

RESEARCH ARTICLE

STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AMONG CANCER PATIENTS.

Mrs. V. PrathibaSivakumar, Dr. C. Susila, Dr. Jain Vaintha and Dr. Ciby Jose. Professor, Venkateswara Nursing College, Thalambur, Chennai.

Manuscript Info	Abstract
Manuscript History	
Received: 09 December 2017	
Final Accepted: 11 January 2018	
Published: February 2018	

Copy Right, IJAR, 2018,. All rights reserved.

Introduction:-

"An investment in knowledge always pays the best interest. (Benjamin Franklin)

Cancer is a leading cause of death in developed countries after cardiovascular disease and epidemiological evidence points to this trend emerging in the less developed countries. Oncology management includes multiple treatments dealing with the preventive, curative and rehabilitative aspects of malignant disease. Chemotherapy is one of the best modalities of treatment. In chemotherapy systemic drugs are used which kill cancer cell and is used as curative or palliative treatment. Cancer is the word used for a tumor that spreads & destroys the host and one of the leading causes of morbidity and mortality in developed and developing countries. As per **Indian Council for Medical Research (ICMR)** cancer burden in India is estimated to be around 17.3 million new cases and 8.8 million death accounting in 2015.

Common side effects of chemotherapy therapy include oral mucositis, nausea, vomiting, taste changes and fatigue. Chemotherapy therapy presents a challenge to patients because of their altered abilities for self-care. Nurses are in a strategic position to lead efforts at changing attitudes and behaviors about cancer by providing adequate knowledge. Knowledge acquired will enable them to adapt measures to relieve discomforts caused by the side-effects of chemotherapy and radiation therapy. The uncertainty about how to cope with the life threatening situations such as cancer, treatment, and resulting stress can be decreased by providing information about the treatment and side effects.

Statement Of The Problem:-

Effectiveness of structured teaching programme on knowledge among cancer patients receiving chemotherapy at selected Hospital, Chennai, Tamil Nadu.

Objectives Of The Study:-

1. To assess the pre-test and post-test level of knowledge among cancer patients receiving chemotherapy in experimental and control group.

Corresponding Author:- V.PrathibaSivakumar. Address:- Professor, Venkateswara Nursing College, Thalambur, Chennai.

- 2. To find out the effectiveness of structured teaching programme on knowledge among cancer patients receiving chemotherapy.
- 3. To associate the selected demographic variables with the post-test level of knowledge among cancer patients receiving chemotherapy.

Research Hypothesis:-

H₁: There is a significant difference in the level of knowledge between pre and post- test among cancer patients receiving chemotherapy in experimental and control group.

 H_2 : There is a significant difference in the level of knowledge among cancer patients receiving chemotherapy between the experimental and control group.

 H_3 : There is a significant association between the selected demographic variables with the post-test level of knowledge among cancer patients receiving chemotherapy.

Methodology:-

Research approach:- the research approach selected for the study is quantitative research approach.

Research design:- Pre – experimental design.

Variables Of The Study:-Independent variable:-Self-Care Measures

Dependent variables:-Knowledge, Self efficacy and Performance status

Extraneous variables:-

The Extraneous variable identified in the study were age, Sex, Marital status, Educational status, Occupation, Type of work, Religion, Family income per month, Body Mass Index, Duration of cancer during diagnosis, Family history of any type of cancer, Type of cancer, Duration of Surgery, Stage of cancer (TNM) during chemotherapy, Chemotherapy agents being administered Research.

Setting: The setting of the study was Dr.Kamakshi Memorial Hospital a Super speciality hospital with 150-bedded multispecialty hospital caters to millions of people in and around the Chennai metropolitan area.

Population:-

The population of the study includes Cancer patients on chemotherapy in Dr.Kamakshi Memorial Hospital.

Sample size:-

The sample size was calculated using Power Analysis. Sample size is 200 (100+100)

Sampling technique:- Purposive sampling technique.

Sampling Criteria: Inclusive criteria:-

- 1. Patients who were diagnosed as breast, oral, esophagus, stomach and rectum Cancer and receiving chemotherapy for the first time
- 2. Patients who were able to understand Tamil and/or English.

