



A STUDY TO ASSESS EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING MANAGEMENT OF COMMON SIDE EFFECTS OF CHEMOTHERAPY DRUGS AMONG CANCER PATIENTS ADMITTED AT DR.VVPPRH LONI BK.

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Introduction: Chemotherapy remains a cornerstone in the treatment of various cancers, offering therapeutic benefits that target rapidly dividing cancer cells throughout the body. The cytotoxic effects of chemotherapy on the gastrointestinal tract, leading to nutrient malabsorption and metabolic imbalances. **Material and methods:** A quasi-experimental, one-group pre-test post-test design was used to evaluate the effectiveness of an information booklet on managing chemotherapy side effects among 60 cancer patients at Dr. VVPPRH Loni Bk. Patients were selected using systematic random sampling, and data was collected through a proforma. Descriptive and inferential statistics were used to analyse the results. **Results:** The result reveals that the mean post-test score (10.01) was significantly higher than the mean pre-test score (4.03), indicating that the information booklet effectively increased knowledge about managing chemotherapy side effects. The calculated 't' value of 28.59 was greater than the tabulated 't' value of 2.001 at a 0.05 significance level, confirming the intervention's effectiveness. However, the study found no significant association between post-test scores and most demographic variables, except for age. **Conclusion:** The study findings have shown that the information booklet was effective in increasing knowledge regarding management of common side effects of chemotherapy treatment among patients receiving chemotherapy.

Key words: Chemotherapy treatment, Side effects, Information booklet, effectiveness, knowledge, Cancer.

INTRODUCTION

Chemotherapy remains a cornerstone in the treatment of various cancers, offering therapeutic benefits that target rapidly dividing cancer cells throughout the body. While chemotherapy can be effective in reducing

tumor size and improving survival rates, it often comes with side effects such as nausea, fatigue, hair loss, and immunosuppression due to its nonspecific nature, affecting both cancerous and healthy cells alike. Chemotherapy treatment often brings about a myriad of side effects that can significantly challenge patients' physical and emotional well-being. Given the diverse range of side effects associated with chemotherapy, a multidisciplinary approach that includes supportive care measures, regular monitoring, and tailored interventions is essential to optimize patients' treatment experiences and outcomes. Chemotherapy is a widely utilized treatment for various types of cancer, but one of its most recognized side effects is hair loss or alopecia. Diarrhoea is another notable side effect that can arise from chemotherapy treatments. Mucositis is a distressing side effect commonly associated with chemotherapy treatments, characterized by inflammation and ulceration of the mucous membranes lining the digestive tract, oral cavity, and other parts of the gastrointestinal system.

NEED FOR STUDY

Chemotherapy has revolutionized cancer treatment and improved survival rates for many patients, but it is associated with a range of side effects that can significantly impact quality of life and treatment adherence. Common side effects encompass gastrointestinal disturbances like nausea, vomiting, and diarrhoea; haematological complications such as anemia, neutropenia, and thrombocytopenia; mucositis; hair loss; and peripheral neuropathy, among others. Nausea and vomiting are reported in a significant proportion of cases, with estimates indicating that up to 70-80% of patients undergoing chemotherapy experience these symptoms. Fatigue, another common side effect, affects approximately 75-96% of cancer patients undergoing treatment. Hair loss (alopecia) occurs in a substantial number of cases, impacting up to 65-90% of individuals, depending on the specific drugs used. Managing nausea, vomiting, and dehydration, common side effects of chemotherapy, necessitates a multifaceted approach to optimize patient comfort and treatment adherence. Managing chemotherapy-induced hair loss, or alopecia, is a critical aspect of supportive care aimed at enhancing patients' psychological well-being and quality of life during cancer treatment. Managing mucositis, a debilitating side effect of chemotherapy, requires a comprehensive approach to alleviate symptoms and prevent complications. An effective management of side effects can enhance the patient's quality of life and minimize the interruption of treatment caused by severity of chemotherapy side effects. An information booklet on common side effects of chemotherapy drugs can be effective to improve patients' knowledge regarding the common side effects and help them cope effectively.

