To Assess the Effectiveness of an Informational Module on Knowledge of Parents Regarding Care of Children Receiving Chemotherapy in Selected Hospitals

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***Abstract*—Background-This study assesses parents' knowledge of chemotherapy care, highlighting the need for an informational module to improve understanding and safety in hospitals and home-based care for children undergoing chemotherapy. Objective-To assess the knowledge of parents regarding care of children receiving chemotherapy in selected hospitals. Methodology- Research design use for study experimental, one group pre-test, post-test research design. Sampling technique: -purposive sampling. 70 parents of children were selected from hospitals. The tool consists of a self-structured knowledge questionnaires based on the care of children receiving chemotherapy. After the pre-test informational module on knowledge of parents regarding care of children receiving chemotherapy was administered post test was conducted on 7th day. Descriptive and inferential statistics were used for the analysis of data. Expected result- The knowledge for pre-test, post-test Analysis resulted that pre-test had very poor level of knowledge score 18.6% of Parents and 78.6% had poor and 2.9% of Parents had good level of knowledge score. knowledge score in posttest shows that 8.57% of parents in posttest had good/average level of knowledge score, and 81.43% of parents had very good level of knowledge score and 10% parents had excellent level of knowledge score. Conclusion: It was found that parents of children had average knowledge related to care of children receiving chemotherapy. Efforts are made to increase knowledge of parents regarding care of children receiving chemotherapy through informational module. Hence, an informational module was effective in enhancing knowledge of parents regarding care of children receiving chemotherapy.**

***Index Terms*—Informational module, Chemotherapy, parents of children**

I.INTRODUCTION

Chemotherapy, is the treatment of disease by chemical compounds chemotherapeutic drug were originally those employed against infectious microbes, but the term has been broadened to include anticancer and other drugs.[1]
(By.Paul Ehrlich)

The origin of the word cancer is credited to the Greek physician Hippocrates (four hounred sixty- three underservant) who is considered the "Father of Medicine." The Hippocrates used the terms carcinoses and carcinoma to describe the non-ulcer forming and ulcer-forming tumors In the Greek, the words refer to a crab, most likely applied to the disease because of the finger-like spreading projections from a cancer called to mind the shape of a crab. One of the most Unique exponents of these great scientists is Paul Ehrlich. His work resulted not only the foundation and birth of modern hematology and immunology, but also lead to the development of the chemotherapy and specific targeted treatment concept.[2]
In fact, the search for such magic bullets had commenced in 1891, when Ehrlich began to work in the field of chemotherapy by studying of the antimalarial effect of methylene blue. Overview. Chemotherapy is a drug of treatment that uses powerful chemicals to kill fast-growing cells in your body.[3] The treatment of disease by means of chemicals that have a specific toxic effect upon the disease-producing microorganisms or that selectively destroy cancerous tissue.[4]

II.OBJECTIVES

-To assess the effectiveness of an informational module on knowledge of parents regarding care of children with chemotherapy in selected hospitals.
-To find out the association of study findings with selected demographic variables.

ASSUMPTION

Parents of children may have some knowledge regarding care of children receiving chemotherapy

III MATERIAL AND METHOD

STUDY SETTING-STUDY DESIGN-

Selected Hospitals and Research design use for study experimental, one group pre-test, post-test.

PARTICIPANTS-

The Participants was the Parents of 70Children who are Receiving Chemotherapy.

Sample size: 70 parents of children
- Standard deviation: $\sigma = \sqrt{(p(1-p))} = 0.1706$
- $\alpha = 1 - 0.95 = 0.05$
- $\alpha p = 1 - 0.05/2 = 0.975$
- $Zp = Z0.975 = 1.96$ (or $Z\alpha/2 = Z0.025 = -1.96$)

Sample Size Calculation:

- n = (Z^2 * p(1-p)) / MOE^2
- n = (1.96^2 * 0.03(1-0.03)) / 0.042
- n = 69.8665

Rounded Sample Size: 70

The image provides a clear and concise explanation of the sample size calculation, including the relevant formulas and values used in the calculation.

Inclusion criteria-

Who are given informed written consent and willing to participate in this study.Available at the time of data collection.

Exclusion criteria-parents of children who are reciving chemotherapy.

Data Collection Tool-

SECTION-A Demographic data sheet

SECTION-B Self-structuerd questionarrie

Description of Tool-Tool consist of two section.i.e section A,and Section B

SECTION A-This section consists of items obtaining information about demographic variables like age, education, occupation, source of information, monthly income, family type, history of chemotherapy.

SECTION B--This section consists of 30 self-structured objective type question to assess the knowledge of parents regarding care of children receiving chemotherapy.

IV.PILOT STUDY

A pilot study was conducted on knowledge score of Parents regarding care of children receiving chemotherapy from selected hospitals. The tabulated value for n=10-1 i.e. 9 degrees of freedom was 2.26. The calculated „t" value i.e. 26.66 are much higher than the tabulated value at 5% level of significance for overall knowledge score of Parents which is statistically acceptable level of significance. Hence it is statistically interpreted that Information Module on knowledge regarding care of children receiving chemotherapy among Parents from selected hospitals of the city was effective. Thus, the H_1 is accepted.

V.STATISTICAL ANALYSIS

It was planned to analyses the data based on the objective of the study.

Demographic data was analyzed using frequency and percentage.

Analysis of knowledge score was done using frequency and percentage.

