

# Effectiveness of Learning Enrichment Programme on the Attitude Regarding Side Effects of Chemotherapy and Its Management among Caregivers of Patients Receiving Chemotherapy

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## Abstract

The incidence of cancer has seen a remarkable increase in the recent times and chemotherapy occupies a pivotal role in the recovery process of the patient. Several types of cancer are now considered curable with chemotherapy even in advanced stages. The client who is at high risk for recurrence but shows no evidence of current disease may be a candidate for chemotherapy. The primary objective of the study is to assess the effectiveness of learning enrichment program on attitude regarding side effects of chemotherapy and its management among care givers of patients receiving chemotherapy. Hence the research approach selected for study was quantitative research approach. One group pretest posttest experimental research design was used. 30 care givers of patients receiving chemotherapy were selected from the oncology ward and day care center by using convenience sampling technique. Attitude was assessed by using attitude scale. The group was offered a learning enrichment program regarding side effect and its management of chemotherapy. The data collected were analyzed using descriptive and inferential statistics. The result shows that there is significant improvement in the level of attitude of care givers of clients receiving chemotherapy regarding side effects of chemotherapy and its management after learning enrichment programme with a mean difference 6.11 at  $p > 0.05$  level of significance.

**Key words:** *Effectiveness, Learning enrichment program, Attitude.*

## Introduction

Cancer is a group of more than 200 diseases characterized by uncontrolled and unregulated growth of cells. It is a major health problem that occurs in people of all ethnicities. Most cancers occur in people over age 55. Cancer is the leading cause of death in people 55 to 75 years of age. Globally cancers accounts for 5.1% of total disease burden and 12.5% of all deaths. In India they account for 3.3% of disease burden and 9.9% of all deaths. This is especially important since life span is lengthening and elderly population (>55 years) is expected to double from 35 to 70 million by 2050. Most common cancer in males is lung and bronchus followed by hypo pharynx, oral cavity, pharynx, larynx and rectum. In the females commonest is the breast cancer followed by cervix, mouth, esophagus, ovary and

stomach. Cancer incidence overall is higher in women than in men in India. These are considerable geographic variations in incidence of certain type of cancers, due to life style in a particular regions.<sup>1</sup>

Treatment options offered to patients with cancer are based on treatment goals for each specific type, stage, grade of cancer. Chemotherapy is used primarily to treat systemic disease rather than localized lesions that are amenable to surgery or radiation. Chemotherapy involves the use of antineoplastic drugs in an attempt to destroy cancer cells by interfering with cellular functions, including, replication, and DNA repair. Each time a tumor is exposed to chemotherapy, a percentage of tumor cells are destroyed. Repeated doses of chemotherapy are necessary over a prolonged period to achieve regression of tumor. It has evolved to become a therapeutic option

that can offer cure from certain cancers, control other cancers for long periods of time and in some instances offer palliative relief of symptoms and improve quality of life when cure or control no longer is possible.<sup>2</sup>

There are early and late side effects for chemotherapy. Cells with rapid growth rates are very susceptible to damage and effects may manifest in virtually any body system. Nausea, vomiting, leukopenia, anemia, neutropenia, dryness, kidney dysfunction etc.

Typically family members or friends provide care to individuals with variety of conditions including cancer. This experience is commonly perceived as a chronic stressor of caregivers often experience negative psychological, behavioral and physiological effects on their daily lives and health caregivers are often faced with multiple concurrent stressful events and extended, unrelenting stress, they may experience negative health effects, mediated in part by immune and autonomic deregulation.<sup>(3)</sup>

A descriptive survey was conducted on hundred patients diagnosed with breast, gastro intestine, lung and ovarian cancers to assess major side effects of chemotherapy. In hundred patients 80 were received different chemotherapy regimens with known side effects like nausea and vomiting. It was found that the patients who received chemotherapy regimens had hair loss, fatigue, effect on work or home responsibilities, effect on social activities and who had a negative effect on family or partner.

Proper management of side effects of chemotherapy may be improve the psychological strength of caregivers. Learning enrichment program may improve the knowledge and attitude regarding side effects of chemotherapy and its management. Apart from this various educational methods will help to reduce caregiver burden and improve their quality of life.

**Objectives:** The study is aimed to:

1) To assess the attitude of caregivers of patients receiving chemotherapy regarding side effects of chemotherapy and its management before administration of learning enrichment program.

2) To evaluate effectiveness of learning enrichment program on attitude regarding side effects of chemotherapy and its management among caregivers of patients receiving chemotherapy.

## **Materials and Methods**

### **Research Design**

The research design is the overall plan for answer to the question being studied and for handling some of the difficulties encountered during research process. The research design used for study as pre experimental one group pretest posttest design.

O1XO2

O1 = Attitude assessment on caregivers of patients receiving chemotherapy regarding side effects of chemotherapy and its management before learning enrichment programs.

X= Learning enrichment program.

O2= Attitude assessment on caregivers of patient receiving chemotherapy regarding side effects of chemotherapy and its management after learning enrichment program.

