

## A study to assess the knowledge on current trends in the treatment of cancer among staff nurses working in MGMC&RI, Puducherry

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### Abstract

**Background:** "Health is not everything, but everything else is nothing without health". Since many years, medical researchers has been on their way of finding treatment for many dreadful diseases which has been increasing because of modifying life-styles. Even now many diseases are prevailing only with palliative treatment. Among these cancer is a major one. Cancer is more than 200 diseases characterized by uncontrolled and unregulated growth of cells. Cancer is a disease that possess a threat to many aspects of life. It can occur in persons of all ages and ethnicities and is a major health problem.

**Aim:** The main aim of the current study was to assess the knowledge on current trends in the treatment of cancer among staff nurses in MGMC&RI, Puducherry.

**Materials and Methods:** Quantitative research approach was used for this study. The non-experimental design was used for this study. Total 60 samples were selected using purposive random sampling technique. The data pertaining to the level of knowledge of staff nurses regarding the current trends in the treatment of cancer.

**Results:** This study shows that only, 1(.06%) of B.Sc nurses low knowledge. 6(40%) of the B.Sc nurses has moderate knowledge. 6(40%) of the B.Sc nurses has good knowledge. 2(13.3%) of B.Sc nurses has very good knowledge. With regard to age 20(66.6%) of the staff nurses belongs to the age group of 20-25 yrs. Nearly 8(26.6%) belongs to the age group of 26-30.1(3.3%) belongs to the age group of 31-35 yrs and 36-40yrs. Among the 30 staff nurses 8(26.6%) of them were male and 22 (73.33%) were females. Regarding years of experience, 15(50%) of the staff nurses have experience below 1yr. 5(16.66%) were having 2 yrs of experience. 3(10%) were having 3 yrs of experience. 7(23.33%) having more than 4 yrs. Regarding the area of experience of nurses.16(53.3%) in Medical unit and 14(46.6%) in surgical unit. Regarding experience in oncology ward, none of the nurses have the exposure. Only the sex of staff nurses had an association with the knowledge on current trends in treatment of cancer.

**Conclusion:** The study conducted shows that the knowledge on recent trends in treatment of cancer is low in B.Sc Nurses. There is a need to improve the knowledge regarding recent trends in treatment of cancer, for which a learning aid is essential. The association of demographic variables like age, sex, educational status, years of experience, area of experience & experience in oncology has relation with the knowledge regarding treatment of cancer.

**Keywords:** current trends, treatment of cancer, staff nurses, MGMC&RI, Puducherry

### 1. Introduction

"Health is not everything, but everything else is nothing without health". Since many years, medical researchers has been on their way of finding treatment for many dreadful diseases which has been increasing because of modifying life-styles. Even now many diseases are prevailing only with palliative treatment. Among these cancer is a major one.

Cancer is more than 200 diseases characterized by uncontrolled and unregulated growth of cells. Cancer is a disease that possess a threat to many aspects of life. It can occur in persons of all ages and ethnicities and is a major health problem. (Lewis e. tal 1996). Caring for clients with cancer is one of the most significant tasks perturbing the health care professionals. (Nursing Times, Vol:4, Sep 2008)

An estimated 30% Americans now living will experience cancer at some point of their lives. An estimated 1,284,900 persons were diagnosed with cancer in 2002(Brunner 2004) According to Global Cancer factsheet, an estimated 12.7 million new cancer cases occurred and 7.6 million deaths

(around 13% of all deaths) in 2008. Lung, female breast, colorectal and stomach cancers accounted for 40% of all cases diagnosed worldwide. In men, lung cancer was the most common cancer (16.5% of all new cases in men). Breast cancer was by far the most common cancer diagnosed in women (23% of all new cases in women).

Many modalities has been used in controlling cancer in earlier days like surgery, chemotherapy, radiation therapy etc. But advances in science and technology has brought about considerable progress in treatment of cancer and found new treatments like anti-cancer vaccine, gene therapy, boosting the immune system, stem cell transplantation, photo dynamic theory and biologic response modifier.