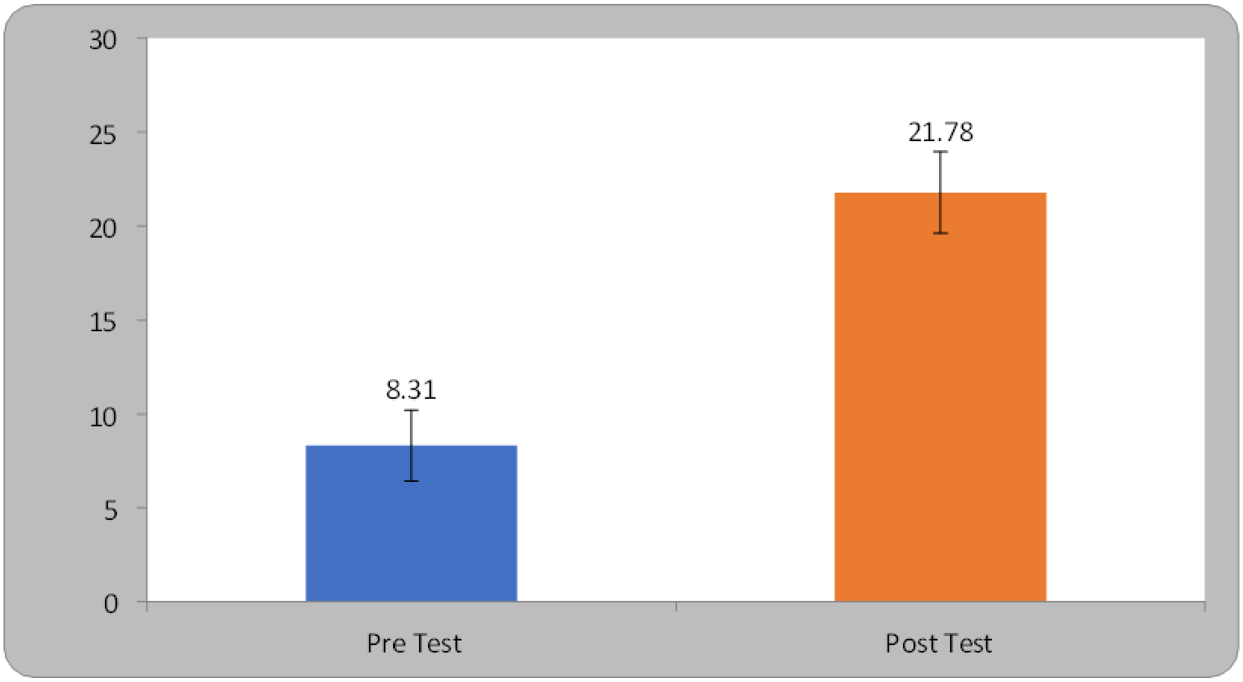
Comparison of knowledge score was done using paired t- test.

Association of knowledge score with selected demographic variable was done using ANOVA.

VI.CONSENT AND ETHICAL APPROVAL

The study was conducted after approval of institutional ethics committee of government medical college,Nagpur.(IEC/2087/ date23/2/24).Written consent was taken from the participant for participation in the study. throughout the study, can identicality was maintained. Freedom to withdraw from the study at any point of time will be assured.

result-The findings suggest that there is different level of knowledge among parents of children admitted in selected hospitals.



Graph 1: Significance of difference between Knowledge Score in pre and post test of Parents

TABLE 1Significance of difference between Knowledge Score in pre and post- test of Parents
n=70

Overall	Mean	SD	Mean Difference	t-value	p-value
Pre Test	8.31	1.90	13.47±2.86	39.37	0.0001 S,p<0.05
Post Test	21.78	2.17			

This table shows the comparison of pretest and post test Knowledge score of Parents regarding care of children receiving chemotherapy from selected hospitals of the city. Mean, standard deviation and mean difference values are compared and student's paired „t‟ test is applied at 5% level of significance. The tabulated value for n=70-1 i.e. 69 degrees of freedom was 1.98. The calculated „t‟ value i.e. 39.37 are much higher than the tabulated value at 5% level of significance for overall knowledge score of Parents which is statistically acceptable level of significance. Hence it is statistically interpreted that Information Module on knowledge regarding care of children receiving chemotherapy among Parents from selected hospitals of the city was effective. Thus the H1 is accepted.

VII. CONCLUSION

After the detailed analysis, the study leads to following conclusion.

The study reveals Knowledge has association of knowledge score regarding Care of children receiving chemotherapy among Parents from selected hospitals of the city with their history of chemotherapy. The tabulated „χ^2‟ values were 5.99(df=2) which is higher than the calculated „χ^2‟ i.e. 2.52 at 5% level of significance. Also, the calculated p‟=0.28 which was higher than the acceptable level of significance i.e.p=0.05.Hence it is interpreted that History of Chemotherapy of Parents is statistically not associated with their pre test knowledge score.

VIII. RECOMANDATION

- The study can be conducted on various methods of care of children reciving chemotherapy.
- The study can be conducted on parents to assess their practice while caring children reciving chemotherapy.
- Simulation-based research can be conducted on parents regarding care of children reciving chemotherapy.

Informational module can be conducted on parents regarding care of children reciving chemotherapy.

Conflict of interest-
There is no conflict of interest in this study. no any risk factors to the
subject of the study

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