Exclusive criteria:-

- 1. Patients who were confused, terminally ill and undergoing radiotherapy and other treatment therapy for cancer other than chemotherapy.
- 2. Patients who were health professionals.

Development And Description Of The Tool:-

The investigator developed the tools in the following aspects

Part A:-

Semi structured questionnaire to assess the demographic variables and disease related variables such as Age, Sex, marital status, educational status, occupation, religion, family income per month, type of work, BMI, Duration of cancer during diagnosis, Family history of any type of cancer, Type of Cancer and Duration of Surgery, Stage of cancer, Chemotherapy agents being administered.

Part B:-

It consists of Semi structured questionnaire on knowledge with two aspects

- 1. Knowledge on chemotherapy and side effects 10 questions
- 2. Knowledge on self-care measures -15 questions

Data Collection Procedure:-

- 1. Prior permission from the hospital is obtained.
- 2. Established a safe, trusting environment on the first day of chemotherapy cycle.
- 3. Brief introduction of self (Researcher) was given.
- 4. Informed consent was obtained from each individual.
- 5. Purposes of the study were explained to each sample.
- 6. The pre-test questionnaire on demographic variables and knowledge was done on first day of chemotherapy cycle.
- 7. Followed by pre-test the researcher distributed the hand book and taught regarding chemotherapy, selected side effects and its self-care measures through power point presentation in a group (4 5 members) for 5 minutes.
- 8. On 7th day of chemotherapy cycle post-test questionnaire on knowledge was done.

Results:-

Section A:-

Description of the demographic variables of the Samples.

Demographic Variables		nental Group	Control Group		
	No.	%	No.	%	
Age in years					
35 - 40	11	11	5	5	
41 - 45	31	31	34	34	
46 - 50	22	22	25	25	
51 - 55	36	36	36	36	
Sex					
Male	57	57	56	56	
Female	43	43	44	44	
Marital status					
Married	86	86	84	84	
Unmarried	8	8	8	8	
Divorced	4	4	5	5	
Widower	2	2	3	3	
Educational status					
No formal education	15	15	22	22	
Primary school	21	21	22	22	
High school	37	37	20	20	
Graduate	22	22	30	30	
PG and above	5	5	6	6	
Occupation					
Employed	27	27	22	22	
Unemployed	26	26	23	23	
Self employed	47	47	55	55	
Type of work					

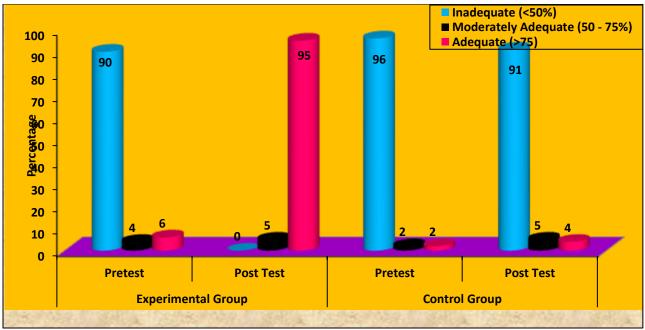
Table 1:- Frequency and percentage distribution of demographic variables in the experimental and control group.

totally 25 questions

Sedentary worker	57	57	64	64
Moderate worker	20	20	17	17
Heavy worker	23	23	19	19
Religion	25	25	17	17
Hindu	55	55	58	58
Christian	24	24	18	18
Muslim	24	24	22	22
Others	0	0	22	22
Family income per month	0	0	2	2
30,000 and above	54	54	54	54
20,000 - 29,999	23	23	15	15
10,000 - 19,999	19	19	17	17
Less than 10,000	4	4	14	17
Body Mass Index	4	4	14	14
Less than (15.0 - 18.4)	77	77	90	90
Normal weight (16.5 - 24.9)	21	21	90	90
Overweight (25.0 - 29.9)	21	21	9	9
Obesity (30.0 - 39.9)	0	0	0	0
	0	0	0	0
Duration of cancer during diagnosis	0	0	0	0
1 - 6 months 6 - 12 months	0	0	0	0
	17	17	19	19
> 12 months	83	83	81	81
Family history of any type of cancer in first - degree relatives				
Yes	71	71	66	66
No	29	29	34	34
Type of cancer	2)	2)	54	54
Breast	47	47	23	23
Oral	14	14	16	16
Oesophagus	07	07	7	7
Stomach	13	13	35	35
Rectal	06	06	9	9
Cervical	13	13	10	10
Duration of surgery	1.5	15	10	10
0 - 11 months	0	0	0	0
1 yrs - 3 yrs	45	45	53	53
Above 3 yrs	55	55	47	47
Stage of cancer (TNM) during	55	55		77
chemotherapy				
Stage I	0	0	0	0
Stage II	55	55	40	40
Stage III	45	45	60	60
Chemotherapy agents being administered	15	15	00	00
Cyclophophamide, Methotexate and	24	24	21	21
Fluorouracil	27	27	<i>L</i> 1	21
Cyclophophamide and adriamycin	48	48	55	55
Cyclophophamide, Methotexate, Fluorouracil	28	28	24	24
and tamoxifen or adriamycin	20	20	24	24
Other combinations	0	0	0	0
	0	U	0	0