The choice of therapy depends on the location and grade of the tumors and the stage of the disease as well as the condition of the patient. A number of experimental cancer treatments are also so under development. (Nursing Times, Vol: 8, Nov2007) Pai RR, Ongole R conducted a cross sectional descriptive study on Nurses' Knowledge and Education about Oral Care

of Cancer Patients Undergoing Chemotherapy and Radiation Therapy among 158 staff nurses working in oncology related areas from 4 different hospitals of Dakshina Kannada district and Udupi district of Karnataka state, India. The results shows that Majority 81 (51.3%) of the staff nurses had poor knowledge of oral care in cancer patients whereas 87 (55.1%) reported that knowledge acquired through basic education in oral care is not sufficient. Most of the staff nurses 115 (72.8%) did not receive basic education in oral care of cancer patients. There was significant association between knowledge and variables such as designation (.005), years of work experience (.040) and years of experience in cancer wards (.000) at 0.05 levels.

### 1.1 Objectives of the Study

- To assess the level of knowledge of staff nurses regarding the current trends in the treatment of cancer.
- To associate the selected demographic variables with the level of knowledge of nurses regarding the current trends in the treatment of Cancer

## 2. Methodology

### 2.1 Research Approach

Descriptive approach was adopted for the study as it was intended to assess the knowledge of nurses. The design used was non experimental design.

### 2.2 Research Design

The design used was non-experimental design

### 2.3 Study Setting

The study was conducted in Mahatma Gandhi Medical College & Research Institute, Puducherry. It is a multispeciality hospital equipped with special wards for oncology and bed strength of 850 situated 15 km away from Puducherry

### 2.4 Study Population

The population of the study includes nurses working in different wards of MGMC&RI, who met the inclusion criteria & are available during the time of data collection.

### 2.5 Sample and Sample Size

Nurses working in different wards of MGMC&RI, who who met the inclusion criteria were selected as sample. The sample size was 30.

### 2.6 Criteria for Sample Selection

#### Inclusion Criteria:

- Nurses who were available during data collection
- Nurses who were willing to participate in the study

#### Exclusion Criteria

- Nurses who were not willing to participate and in other shifts.

### 2.7 Sampling Technique

The samples who met the inclusion criteria during the data collection were selected using Purposive sampling technique.

## 2.8 Procedure for Data collection

The data was collected from various wards for a period of one week. Before starting data collection, researcher obtained permission from nursing superintendent. The samples were selected on basis of selection criteria and oral consent was obtained. Data were collected using questionnaire focusing on different aspects in treatment of cancer. Data was detained and scoring was done. Data collected was analysed using inferential statistics

## 3. Results

### 3.1 Background Variables

- With regard to age 20(66.6%) of the nurses belongs to the age group of 20-25 years and nearly 8(26.6%) belongs to the age group of 26-30 years and 1 (3.3%) belongs to age group of 31 – 35 years and 36-40 years.
- Among 30 staff nurses, 22 (73.33%) of them were female and 8 (26.6%) were male
- Regarding years of experience 15 (50%) of nurses have experience for 1 year and 5(16.66%) were having 2 year and 3(10%) have 3 year experience and 7(23.33%) have 4 year experience.
- Regarding area of experience 16(53.3%) had experience in medical ward and 14(46.6%) had experience in surgical ward.
- Among the nurses 30(100%) does not have the experience in oncology ward
- Regarding the knowledge of nurses 2(13.06%) of B.Sc nurses have adequate knowledge, 6(40%) of B.Sc nurses have moderately adequate knowledge and 6(40%) have inadequate knowledge and 1(.06%) have poor knowledge.
- Regarding the knowledge of GNM nurses 3(20%) has poor knowledge, 10(66.6%) have inadequate knowledge and 2(13.3%) has moderate knowledge and no one has adequate knowledge regarding current trends in treatment of cancer.
- Regarding the association age, sex, educational status, area of experience and years of experience of BSc and GNM staff nurses had  $X^2$  value of 1.6071, 6.294, 6.000, 2.2768, 10.178 at value of  $p < 0.6$ ,  $p < 0.09$ ,  $p < 0.1$ ,  $p < 0.5$  and  $p < 0.3$  respectively. This shows that there was a significant association only between sex of staff nurses with the level of knowledge of staff nurses on current trends in the treatment of cancer. The remaining demographic variables had no association

