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Research Article

Knowledge on Warning Signs of Cancer among Nursing Students

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ABSTRACT

Background and Objectives: Cancer has historically been surrounded by myths and misconceptions, with early diagnoses often being fatal due to limited medical knowledge. Hippocrates (460–370 BC) first described cancer as "carcinosis" and linked it to the humor theory, which influenced treatments for centuries. Today, cancer is recognized as a group of over 200 diseases characterized by uncontrolled cell growth, affecting people of all ages, though 76% of cases occur in individuals over 55 years old. Cancer contributes to 5.1% of the global disease burden and 12.5% of all deaths.

Objectives: The objectives are as follows,

1. To assess the level of knowledge regarding warning signs of cancer among nursing students.
2. To find out the association between knowledge scores regarding warning signs of cancer among nursing students with their selected socio-demo graphic variables.

Methods: The research approach adopted for the study was a quantitative and descriptive research design was chosen by using non probability purposive sampling technique followed by random selection of samples. 80 nursing students studying in D Y Patil College of Nursing, Kolhapur were selected for the study. Reliability of the tool was tested by using Kuder Richardson formula method which was r= 0.71 study was conducted at D Y Patil College of Nursing, Kolhapur.

Result: The study revealed that out of 80 nursing students 45 had good knowledge (56.25%), while 28 students had average knowledge (35%) and 7 students had poor knowledge (8.75%).There was no any significant association between knowledge scores regarding warning signs of cancer and selected socio-demographic variables. such as Gender [X^2 cal = 1.479, X^2 tab= 5.991] , Age in years [Xcal=2.468, X^2 tab= 5.991], Religion [X^2cal= 6.851, X^2tab= 9.488], Sources [X^2cal=13.659, X^2tab=15.507], Any of your known person suffering with cancer [X^2cal=0.326, X^2tab=5.991]. The calculated Chi-square value was lesser than tabulated value at 0.05 level of significance for all the demographic variables. Hence there is no association between knowledge score regarding warning signs of cancer among nursing students with selected socio-demographic variables. Hence, H_1 is rejected.

Interpretation and Conclusion: The study concludes that majority (56.25%) nursing students had good knowledge, while 35% nursing students had average knowledge and 8.75% nursing students had poor knowledgeregarding warning signs of cancer. There was no any significant association between knowledge score on warning signs of canceramong nursing students with their selected socio-demographic variables.

Keywords: Knowledge, Warning Sing, Cancer, Nursing Students.

INTRODUCTION

NEVER SAY 'NO', NEVER SAY 'I CANNOT', FOR YOU INFINITE. ALL THE POWER IS WITHIN YOU. YOU CAN DO ANYTHING.

SWAMI VEVEKANADA

From the beginning of recorded history, cancer has been a disease laden with myths, misconceptions and valid fears. Until well into the twentieth century, most cancer diagnosis was universally fatal.

Hippocrates (ca. 460BC –ca 370 BC) described several kinds of cancer, referring to them with the Greek word carcinosis (crab or crayfish), among others. Since it was Greek tradition to open the body, Hippocrates only described and made drawings of outwardly visible tumors on the skin, nose and breasts. Treatment was based on the humor theory of

four bodily fluids (black and yellow bile, blood, phlegm). According to the patient's humor, treatment consisted of diet, blood-letting and/or laxatives. Through the centuries it was discovered that cancer could occur anywhere in the body, but humor theory-based treatment remained popular until the 19th century with the discovery of the cells.

Cancer is a group of more than 200 diseases characterized by uncontrolled and unregulated growth of cells. It5 is the major health problem that occurs in people of all ethnicities. Although, cancer is often considered a disease of aging, with majority of causes diagnosed (76%) in those over the age of 55 years, it occurs in people of all ages. Globally cancer accounts for 5.1% of total disease burden and 12.5% of all deaths.[1]

According to department of Biostatistics and Epidemiology: Kidwai Institute of Oncology among male's cancer of the stomach is the most predominant site of cancer constituting 9% of the total cancers among males followed by cancers of the lung (7.0%), esophagus (6.6%), prostate (5.3%) and Non Hodgekin's Lymphoma (4.6%). Among females, cancer of the breast is the predominant site of cancer and has accounted for 24.6% of the total cancers in females followed by cancer of the cervix (15.9%), ovary (4.9%), esophagus (4.7%) and mouth cancers (4.6%). Altogether, the first ten leading sites of cancers among males and females accounted for 53.1% of the total cancers in males and about 70.9% of the total cancers in females.[2]

