

## Planned Teaching Programme on Knowledge About Management of Side Effects for Cancer Patients Undergoing Chemotherapy.



### Nursing

**KEYWORDS :** Side effects of Chemotherapy, Planned Teaching Programme, Knowledge, Cancer Patients

**Mrs. Christeena Saju Varkey**

Professor & HOD, MSN (Dept), New Mangalore College of Nursing, Mangalore

#### Introduction

In the war against diseases there are many battles and the most intense of these battles have been against AIDS, TB, Malaria, Cardiovascular diseases and malignant neoplasms which are among the killer diseases that form the worst plague in human history (Hunt John, 2002). The leading cause of death in Japan is malignant neoplasm rated first among all other diseases with 31.8% of death. Cancer is the leading cause of death in Canada second to heart disease. In the developing world cancer ranks third as a cause of death (WHO, 1999). Devraj R. (2000) stats in a report in the World News Interpress Service that by the year 2015, two thirds all cancer cases will occur in the developing world. It is estimated that there are approximately 2 - 2.5 million cases of cancer in India at any given time with 700 thousand new cases detected each year. The different modalities of treatment for cancer are surgery, radiation therapy, chemotherapy, hormone therapy and immuno therapy. Chemotherapy is systemic treatment on the use of cytotoxic drugs to destroy cancer. In 1970's chemotherapy was an effective treatment modality for cancer. An undesirable consequence of the chemotherapeutic drugs is that those normal tissues having a high rate of cellular proliferation bear the brunt of toxic side effects. The major responsibilities of the nurse for patients with chemotherapy would be to deliver physical care to manage the side effects, provide psychosocial support to build or sustain coping capacity, education to encourage active participation in decision making and self care.

#### Statement of the Problem

Effectiveness of planned teaching programme on knowledge about management of side effects for Cancer patients undergoing Chemotherapy at Oncology O.P.D. of M. S. Ramaiah Medical Teaching Hospital, Bangalore.

#### Objectives of the study

- 1) To assess the pre-test level of knowledge among cancer patients regarding management of side effects of Chemotherapy.
- 2) To evaluate the effectiveness of planned teaching programme on knowledge of cancer patients regarding management of side effects of Chemotherapy.
- 3) To associate between post-test level of knowledge of cancer patients regarding management of side effects of Chemotherapy with their selected demographic variables.

(The selected variables include age, gender, habitat, type of family, education status, marital status, occupational status, income, dietary habits and hobbies)

#### Hypothesis

H01 - there is no significant difference between the mean pre-test and the mean post-test knowledge scores among cancer patients.

H02 - there is no significant association between the post-test level of knowledge among cancer patients with their selected demographic variables.

#### Materials and Methods

##### Design

An evaluative approach was adopted, a pre experimental one group pre-test, post-test design was selected to assess the knowledge of cancer patients on Chemotherapy, its side effects and management of side effects of Chemotherapy.

##### Population

The target population of the study were cancer patients under going Chemotherapy in oncology out patient department of M. S. Ramaiah Medical Teaching Hospital, Bangalore, Karnataka.

##### Sample

Sample consists of cancer patients under going Chemotherapy.

##### Sample Size

50 cancer patients under going Chemotherapy were selected for the study.

##### Sampling Technique

A purposive sampling method through non probability sampling approach was used for selection of subjects.

##### Delimitations

- 1) The study was delimited to cancer patients whoever was under going Chemotherapy in the out patient department of M. S. Ramaiah Medical Teaching Hospital, Bangalore.
- 2) Cancer patients who can read and write English or Kannada were selected.
- 3) Cancer patients who were available for the planned teaching programme and will follow the teaching on how to manage side effects of Chemotherapy.

##### Tool

- 1) Demographic Perfoma
- 2) Structured interview questionnaire on knowledge on concepts of cancer, Chemotherapy side effects and management of side effects.
- 3) Planned teaching programme after literature review. A systematically organized teaching strategy for a duration of 1 hour on management of side effects of Chemotherapy.

##### Ethical consideration

Ethical clearance was obtained from institutional review committee. A written informed consent was obtained from participants after verbally explaining all the aspects of the study.

##### Methodology

Research Design - Pre experimental design

##### Review of literature

Review of literature from books, journals, published and unpublished research studies where reviewed and it was revealed that cancer patients under going Chemotherapy suffer from various side effects such as hair loss, mouth sores, nausea, vomiting and fatigue. Culkin (2000) conducted a survey of 127 adults receiving Chemotherapy at a tertiary care hospital in Washington. The results revealed that patients had symptoms of fatigue, which was making them feel sluggish and drained which was affecting the quality of life. Another study revealed that most patients under

going Chemotherapy had most common side effects of nausea, vomiting and mouth sores. A study was conducted in 2003 to assess the physical and psychological problem of the patients receiving Chemotherapy. The findings of the study implicated that there was an increased need for education sessions for cancer patients under going Chemotherapy. Planned teaching programme helps in changing behavior through cognitive and effective behavioral change which will make the individual to be responsible for the maintenance of his or her own health.

**Results**

The data collected was analyzed using descriptive and inferential statistics and is presented below under various sections.

