

Assess the Effectiveness of Information Booklet on the Knowledge and Practices Regarding Chemotherapy Administration Among Staff Nurses

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Abstract

The present study aim to assess the effectiveness of information booklet on the knowledge and practices regarding chemotherapy administration among staff nurses working in chemotherapy department

Specific Objectives

- (1) To assess the knowledge and practices regarding chemotherapy administration before and after administration of information booklet among staff nurses working in chemotherapy department of selected hospitals of Pune.
- (2) To compare the pre test and post test score of knowledge and practices regarding chemotherapy administration among staff nurses working in chemotherapy department of selected hospitals of Pune.
- (3) To associate the Demographic variable with of knowledge and practices regarding chemotherapy administration among staff nurses working in chemotherapy department of selected hospitals of Pune.

The researcher adopted quasi experimental design (pre test post test design) research. Sample comprised of 30 staff nurses. Setting for the study was selected hospitals of Pune. Sampling technique used for the study was convened sampling technique.

After obtaining permission from the concerned authority and informed consent from the samples, the investigator administered the tool. The tool was divided into three sections:

Section A: Demographic variables

Section B: Self-structured questionnaire

Section C: Check list

Data collected were analyzed and interpreted in terms of objectives of the study by using descriptive and inferential statistics.

Major findings

On the basis of frequency and percentage wise distribution of knowledge and practices about chemotherapy administration in staff nurses, it was found that majority 63.3% of them average score in knowledge and 100% of them were average score in practice. In the posttest, all of 100% of them were good knowledge score and 100% of them were good practice score. Thus null hypothesis was accepted and H_1 was rejected. Based on these findings recommendations were given for future research.

Keywords Knowledge, Practices, Chemotherapy and Information Booklet



Introduction

Worldwide, more than 11 million new cases of cancer are diagnosed each year, and that number is expected to rise to 16 million by 2020. In the United States, the American Cancer Society (ACS) predicts that almost 1.4 million new cancer cases will be diagnosed in 2006. In India, each year one million cases of cancer are diagnosed and in Maharashtra 51,747 (Union Ministry of Health, 2013). The National Cancer Institute predicts that this figure will double by the year 2050 because the US population is growing and aging. This increased patient load, along with the use of high-dose chemotherapy, combinations of several drugs, and the use of antineoplastic drugs for diseases other than cancer, will increase the potential for exposure of the health care workers to these drugs.

Information booklet is widely used method to help to improve knowledge among health professionals specially nurse. The information provided through this information booklet will help nurses working in the hospital improve their knowledge and practices regarding chemotherapy administration, which will benefit both the patients and the nurses in more than just one way. Thus the investigator felt to conduct the study.

Need for study

Cancer is a leading cause of death worldwide, accounting for 7.6 million deaths (around 13% of all death in developed countries, more than half of all cancers occurs in the developing countries). In developed countries, cancer is the 2nd most common cause of death and epidemiological evidence points to the emergence of a similar trend in developing countries.

Cancer prevalence in India is estimated to be around 2.5 million, with over 8,00,000 new cases and 5,50,000 deaths occurring each year to this disease in the country. The goal of the cancer treatment is cure, control or palliation. Factors that determine the treatment modality are the cell type of the cancer, the location and size of the tumor, and the extent of the disease, the physiological and psychological status and the expressed needs of the patient also have an important part in determining the treatment plan. This factor influences the modalities chosen for treatment and the length of time the treatment is administered.

Operational definitions

Knowledge: It refers to the understanding of staff nurses regarding as measured by a structured questionnaire.

Practices: It refers to the understanding and actions of staff nurse in relation to



management of cancer patients measured by check list.

Chemotherapy: The treatment of cancer using specific chemical agents or drugs those are selectively destructive to malignant cells and tissues.

Information Booklet: In this study it refers to tool which is used to provide knowledge about the chemotherapy administration while staff nurses must follow while giving drugs.

Aim

The study focused on the effectiveness of information booklet regarding chemotherapy administration among staff nurses working in chemotherapy department.

Research methodology

The researcher adopted quasi experimental design (pre test post test design) research. Sample comprised of 30 staff nurses. Setting for the study was selected hospitals of Pune. Sampling technique used for the study was convened sampling technique

Inclusion criteria:

- (1) Staff nurses available during data collection period.
- (2) Staff nurses who are willing to participate in the study.
- (3) Staff nurse who can understand English.

Exclusion criteria:

Staff nurses not working in chemotherapy department of selected hospitals of Pune.

Research tool and technique

A self administered structured knowledge questionnaire and check list on chemotherapy administration. These areas has selected after extensive literature review and consultation with experts of concerned discipline.

Description of tool and technique:

A self structured questionnaire and observation checklist was developed to assess the effectiveness of information booklet regarding chemotherapy administration.

Description of the tool, the tool consist of three section

Section A: Demographic variables

Section B: Self-structured questionnaire

Section C: Check list

Information booklet: The information booklet was prepared and distributed to samples, immediately after pretest.

Method of data collection:

After obtaining permission from the concerned authority and informed consent from the samples, the investigator administered the tool.