Section B:- Assessment of pre-test and post-test level of Knowledge among cancer patients.

Assessment of pre-test and post-test level of knowledge among cancer patient undergoing chemotherapy in the experimental and control group.



Section C:- Comparison of pre-test and post-test level of knowledge among cancer patients.

Table 2:- Comparison of pre-test and post-t	est level of knowledge among cancer patients undergoing chemotherapy
in the experimental and control group.	(N = 200)

Knowledge	Pre-test		Post Test		Paired 't' Value
	Mean	S.D	Mean	S.D	
Experimental	7.21	4.95	21.68	2.39	t = 25.673***
(n = 100)					p = 0.000 , S
Control	5.33	4.32	5.84	4.95	t = -0.815
(n = 100)					p = 0.417, N.S

Section D:- Association between post level of knowledge among cancer patients with their selected demographic variables.

It was found there is no association with level of knowledge and demographic variables of cancer patients undergoing chemotherapy.

Conclusion:-

The study was concluded that Structured Teaching Programme and hand book was very effective to improve the knowledge regarding side effects and self- care measures of chemotherapy among cancer patients.

References:-

- 1. Adenipekun.A, Kupoluyi.TE, Omoyeni.N, Soyannwo.O. (2012).Knowledge and Experience of Cancer Patients Receiving Chemotherapy in a Teaching Hospital in Nigeria. *The Internet Journal of Pain, Symptom Control and Palliative Care.* Volume 9 Number 1.
- 2. Aranda. S. Jefford.M, Yates.P, Gough.K, Seymour.J, Francis.P, et al. (2012).Impact of a novel nurse-led prechemotherapy education intervention (ChemoEd) on patient distress, symptom burden, and treatment-related information and support needs: results from a randomised, controlled trial. *Annals of Oncology*. volume:23. Page no:222-231.
- Choenyi.N, Kumari.M, Choedon.S, Meera Kumari, Sachitra Kumari, Indu Kumari, et.al., (2016). Knowledge Regarding Ill Effects of Chemotherapy and Its Home Management among Patients Receiving Chemotherapy. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*. Volume 5, Issue 3. PP 25-29. Retrieved from http://www.iosrjournals.org/iosr-jnhs/papers/vol5-issue3/Version-1/E0503012529.pdf

Table 3:- Assessment of post test level of knowledge regarding side effects of chemotherapy and self care measures among cancer patients undergoing chemotherapy in Experimental and Control Group. N=100

Knowledge Aspects	Inadequate (<50%)		Moderately Adequate (50 – 75%)		Adequate (>75%)	
	No.	%	No.	%	No.	%
Experimental group	0	0	10	20.0	40	80.0
Control group	45	90.0	5	10.0	0	0

Table – 3 Post test assessment level of knowledge regarding side effects of chemotherapy and self care measures among cancer patients undergoing chemotherapy reveals 80% had Adequate knowledge 20% had Moderately adequate knowledge in Experimental Group. 90% had inadequate knowledge, 10.0 % had moderately knowledge in Control Group.