Cancer is one of the most important public health problems both in Turkey and worldwide. It ranks the second among the causes of death across the world, and it is expected to increase rapidly in prevalence and take the first place by 2030. Cancer is a preventable disease and mortality can be avoided by cancer screening. The disease is caused by environmental factors in 90% and genetic factors in 10% of the cases. Environmental factors include tobacco and alcohol use, obesity, and infections. It is important to gain healthy lifestyle behaviors in controlling environmental factors. Nurses play a key role in protecting health and preventing illnesses and in bringing healthy lifestyle behaviors to individuals, families, and society, as they are in constant communication with patients. Nurses should know the warning signs and screening programs of cancer, identify individuals at risk, and provide education to the community on early diagnostic methods. Taking part in community health education as a part of their internships in primary health care and clinical areas, nursing students should be aware of the warning signs of cancer so that they may inform the community about them. However, previous studies have reported low level of awareness about the warning signs of cancer in nursing students. According to these studies, nursing students had insufficient knowledge about the symptoms and prevention of breast cancer, had low level of awareness about cervical cancer and skin cancer symptoms, and nurses had insufficient information about cancer screening programs. The most studied topics in cancer awareness field with nursing students in our country are breast cancer awareness and self-examination, and there are no studies to determine the awareness of nursing students about the warning signs of cancer.[3]

Hence the researcher wants assess the Knowledge on Warning Signs of Cancer among Nursing Students in D.Y.Patil College of Nursing, Kolhapur.

METHODOLOGY

The research approach adopted for the study was a quantitative and descriptive research design was chosen by using non probability purposive sampling technique followed by random selection of samples. 80 nursing students studying in D Y Patil College of Nursing, Kolhapur were selected for the study. Reliability of the tool was tested by using kuder Richardson formula method which was r= 0.71 study was conducted at D Y Patil College of Nursing, Kolhapur.

RESULTS

STEP I: Description of Demographic Variables of Students

This part deals with distribution of participants according to their demographic characteristics. Data was analyzed using descriptive statistics and summarized in terms of percentage.

Section 1: Finding related to distribution of socio-demographic data of nursing students.

Table 1.Frequency and Percentage Distribution of Knowledge Scores According To Their Socio-Demographic Data

Sr. No.	Selected socio-demographic variables	Frequency F	Percentage %
1	**Gender**		
	a) Male	52	65%
	b) female	48	35%
2	**Age in years**		
	a) 16 to 20	13	16.25%
	b) 21 to 25	67	83.75%
3	**Religion**		
	a) Hindu	45	56.25%
	b) Muslim	17	21.25%
	c) Christian	18	22.5%
4	**Source of information**		
	a) Radio or television	3	3.75%
	b) Academic education	51	63.75%
	c) Books or magazines	7	8.75%
	d) Health personnel	11	13.75%
	e) Friends	8	10%
5	**Any of your known person suffering with cancer**		
	a) Yes	2	2.5%
	b) No	78	97.5%

Table no.1 indicates that,majority of samples 52 (65%) belonged to the Gender of Male and minimum 28 (35%) belonged to the Gender of Female. Majority of samples 67 (83.75%) belong Age group of and 21 to 25 and minimum 13 (16.25%) belonged to Age group of 16 to 20. Majority of samples 45 (56.25%) belonged to Hindu religion and minimum 17 (21.25%) belonged to Muslim religion Majority of samples 51 (63.75%) known information from Academic education and minimum 3 (3.75%) known information from Radio/Television. Majority of samples 78 (97.5%) belonged to know any familiar person suffering with cancer and minimum 2 (2.75%) belonged to a familiar person suffering with cancer.

Section 2: Finding knowledge regarding warning signs of cancer.

Table 2.Frequency and Percentage (%) Distribution of Knowledge Scoeregarding Warning Signs of Cancer among Nursing Students N=80

Knowledge scores	Frequency (f)	Percentage (%)
Good (21 to 30)	45	56.25%
Average (11 to 20)	28	35%
Poor (0 to 10)	7	8.75%

Table no.2 indicates that, the maximum number of nursing students 45 had good knowledge (56.25%), while 28 students had average knowledge (35%) and 7 students had poor knowledge (8.75%).

Table 3. Findings related to Mean, Median, Mode, Standard Deviation and range of knowledge scores of subjects regarding warning signs of cancer among nursing studentsn= 80

MEAN	MEDIAN	MODE	RANGE	STANDARD DEVIATION
20.43	21	22	25	5.84

Table no.3 indicates that, the data represented shows that after analysis of knowledge scores on warning signs of cancer among nursing students, mean calculated was

20.43, median was 21, mode was 22, range 25 and SD was 5.84.