### **Setting of the study**

The study is conducted in MIMS hospital Kozhikode district. The hospital is selected for easy availability and accessibility of subjects. There are oncology ward and day care in the hospital. In oncology ward there are 30 beds and in day care there are 10 beds. So that total the bed strength is 40 beds.

### **Population**

The population refer to the total category of persons or subject that meet the criteria for study established by the researcher. The selected population for present study is caregivers of patient receiving chemotherapy.

### **Sample**

A sample is a subset of population when dealing with people, it can be defined as set of respondents selected from a large population for the purpose of

study. The samples are caregivers of patient receiving chemotherapy, who admitted in a selected hospital.

Sample size=30

### **Sampling Technique**

Sampling is a process of selecting a set of population in order to obtain information regarding phenomena in a way that represent the entire population. Non probability sampling selects subjects based on the judgment of researcher to achieve particular objective of the research at hand within the prescribed time limits. In convenient sampling, the researcher selects or hand picks the elements of the study that are thought to best represent the phenomenon being studied. Convenient non probability sampling technique was found to be appropriate to select 30 caregivers of patient receiving chemotherapy.

### **Sampling Criteria**

#### **Inclusion criteria:**

- Caregivers of patient receiving chemotherapy.
- Blood relatives.
- Contact with minimum 6 months.
- Language.

#### **Exclusion criteria:**

- Caregivers who are not willing to participate in this study.

#### **Data collection instruments**

- 1) Socio demographic data of caregivers of patient receiving chemotherapy its management.
- 2) Structured questionnaire to assess the attitude
- 3) Attitude Rating Scale

### **Data collection process**

To conduct research study in the Aster MIMS Hospital Kozhikode, formal written permission was obtained from the institutional ethics committee and

medical superintendent after explaining the nature and objectives of the study. Confidentiality of the responses was assured to all the subjects to get their cooperation. The researcher approached each subject individually. An informed consent was taken from all the subjects individually after explaining the objectives, the purpose of the study and the method of filling the rating scale items, followed by a self-introduction of the investigators. Data was collected from the patients of chemotherapy wards.

The collected data was analyzed by using manual method. The baseline data were analyzed by frequency and percentage. Inferential statistics such as t test was applied to identify the Effect of learning enrichment program on attitude on side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy at the p value <0.05 level of significance.

## **Results**

### **SECTION 1: Sample characteristics**

- The findings shows that about 36.6% of subjects were in the age group of >60 years.
- The findings shows that 50% of subjects are males and 50% of females.
- The findings shows that about 40% of subjects were educated up to higher secondary level.
- About 40% of subjects having income in-between 10000-20000 per month.
- About 50% of Subjects were unemployed.
- About 63.3% of subjects were married.
- About 96.65% of subjects are Hindu.
- About 70% of subjects belong to nuclear family.
- About 60% of subjects got information through newspaper.

### **SECTION 2: Effect of learning enrichment program on attitude on side effects and its management of chemotherapy among caregivers of**

**patients receiving chemotherapy.**

**Mean , Mean difference, standard deviation and t value of pre test and posttest score of knowledge on side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy.**

	Mean	SD	Mean difference	Table t value	Df	Calculated t value	P value
Pretest	51.07	8.72	6.11	2.46	29	3.09	0.05
Posttest	57.18	8.28					

Significant at level of 0.05

It is inferred from the table 13 that the mean pretest score on attitude on side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy is 51.07 whereas of posttest is 57.18. The calculated paired t value 3.09 as greater than the table value 2.46 at df 29. Hence the null hypothesis stating that there is no significant difference in the level of attitude on side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy before and after learning enrichment program is rejected and the research hypothesis are accepted. Thus it can be interpreted that there is significant difference in the level of attitude on side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy after learning enrichment program.

### Discussion

The present study was aimed to evaluate the effectiveness of learning enrichment program on the attitude regarding side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy in a selected hospital. The findings of the study are discussed below.

The present study on effectiveness of learning enrichment program on the attitude regarding side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy shows that about 20% of subjects were got good attitude level, about 13.3% were got excellent and 6.6% were got very good attitude level in pretest. Then we provide learning

enrichment program. After one week of pretest we conducted the posttest, the posttest score is significantly greater than pretest score. And we concluded that there is significant improvement in the level of attitude of caregivers of clients receiving chemotherapy regarding side effects of chemotherapy and its management after learning enrichment programme with a mean difference 6.11 at  $p > 0.05$  level of significance.

### Conclusion

Cancer is a group of more than 200 diseases characterized by uncontrolled and unregulated growth of cells. It is a major health problem that occurs in people of all ethnicities. Most cancers occur in people over age 55. Cancer is the leading cause of death in people 55 to 75 years of age. Globally cancers accounts for 5.1% of total disease burden and 12.5% of all deaths. In India they account for 3.3% of disease burden and 9.9% of all deaths. Hereby we are presenting a Learning enrichment program which can improve the attitude of caregivers of patients receiving chemotherapy regarding side effects and its management.

**Ethical Clearance-** Taken from MIMS College of nursing ethics committee

**Source of Funding-** Self

**Conflict of Interest -** Nil

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