Table 4:- Comparison of post-test level of knowledgeamong cancer patients undergoing chemotherapy between the
experimental and control group.(N = 200)

Post Test Knowledge	Mean	S.D	Unpaired 't' Value
Experimental $Group(n = 100)$	21.68	2.39	= 28.759***
Control Group ($n = 100$)	5.84	4.95	p = 0.000, S

***p<0.001, S – Significant, N.S – Not Significant

The difference between post knowledge score t – value was 28.759, statistically significant at p < 0.001.

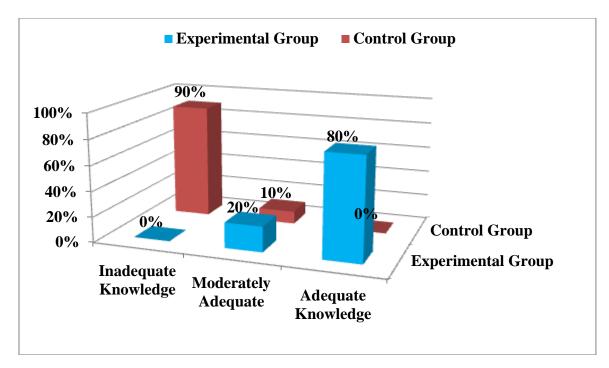
THIS TABLE TO BE ADDED INSEAD OF THE TABLE – 4 (REDCOLOR)

Table 4:- Mean and S.D of improvement score of self instructional module on knowledge regarding side effects of chemotherapeutic drugs and its self care measures among patients receiving chemotherapy N=100

S.No	Variable	Experimental Group (n=50)		t	p value
		Mean SD			
1.	Improved Score	0.23	0.430	2.392	0.02*

The table reveals that the mean and standard deviation of improved score for effectiveness of POWER POINT PRESENTATION AND DISTRIBUTION OF HAND BOOK on knowledge regarding side effects of chemotherapeutic drugs and its self care measures among patients receiving chemotherapy. The mean value was 0.23, the standard deviation value was 0.430 and t value 2.392 which shows that there is significant difference between the pre and post test. This implies that self instructional module helped to improve the knowledge regarding side effects of chemotherapeutic drugs and its self care measures among patients receiving chemotherapy.

- > Blue table to be added insead of the table -4 (redcolor)
- > This picture is not necessary.
- Other corrections were made.



Conclusion:-

In conclusion, although being diagnosed with cancer patient need to undergo chemotherapy as treatment choice. The results of this study showed that the group experienced adequate knowledge on having POWER POINT PRESENTATION AND DISTRIBUTION OF HAND BOOK WHICH CONSISTS OF SELECTED SIDE EFFECTS AND ITS SELF CARE MEASURES. We recommend that health providers could consider patients undergo chemotherapy to improve the knowledge.

Bibliography:-

Books:-

- 1. *1.* Lewis S, Heitkemper.M, Dirksen S.(2007)"Medical Surgical Nursing: Assessment and Management of Clinical Problems".7th ed. Missouri:Elsevier, page no:1442.
- Black JM, Hawks JH.(2005)"Medical Surgical Nursing: Clinical Management for positive outcomes". 7th ed. Missouri: Elsevier;page no. 2051.
- 3. 3. Polit Denise .F and HunglerBernadette.P.(2004) "Nursing Research; Principles and methods". 5th edition. Lippincott Williams & Wilkins publisher.
- 4. Walton, T. (2014). "Clinical thinking and cancer. Massage Therapy", 39(3), 66-82

Journals:-

- 1. Amany M.Shebl et.al, "Impact of oral care protocol on the incidence and severity of stomatitis induced by radiotherapy"; IOSR Journal of Nursing and Health Science., Volume 11, Issue 2, May-Jun. 2014; PP:35-44.
- 2. Dhananjaya Saranath and Aparna Khanna, "Current Status of Cancer Burden: Global and Indian Scenario", Biomedical Research Journal, Volume 1, Issue 1, 2014, PP: 1-5
- 3. Janani Selvaraj, et.al., "Evaluation of age-standardized cancer burden in western Tamil Nadu, India"; Indian Journal of Community Health, Volume 26, Issue 3, 2014, PP: 222-229.
- 4. Rebecca Siegel et.al., "Cancer Treatment and Survivorship Statistics, 2012"; A Cancer Journal for Clinicians, 2012 (62), PP: 220-241.