Table 4. Findings Related To an Association between Knowledge Scores of Subjects with Their Selected Socio-Demographic Variables

Sr. No.	Demographic Variable	Knowledge Score			Df	Calculated Value	Table Value	P-Value	Inference
		Good	Average	Poor					
1	**Gender**								
	Male	28	18	6	2	1.479	5.991	0.477	Not Significant
	Female	17	10	1					
2	**Age**								
	16 - 20	5	7	1	2	2.468	5.991	0.291	Not Significant
	21 - 25	40	21	6					
3	**Religion**								
	Hindu	27	15	3	4	6.851	9.488	0.144	Not Significant
	Muslim	11	6	0					
	Christian	7	7	4					
4	**Sources**								
	Academic Education	33	13	5	8	13.659	15.507	0.091	Not Significant
	Books/Magazines	3	4	0					
	Friends	3	5	0					
	Health Personnel	6	3	2					
	Radio /Television	0	3	0					
2	**Any your known person suffering with cancer**								
	No	44	27	7	2	0.326	5.991	0.85	Not Significant
	Yes	1	1	0					

Table no.04 indicates that, There was no any association between test of knowledge scores and selected socio-demographic variables Gender [X^2 cal = 1.479, X^2 tab= 5.991] , Age in years [Xcal=2.468, X^2 tab= 5.991], Religion [X^2cal= 6.851, X^2tab= 9.488], Sources [X^2cal=13.659, X^2tab=15.507], Any of your known person suffering with cancer [X^2cal=0.326, X^2tab=5.991] The calculated Chi-square value was lesser than tabulated value at 0.05 level of significance for all the demographic variables. Hence there is no significant association between knowledge scores regarding warning signs of cancer among nursing students with selected socio-demographic variables. Hence, H_1 is rejected.

H_1: There is a significant association between knowledge scores regarding warning signs of cancer among nursing students with their selected socio-demo graphic variables.

CONCLUSION

The study wasconducted at D Y Patil College of Nursing, Kolhapur with the objective to assess the knowledge on warning signs of cancer among nursing students. The data was collected from 30/12/2024 to 09/01/2025. The data was collected by using non-probability purposive sampling technique.

In the study maximum number of nursing students 45(56.25%) had good knowledge, while 28(35%) students had average knowledge and 7 (8.75%) students had poor knowledgeregarding warning signs of cancer.

There was no any significant association between knowledge scores regarding warning signs of cancer and selected socio-demographic variables. such as Gender [X^2 cal = 1.479, X^2 tab= 5.991] , Age in years [Xcal=2.468, X^2 tab= 5.991], Religion [X^2cal= 6.851, X^2tab= 9.488], Sources [X^2cal=13.659, X^2tab=15.507], Any of your known person suffering with cancer [X^2cal=0.326, X^2tab=5.991]. The calculated Chi-square value was lesser than tabulated value

at 0.05 level of significance for all the demographic variables. Hence there is no association between knowledge score regarding warning signs of cancer among nursing students with selected socio-demographic variables. Hence, H_1 is rejected.

Implication

Thefindingsofthepresentstudyhaveseveralimplicationswhichare discussed in the following area.

1. NursingEducation
2. NursingPractice
3. NursingAdministration
4. NursingResearch

1. Nursing Education

Incorporate comprehensive cancer education, emphasizing warning signs and early detection, into the nursing curriculum. Employ innovative teaching methods, such as case studies, simulations, and interactive sessions, to enhance students' knowledge and retention. Invite oncology experts to deliver guest lectures and share their experiences, providing students with real-world insights. Develop and implement effective assessment tools to evaluate students' knowledge and understanding of cancer warning signs.

2. Nursing Practice:

Nursing students, as future healthcare professionals, can play a crucial role in promoting early detection and prevention of cancer. Nursing students can educate patients and their families about cancer warning signs, risk factors, and the importance of screening. Nursing students can work with interdisciplinary healthcare teams to develop and implement effective cancer screening and prevention strategies. Nursing students can participate in health promotion activities, such as community outreach programs, to raise awareness about cancer warning signs and prevention.

3. Nursing Administration

Develop and implement policies that support cancer education, early detection, and prevention in healthcare settings. Allocate resources, such as funding and personnel, to support cancer education and prevention initiatives. Establish quality improvement initiatives to monitor and evaluate the effectiveness of cancer education and prevention strategies. Foster collaboration between nursing administrators, educators, and practitioners to develop and implement comprehensive cancer education and prevention programs.

4. NursingResearch

Conduct similar studies in other nursing colleges and institutions to compare knowledge levels and identify areas for improvement. Design intervention studies to evaluate the effectiveness of educational programs in improving nursing students' knowledge about cancer warning signs. Conduct exploratory studies to identify barriers to cancer education and prevention among nursing students and healthcare professionals. Develop evidence-based practice guidelines for cancer education and prevention, informed by the findings of this study and other relevant research.

Limitation

1. The study did not have a control group, which can make it difficult to compare the results.
2. The study may not have used advanced statistical analysis, which can limit the interpretation of the results.

Recommendations

1. A similar study can be conducted in other healthcare settings to allow for broader generalization regarding warning signs of cancer
2. A similar study can be conducted on a larger sample to ensure the results are representative and applicable across various populations.
3. A similar study can be conducted to evaluate the effectiveness of structured teaching programme on knowledge regarding warning signs of cancer.

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