**Table 1a:** Frequency and Percentage Distribution of Age of Staff Nurses. (N=30)

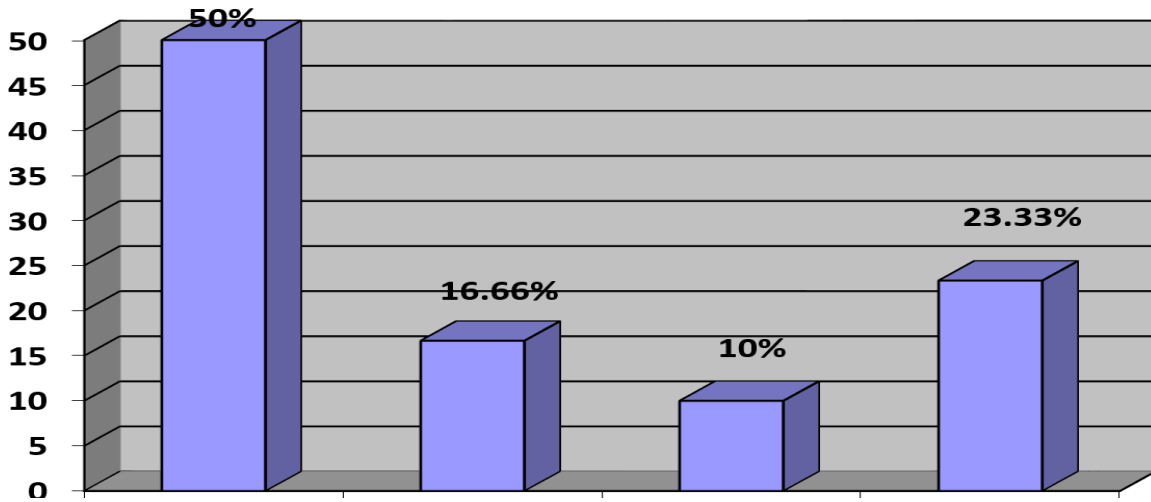
Sl No	Age	Frequency	Percentage
1	20-25 years	20	66.6%.
2	26 – 30 years	8	26.6%
3	31 – 35 years	1	3.3%
4	36 – 40 years	1	3.3%

**Table 1.b:** Frequency and Percentage Distribution of Sex of Staff Nurses.

Sl. No	Sex	Frquency	Percentage
1	Male	8	26.6%
2	Female	22	73.33%

**Table 1.c:** Frequency and Percentage Distribution of Years of Experience of Staff Nurses

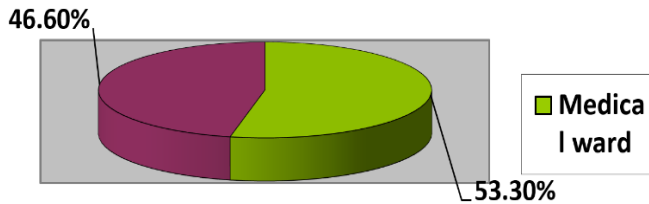
SI NO	Years Of Experience	Frequency	Percentage
1	Below 1 year	15	50%
2	2 year	5	16.66%
3	3 year	3	10%
4	4 year	7	23.33%



**Fig 1:** Percentage Distribution of Years of Experience of Staff Nurses.

**Table 1-d:** Frequency and Percentage Distribution of Area of Experience of Staff Nurses

SI No	Area of Experience	Frequency	Percentage
1	Medical ward	16	53.3%
2	Surgical ward	14	46.6%



**Fig 2:** Percentage Distribution of Area of Experience of Staff Nurses

**Table 1: E** Frequency and Percentage Distribution of Experience in Oncology Ward.

SI no	Experience In Oncology Unit	Frequency	Percentage
1	Yes	0	0%
2	No	30	100%

Level of knowledge among the staff nurses regarding the current trends in the treatment of cancer.