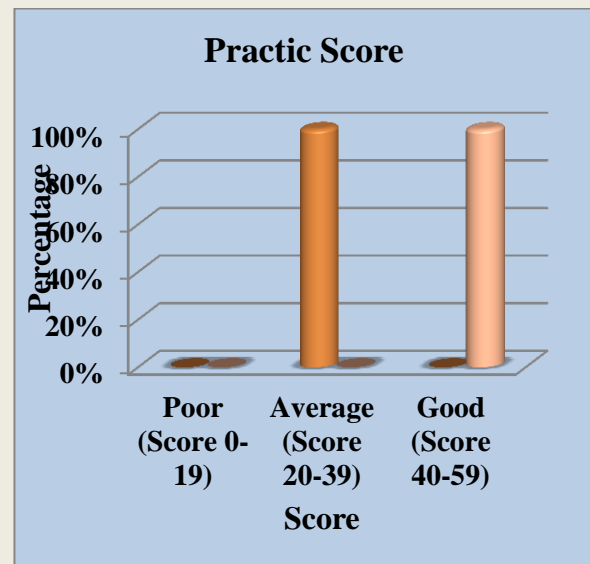
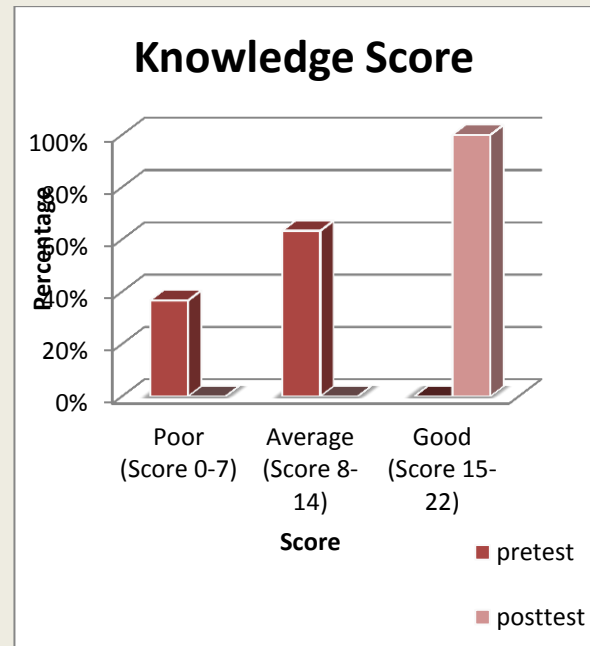
Major findings:

Section I- Sample characteristics

Table 1.1: Distribution of samples according to their personal characteristics in terms of frequency and percentages

Demographic variable	Freq	%
Age		
20-30	20	66.7%
30-40	10	33.3%
Gender		
Female	30	100.0%
Education qualification		
B.Sc.	8	26.7%
GNM	15	50.0%
P.B.Sc.	7	23.3%
Clinical experience		
Up to 5 years	22	73.3%
6-10 years	7	23.3%
11-15 years	1	3.3%
Experience in chemotherapy department		
Up to 3 years	27	90.0%
4-6 years	3	10.0%
Marital status		
Married	20	66.7%
Unmarried	10	33.3%
In- service education		
None	7	23.3%
Yes	23	76.7%
Certification courses		
None	28	93.3%
Yes	2	6.7%

Section II: Pretest and posttest knowledge and practices of staff nurses working in chemotherapy department regarding chemotherapy administration



Section III- Association between practices of staff nurses with their demographic variables

Demographic variable	Freq	p-value
Age	0.47	0.501
Education qualification	0.4	0.673
Clinical experience	0.5	0.611
Experience in chemotherapy department	3.28	0.081
Marital status	0.22	0.646
In- service education	1.54	0.225

Certification courses	0.52	0.477
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Since all the p-values are large (greater than 0.05), there is no evidence against null hypothesis. The association between practices of staff nurses regarding chemotherapy administration and their demography is not significant.

Conclusion

The following conclusions were drawn from the findings of the present study:

The study has been conducted to assess the effectiveness of information booklet on the knowledge and practices regarding chemotherapy administration among staff nurses working in chemotherapy department of selected hospitals of Pune.

In the present study it is found that information booklet was to improve knowledge and practices regarding chemotherapy administration among staff nurses working in chemotherapy department. The demographic variable selected were age, gender, education, clinical experience, experience in chemotherapy department, marital status, in-service education and certification courses. Thus the objectives formulated for the study have been achieved.



References

1. Womer RB, Tracy E, Soo-Hoo W, Bickert B, DiTaranto S, Barnsteiner JH. Multidisciplinary systems approach to chemotherapy safety: rebuilding processes and holding the gains. *J Clin Oncol* 2002; 20: 4705–12.
2. World Cancer factsheet August 2012 [cited on 2012 Dec 8] Available form:<http://www.iarc.fr/en/mediacentre/iarcnews/pdf/Global%20factsheet-2012.pdf>
3. Stewart BS ,Kleihues P,eds.Cancer of female reproductive tract; In world Cancer Report.World Helth Organiza .Interanational agency for research in cancer ,Lyon ,France : IARC 2003
4. Potter, Perry. *Fundamentals of Nursing*. 7th edition. New Delhi: Elsevier publication;2008.p. 180-201
5. F.A. Holmes et al. Blinded, Randomized, Multicenter Study to Evaluate Single Administration Pegfilgrastim Once per Cycle Versus Daily Filgrastim as an Adjunct to Chemotherapy in Patients With High-Risk Stage II or Stage III/IV Breast Cancer. *American Society of Clinical Oncology* 2006
6. Kyprianoua M, Margrita K, Kapsoub. Knowledge, attitude and belief of Cypriot nurses on the handling of antineoplastic drugs. *Europ jour of nsg* 2010;14(4):278-82.