
6 months- 1year	2	6.7
1-2 years	15	50.0
>2 years	13	43.3

Level of knowledge

About 16 (53.3%) of the caregiver had inadequate knowledge, 9 (30%) of them had moderately adequate knowledge and 5 (16.7%) of them had adequate knowledge on management of childhood cancer.

The demographic variables such as sex of the child ($\chi^2=$

1.10, df=2, P=0.5769), monthly income of the family ($\chi^2=4.038$, df=6, P=0.6714) and education status of the caregivers ($\chi^2=6.40$, df=6, P=0.3793) shows significant association with level of knowledge on management of childhood cancer at $p<0.01$.

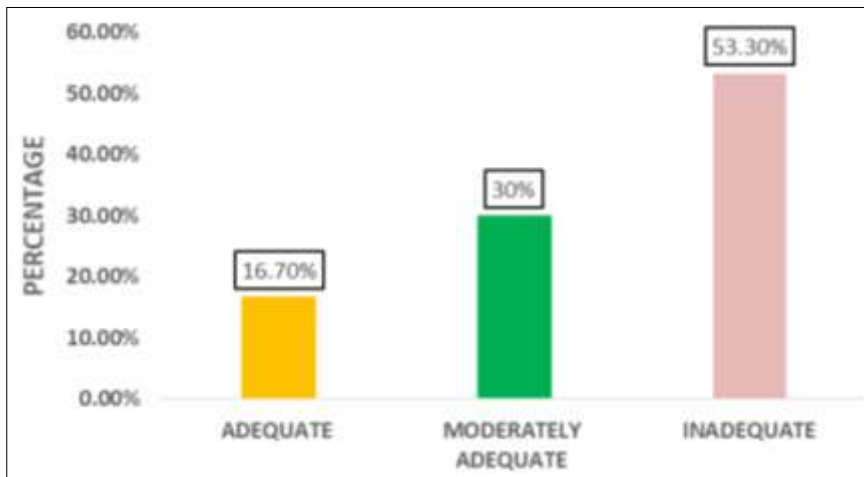


Fig 1: Level of knowledge

Discussion

The present study results revealed that 16 (53.3%) of the caregiver had inadequate knowledge, 9 (30%) of them had moderately adequate knowledge and 5 (16.7%) of them had adequate knowledge on management of childhood cancer. The present finding is supported by Ismail *et al.* (2018) a cross sectional survey among 192 parents of children with cancer in cario university to assess the knowledge and home practices of family caregivers having children with leukemia. Descriptive research design was utilized in this study. Structured questionnaire was used to collect data. The Result identifies that more than two third of caregivers had partially satisfactory knowledge and practice scores concerning home care, dealing with disease and side effects of treatments. A statistically significant positive correlation was found between total knowledge and total practice scores of family caregivers. Also, a statistically significant correlation was found between total knowledge & practice scores and caregiver’s education, income, place of residence, number of children in the family and duration of care [9].

The present study showed that demographic variables such as sex of the child ($\chi^2= 1.10$, df=2, P=0.5769), monthly income of the family ($\chi^2=4.038$, df=6, P=0.6714) and education status of the caregivers ($\chi^2=6.40$, df=6, P=0.3793) shows significant association with level of knowledge on management of childhood cancer at $p<0.01$ The present finding is supported by Rekha raninar *et al.* (2017) a study on level of knowledge regarding leukemia among caregivers

of leukemia in selected hospital. In India hematological malignancies as a group were the sixth most common with 8.77% patients. Reason for India's low survival rates is patients do not fully comply with the treatment decided by the doctors and follow-up is also patchy, says A Nandakumar, director of the National Cancer Registry Programme. A diagnosis of leukemia dramatically affects the lives of caregivers and all others who have a relationship with the patient. Quantitative approach using descriptive design was adopted for the present study. The sample for the present study was comprised of the caregivers of leukemia patients who were regularly attending OPD with patient in selected hospitals under study and is main family caregiver. One hundred fifty caregivers of patients suffering from leukemia were included in study. Structured knowledge questionnaire was used to assess the knowledge of caregivers of leukemia patients regarding leukemia. Results showed that majority of caregivers of leukemia patients had poor knowledge. The study found that mean knowledge score was poor and thus required intervention [10].

Conclusion

The present study concluded that maximum of the caregivers had inadequate knowledge on the management of childhood cancer. The nurse educators can organize teaching section on management of childhood cancer by using IEC material to the staff nurses. Awareness program can be conducted in the community regarding management of childhood cancer among mothers and caregivers. Nurse

administrator can provide necessary facilities and opportunities for nursing staff in the pediatric units to equip themselves with knowledge to deal with children, their needs, and problems in physical, psychological and social perspective.

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