**Table 2:** Frequency and percentage distribution of knowledge of b.sc and gnm nurses regarding current trends in the treatment of cancer.

SL. No	Knowledge level on treatment of cancer	BS.c (N)		GNM (N)	
		Frequency	Percentage	Frequency	Percentage
1	Poor ( $\leq 5$ )	1	.06%	3	20%
2	Average (6 – 10)	6	40%	10	66.6%
3	Good (11 -15)	6	40%	2	13.3%
4	Excellent (16 -20)	2	13.33%	0	0%

**Table 3:** Association of Demographic Variables with Knowledge of B.Sc and Gnm Nurses

Variables	Adequate		Inadequate		Poor		Very Poor		X <sup>2</sup> value
	f	%	F	%	f	%	f	%	
<b>AGE</b>									X <sup>2</sup> =1.6071 df=3 p=.6577 NS
20-25yrs	2	6.66%	6	20%	10	66.6%	2	6.66%	
26-30yrs	0	0	8	26.6%	0	0	0	0	
31-35yrs	0	0	0	0	1	3.3%	0	0	
36-40yrs	0	0	0	0	0	0	1	3.33%	
<b>Sex</b>									X <sup>2</sup> =6.2946 Df=3 P=.0980 S
Male	0	0	5	16.6%	1	3.3%	2	6.66%	
Female	2	6.66%	3	10%	15	50%	2	6.66%	

Education									X <sup>2</sup> =6.000 Df=3 P=0.1115 NS
B.Sc	1	6.66%	6	40%	6	40%	2	13.33	
GNM	3	20%	10	66.6%	2	13.33%	0	0	
Area Of Experience									X <sup>2</sup> =2.2768 Df=3 P=0.5169 NS
Medical- ward	1	3.33%	2	6.66%	10	66.6%	3	20%	
Surgical-ward	1	3.33%	6	20%	6	20%	1	3.33%	
Years Of Experience For B.SC and GNM.									X <sup>2</sup> =10.1786 Df=9 P=0.3362 NS
<1YR	1	3.33%	6	20%	6	20%	2	6.66%	
<2YR	0	0	4	13.33%	1	3.33%	0	0	
<3YR	0	0	3	10%	0	0	0	0	
<4YR	1	3.33%	3	10%	1	3.33%	2	6.66	

The above table shows that age, sex, educational status, area of experience and years of experience of BSc and GNM staff nurses had X<sup>2</sup> value of 1.6071, 6.294, 6.000, 2.2768, 10.178 at value of p< 0.6, p< 0.09, p<0.1, p<0.5 and p<0.3 respectively. This shows that there was significant association only between sex of staff nurses with the level of knowledge of staff nurses on current trends in the treatment of cancer. The remaining demographic variables had no association

#### 4. Discussion

The objective was to assess the nurses knowledge on current trends in the treatment of cancer.

- 1(.06%) of B.sc nurses and 3(20%) of the GNM nurses had very poor knowledge.
- 6(40%) of the B.sc nurses and 10(66.6%) of the GNM had poor knowledge.
- 6(40%) of the B.sc nurses, and 2(13.3%) of the GNM had inadequate knowledge.
- 2(13.3%) of B.sc nurses and 0% of the GNM nurses had adequate knowledge.
- Regarding the association age, sex, educational status, area of experience and years of experience of BSc and GNM staff nurses had X<sup>2</sup> value of 1.6071, 6.294, 6.000, 2.2768, 10.178 at value of p< 0.6, p< 0.09, p<0.1, p<0.5 and p<0.3 respectively. This shows that there was a significant association only between sex of staff nurses with the level of knowledge of staff nurses on current trends in the treatment of cancer. The remaining demographic variables had no association

#### 5. Conclusion

The study conducted shows that the knowledge recent trends in treatment of cancer is comparatively higher in B.Sc Nurses than GNM. There is a need to improve the knowledge regarding recent trends in treatment of cancer, for which a learning aid was essential. Hence as a follow up a learning aid was given to the staff nurses to improve their knowledge in current trends of cancer.

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