OBJECTIVES

1. Assess the existing knowledge regarding management of common side effect of chemotherapy drugs among cancer patients admitted at Dr.VVPPRH Loni Bk.
2. To evaluate effectiveness of information booklet on management of common side effects of chemotherapy drugs among cancer patients admitted at Dr.VVPPRH Loni Bk.
3. To find out association between post-test knowledge score of cancer patients with their selected demographic variable.

HYPOTHESIS

1. **H1:** There will be significant difference between pre-test and post-test knowledge score on management of common side effects of chemotherapy drugs among cancer patients admitted at Dr.VVPPRH, Loni Bk.
2. **H01:** There will be no significant difference between pre-test and post-test knowledge score on management of common side effects of chemotherapy drugs among cancer patients admitted at Dr.VVPPRH, Loni Bk.
3. **H2:** There will be significant association between post-test knowledge score of cancer patients with their selected demographic variable.
4. **H02:** There will be no significant association between post-test knowledge score of cancer patients with their selected demographic variable.

MATERIALS AND METHODS

A quasi-experimental, one-group pre-test post-test design was used to evaluate the effectiveness of an information booklet on managing chemotherapy side effects among 60 cancer patients at Dr. VVPPRH Loni Bk. Patients were selected using systematic random sampling, and data was collected through a proforma. Descriptive and inferential statistics were used to analyse the results.

Criteria for selection of sample

Inclusion criteria

1. Receiving chemotherapy drugs
2. Willing to participate in the study and available during data collection period
3. Able understands Marathi, Hindi, and English

Exclusion criteria

1. Critically ill
2. Unable to respond to tool

STATISTICAL ANALYSIS:

Objective I: Findings related to demographic characteristics

The study included 60 participants, with the majority being aged over 41 years (66.66%), female (58.33%), married (86.66%), and residing in rural areas (81.66%). Most participants (40%) were farmers, and 63.33% had a monthly income of less than 10,000 rupees. A significant portion (75%) followed the Hindu religion. The majority (58%) had been ill for 1–3 years, and most (86.66%) had never experienced chemotherapy side effects. A similar study at a tertiary care hospital revealed some differences in demographics, with a larger proportion of participants aged 31–40 years (36.66%) and living in urban areas (65%). Both studies highlight the importance of understanding patient demographics when assessing the effectiveness of interventions for managing chemotherapy side effects.

Objective II: Existing level of knowledge regarding management of common side effects of chemotherapy treatment among patients receiving chemotherapy.

Level of knowledge	Poor	Average	Good
F	48	12	0
%	80%	20%	0

The present study assesses the existing level of knowledge regarding management of common side effects of chemotherapy treatment among the study participants before implementation of interventions, it reveals that, majority 80% of the study participants had poor level of knowledge, followed by 20% of the study participants had average level of knowledge whereas no participants had belonged to good level of knowledge before the intervention. A similar study was conducted to evaluate the effectiveness of structured teaching programme on knowledge regarding management of the side effects of chemotherapy among patients with cancer at Tertiary care Hospitals, Bhubaneswar. The findings revealed that, before implementation of intervention, 61.66% study participants have inadequate knowledge and 38.33% of the study participants have moderate knowledge whereas no study participants shown adequate level of knowledge.

Objective III: Effectiveness of an information booklet on knowledge regarding management of common side effects of chemotherapy treatment among patients receiving chemotherapy.

	Mean	SD	't' value	'p' value
Pretest	4.03	1.67	28.59	0.0001
Post-test	10.01	1.59		

The present study reveals that mean of post test score 10.01 is greater than that of mean of pretest score 4.03. This indicates that the information booklet was effective in increasing knowledge regarding management of common side effects of chemotherapy treatment among patients receiving chemotherapy. Further 't' value is calculated to check that whether the increase in level of knowledge was significant. Tabulated 't' value was 2.001 at 0.05 level of significance and degree of freedom 59. It is evidenced from table no 4.3 that calculated 't' value 28.59 is greater than the tabulated 't' value at a level of significance 0.05. Therefore, it proves statistically that the information booklet was effective in increasing knowledge regarding management of common side effects of chemotherapy treatment among patients receiving chemotherapy. Hence the research hypothesis

H1: "There will be significant difference between pre-test and post-test knowledge score on management of common side effects of chemotherapy drugs among cancer patients admitted at Dr.VVPPRH, Loni Bk." was accepted.