**Section 1: Demographic Characteristics**

Score Range	Frequency	% of Subjects
4 - 13	21	42
14 - 23	5	10
24 - 33	10	20
34 - 43	9	18
44 - 50	5	10
Total	50	100

The majority of cancer patients i.e., 52% are above 50 years and 20% were between 41 - 50 years and minority of them i.e., fall in the age group of below 20 years. 54% were females and 46% were males. 72% were from urban area and 28% were from rural area. There were equal number of people in nuclear and joint family. 48% were in the income group of 4,001 - 5,000, 40% were in 3,001 - 4,000. 38% had primary education, 22% had secondary education and 8% were non literate. 50% were house wives, 16% were business and agriculture and 4% were industrial workers. 52% were non vegetarian and 24% were vegetarian. Among subjects 66% did not had any bad habits, 14% of had the habit of smoking, 10% of consuming alcohol, 6% of pan chewing, and 2% had alcohol, smoking and pan chewing habits. 30% had walking as a form of exercise. 22% was listening to music. 28% did not have any hobbies and 2% had jogging as a hobby.

**Section 2: Knowledge Scores of Cancer Patients in pre - test N = 50**

The level of knowledge score of cancer patients in the pre-test ranged from 4 - 13 to 50 where maximum possible score was 50 out of 50. The data shows that the score of maximum percentage of cancer patients is in between the range of 4 - 13 that is 42% and 10% had scored between the range of 44 - 50 which suggests that subjects are having inadequate level of knowledge.

**Section 3: Knowledge Status in relation to specific area of Cancer Chemotherapy in pre - test**

Sl. No.	Pre - test knowledge score			
	Areas	Max. possible score	Obtained mean score	Mean %
1	Meaning, concept and causes of cancer	3	0.84	28.00
2	Treatment	1	0.56	56.00
3	Side effects of Chemotherapy	23	8.24	43.37
4	Management of Side effects of Chemotherapy	23	8.38	55.87

The data presented shows the knowledge score obtained in relation to areas of meaning of cancer, treatment, and Chemotherapy and side effects and management of side effects of Chemotherapy. The mean percentage score indicates that subjects have 56% of knowledge in area of treatment and 56% in the area of management of side effects of Chemotherapy. The overall mean knowledge percentage in all areas is 18.04% which suggests that subjects are having inadequate level of knowledge.

**Section 4: Level of Knowledge of cancer patients on management of side effects of Chemotherapy in pre - test**

The level of knowledge of cancer patients in pre-test regarding management of side effects of Chemotherapy where 26(52%) had inadequate knowledge and 24(48%) had moderate knowledge. The analysis of overall knowledge of the subjects in the pre-test shows that majority of them that is 35(60%) had inadequate level of knowledge.

**Section 5: Comparison between pre - test and post - test knowledge scores actual and modified gain**

Sl. No.	Areas	Max. Scores	Pre-test Mean	Post-test Mean	Actual gain	Possible gain	Modified gain score
1	Meaning, concept and causes of cancer	3	28.00	72.00	44	25	1.76
2	Treatment	1	56.00	100.00	44	55	0.8
3	Side effects of Chemotherapy	23	43.37	76.87	33.5	20.37	1.64
4	Management of Side effects of Chemotherapy	23	55.87	76.73	20.86	32.87	0.6
Maximum score - 50 (100%)							

The findings reveal that the mean post-test score 76.73% is higher than the pre-test score 55.87% in all areas of Chemotherapy which indicates that there is an effectiveness of the planned teaching programme.

**Section 6: Differences between pre - test and post - test knowledge scores**

Knowledge Score	Mean	Median	Standard Deviation
Pre - test	18.04	17.0	6.20
Post - test	37.72	40.0	7.16

The data in the table shows that the post-test mean knowledge score is much higher than the mean pre-test knowledge score that is 37.72% and 18.04% respectively. The median of post-test is found to be higher (40.0) than the median of pre-test (17.0). The standard deviation of post-test is 7.16 which is higher than the pre-test that is 6.20.

**Section 7: Differences of Mean, SD and 't' value of pre and post - test scores of Cancer patients**

Cancer patients	Mean	Difference of Mean	SD	't' value paired
Pre - test	18.04	19.68	6.20	18.88
Post - test	37.72		7.16	

P < 0.05

The data presented in table shows that 't' is 18.88 P < 0.05 is significant indicating that there is a significant gain in knowledge through the teaching programme which concludes that PTP has been effective in increasing the knowledge of cancer patients in the areas of Chemotherapy.

**Section 8: Relationship between post - test knowledge level and Demographic variables on management of side effects of Chemotherapy**

There was no significant association between gain in knowledge with selected demographic variables except for type of family which was found to be significant.

**Discussion**

In the present study the mean post-test knowledge scores were significantly higher than the mean pre-test knowledge score of cancer patients exposed to planned teaching programme. The

findings was supported by the study conducted by Chinnamma (1994). The tool used here was structured interview questionnaire. This was supported by the study conducted by Jethrulthamma (1991) in which cancer patients under going Chemotherapy was given a self instructional material. A sample of 50 subjects was selected. The results of the study showed that the mean post-test knowledge score was significantly higher that the mean pre-test knowledge score.

The study findings reveal that planned teaching programme is effective in helping patient to manage side effect of Chemotherapy. However repeated teaching sessions is essential.

#### **Conclusion**

Side effects of Chemotherapy can be managed by cancer patients undergoing Chemotherapy. Nurses play an important role in teaching patients about side effects of Chemotherapy through various methods like lectures, discussion, pamphlets, display etc. Any teaching strategy must be simple, clear for the learner to follow instructions easily so that cancer patients can lead a productive life.