

Knowledge on Self care management among Myelosuppressed patients

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ARTICLE DETAILS

Article History

Published Online: 15 July 2019

Keywords

Myelosuppression, Self care management.

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ABSTRACT

Myelosuppression is an expected side effect of novel therapies for cancer. In consideration of the prevalence of cancer related symptoms and their impact on patients the present study was conducted to assess the knowledge among myelosuppressed patients. A descriptive design was adopted among 102 patients with purposive sampling who fulfilled inclusion criteria were included in this study. The results showed that knowledge of the subjects was found to be very low as evidenced by 4.26. Nursing assessment, intervention, and education of patients and caregivers play a vital role in promoting knowledge and maintenance of prescribed therapy, thereby enhancing patient quality of life.

1. Introduction

Cancer is a leading cause of premature mortality and it is estimated to cause more than 8 million deaths each year.¹ The number of persons with cancer is expected to double between 2000 and 2050, from 1.3 million to 2.6 million, with the elderly accounting for most of this increase.² The estimated number of new cancers in India per year is about 7 lakhs and over 3.5 lakhs people die of cancer each year.³

Myelosuppression refers to a decrease in the production of blood cells. As a result of myelosuppression, patients may experience anemia, neutropenia and thrombocytopenia. All chemotherapy patients and most radiation patients experience some form of immunosuppression for a short period of time. Depending on their severity, these adverse effects can impact patients' medical treatment and quality of life by interrupting or reducing therapy and causing life-threatening complications.

While the magnitude of the cancer epidemic has been rising in recent years, so has the knowledge and understanding of its control and prevention. The proactive management of myelosuppression is therefore essential in cancer patients. The physical effects of the disease on a patient do not occur in a vacuum. Rather, the emotional, spiritual and social context of the disease has profound effects on patients, as well as their families and caregivers. Identifying these feelings is the first step in dealing with them, but many nurses do not have training in the psychological and social aspects of cancer care and up to 40% of cancer patients suffering from psychological problems are not properly diagnosed.

Maintaining individual health and quality of life among myelosuppressed patients is dependent upon many variables. Adequate nutrition promotes and maintains optimal immune function. Dietary restrictions reduce the complications and thereby improve the quality of life and ultimately reducing disease-related mortality. Achieving and maintaining optimal nutrition is considered an important adjunct in the clinical care of patients with myelosuppression. As good nutrition can improve an individual's immune function, limits disease specific complications and improves quality of life and survival. Thus

this study was conducted to assess the knowledge on self care management of myelosuppressed patients.

2. Statement of problem

A descriptive study on the assessment of knowledge on self care management among myelosuppressed patients at selected hospitals, Chennai.

3. Objectives

1. To assess the knowledge on self care management among myelosuppressed patients.
2. To find out the association between knowledge on self care management and selected demographic variables among myelosuppressed patients.

4. Materials and Methods

The present study was conducted in the chemotherapy ward and daycare unit of selected tertiary care hospital, Chennai. A descriptive design with 102 myelosuppressed patients was selected using purposive sampling technique. The data was collected using structured questionnaire. Demographic variable profile, clinical variable profile was used. Structured knowledge questionnaire was prepared by the investigator to assess the knowledge. There were 25 items with responses given on a 4 point scale. The questions were classified based on 4 dimensions that include disease condition, signs and symptoms, management and prevention of complications.

Data analysis was done using statistical software package SPSS for windows version 22. Appropriate descriptive and inferential statistics were used to analyze the data.

5. Results

In the present study a total of 102 subjects were enrolled. Majority of them were between the age group of 31-60 years 72% belongs to nuclear family 60% with graduate level of education 69% engaged in sedentary work. Most of the patients 54% were diagnosed to have cancer of more than 3 months of duration of illness with Stage I, 54% with hematological malignancies 63%, platelet level <75,000- 50,000/cu.mm 46%

hemoglobin 10-12 gm% 46%, neutrophil lower less than 1,500/cu.mm 60% and most of the patients had co-morbid illness 52%.

The overall mean knowledge scores was (4.26±1.32). The knowledge related to disease condition was (0.60±0.66) signs & symptoms(0.89±0.60), management of symptoms was less (1.51±0.50)and prevention was very less (1.26±0.44).

6. Discussion

The study attempted to identify the knowledge among myelosuppressed patients. According to the objective of the study the existing knowledge of the subjects was found to be very low as evidenced by 4.26. The findings of the study was very similar to results of previous study conducted by Turhal et al (2008) among 415 patients was interviewed using a semi-structured interview guide. The proportion of false knowledge about cancer is unacceptably high in their cohort.⁵

Table:1Mean and Standard Deviation of Dimensions of Knowledge Scores on self care management among patients with Myelosuppression

Dimensions	n=100	
	Mean	SD
Overall knowledge scores	4.26	1.32
Disease condition	0.60	0.66
Signs & symptoms	0.89	0.60
Management	1.51	0.50
Prevention	1.26	0.44

Table:2Association between the selected Demographic Variables and Knowledge on self care management among Patients with Myelosuppression

Demographic variables	n=100		
	Up to Mean	Above mean	χ ²
Age in years	< 30	16	5.25 df=4 p=0.26
	31-50	20	
	>51	0	
Gender	Male	12	7.59 df=1 p=0.38
	Female	24	

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 [3]. Marrs, J.A. (2006). Care of patients with Neutropenia. Clinical Journal of Oncology Nursing, 10(2), 164–166.

Educational status			
Illiterate	1	4	1.94 df=2 p=0.37
Graduates	25	4	
Professional	10	11	
Marital status			
Single	8	16	0.41 df=2 p=0.81
Married	26	46	
Widowed	2	2	
Nature of work			
Sedentary work	19	31	5.55 df=2 p=0.06
Moderate work	10	29	
Heavy work	7	4	
Area of residence			
Rural	14	16	2.11 df=1 p=0.14
Urban	22	48	
Type of family			
Joint	9	21	1.04 df=2 p=0.59
Nuclear	24	36	
Residential home	3	7	

7. Conclusion

Although Myelosuppression is an expected side effect of novel therapies for different types of cancers, they are manageable with careful monitoring of patients' blood counts, prophylactic treatment, and adequate awareness as necessary. Nursing assessment, intervention, and education of patients and caregivers play a vital role in promoting patient compliance and maintenance of prescribed therapy, thereby enhancing patient quality of life. This study concluded that although decreased knowledge on self-care management on myelosuppression was identified but they are not statistically significant. Hence nurses need to provide information and support when appropriate, is an essential factor when caring for the oncology patients thus enhancing compliance to treatment and to manage side effects effectively.

Acknowledgement

None

Source of Support

Nil

Conflict of Interest

None

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