A similar study was conducted to assess effectiveness of structured teaching program on knowledge regarding side effects of chemotherapy and radiation therapy and their management among patients with cancer in selected hospital at Jaipur. The study findings revealed that, the mean posttest knowledge score (25) was higher than the mean pretest knowledge score (14.5). The calculated 't' value (28.14) was found to be statistically significant at 0.05 level of significance which showed that the mean difference obtained in the knowledge score was the true difference and show that the knowledge score was significantly increased after the administration of structured teaching programme regarding side effects of chemotherapy and radiation therapy and their management.

Objective IV: Association of post-test knowledge score of study participants with their selected demographic variables.

Demographic variables	Chi- value	Tabulated value	'p' value	Inference
Age	10.50	12.59	0.105	NS
Gender	7.88	5.99	0.019	Significant
Marital status	7.57	9.48	0.108	NS
Occupation	8.42	18.30	0.587	NS
Type of family	0.48	5.99	0.786	NS
Monthly income	6.00	12.59	0.422	NS
Religion	3.27	12.59	0.773	NS
Residence	5.50	5.99	0.063	NS
Duration of illness	10.02	12.59	0.123	NS
History of chemotherapy side effects	1.09	5.99	0.578	NS

The present study shows that there was no significant association of posttest knowledge scores of study participants with their selected demographic variables except age. Calculated chi-value for age 10.50 is less than table value 12.59 shows non-significant association. Calculated chi-value for marital status 7.57 is less than table value 9.48 shows non-significant association. Calculated chi-value for occupation 8.42 is less than table value 18.30 shows non-significant association. Calculated chi-value for type of family 0.48 is less than table value 5.99 shows non-significant association. Calculated chi-value for monthly income 6.00 is less than table value 12.59 shows non-significant association. Calculated chi-value for religion 3.27 is less than table value 12.59 shows non-significant association. Calculated chi-value for residence 5.50 is less than table value 5.99 shows non-significant association. Calculated chi-value for duration of illness 10.02 is less than table value 12.59 shows non-significant association. Calculated chi-value for history of chemotherapy side effects 1.09 is less than table value 5.99 shows non-significant association. Calculated chi-value for gender 7.88 is greater than table value 5.99 shows significant association.

H2: "There will be significant association between post-test knowledge score of cancer patients with their

selected demographic variable” was rejected.

A similar study was conducted to assess effectiveness of structured teaching program on knowledge regarding side effects of chemotherapy and radiation therapy and their management among patients with cancer in selected hospital at Jaipur. The study findings revealed that, the calculated value for association of posttest knowledge with demographic variables was age (0.214), gender (0.473), religion (0.156), education (2.513), occupation (3.417) and no. of days (2.532) which were less than that of tabulated value shows no significant association with posttest knowledge scores.

SUMMARY:

This study aimed to evaluate the effectiveness of an information booklet in improving the knowledge of patients receiving chemotherapy about managing common side effects. The researcher used a quasi-experimental design with a pre-test and post-test approach, selecting 60 chemotherapy patients through a systematic random sampling technique. The study found that the information booklet significantly improved patients' knowledge, as evidenced by a notable increase in post-test scores compared to pre-test results. However, the study had limitations, including a small sample size, the absence of a control group, potential self-reporting bias, and no long-term follow-up. Future research could expand the sample size, include a control group, and examine the booklet's long-term impact on patient knowledge.

CONCLUSION:

The patients receiving chemotherapy treatment suffers from various side effects of chemotherapy. Many of the side effects are common and repeating in nature. Several common side effects of chemotherapy treatment can be managed in hospital as well as home setting by patients themselves, but it might need a training or patient teaching at first which can be done through an educational intervention. The information booklet was found effective in increasing and enhancing patients' knowledge regarding management of common side effects of chemotherapy treatment. It can be used in chemotherapy unit for patients teaching by nurses and nursing students.

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