

A Study to Evaluate the Effectiveness of Structured Teaching Program on Knowledge Regarding Awareness of Anticancer Diet to Reduce the Risk of Cancer among Degree Students at Selected Colleges, Bangalore

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Abstract: Background and Purpose of the Study: A healthy lifestyle leaves us fit, energetic and at reduced risk for disease, based on the choices one make about daily habits. Good nutrition, daily exercise and adequate sleep are the foundations for continuing good health, But this essential event in life is more miserable in student period so, students must be aware of different disease like cancer. The aim of the study is to evaluate the effectiveness of structured teaching programme for degree students regarding awareness of anti cancers diet to reduce the risk of cancer. Objectives: 1) Assess the existing knowledge regarding awareness of anti cancers diet to reduce the risk of cancer among degree students. 2) Develop and administer structured teaching program regarding awareness of anti cancers diet to reduce the risk of cancer. 3) Evaluate the effectiveness of structured teaching program regarding awareness of anti cancers diet to reduce the risk of cancer by comparing mean pre and post test knowledge scores. 4) Determine an association between mean pretest knowledge scores regarding awareness of anti cancers diet to reduce the risk of cancer among degree students with their selected socio demographic variables. Design: Pre experimental, one group pre test post test design was selected for the study. Subject: The participants were 100 degree students from selected colleges, Bangalore. Sampling Technique: A convenience sampling technique was used to select the sample for the study. Data Collection Tool: Structured knowledge questionnaire was used to collect the data. Data Analysis: The obtained data were analyzed by using descriptive and inferential statistics and interpreted in terms of objectives and hypothesis of the study. The level of significance was set at 0.05 level. Result: In the pre test, the subjects had inadequate knowledge with a mean percentage of 48% and a standard deviation of + 3.087. Whereas in the post test there was a significant gain in mean percentage knowledge score of about 85.10% and standard deviation of +1.702. There was significant association found in selected socio demographic variables and the mean pre test knowledge scores of degree students regarding healthy lifestyle practices to prevent cancer. Conclusion: In the pre test 66.7% of the subject had inadequate knowledge regarding healthy lifestyle practices to prevent cancer whereas in the post test 96.7% of subjects had adequate knowledge and 3.3% had gained moderately adequate knowledge. This study finding indicates that the structured teaching programme was effective in enhancing the knowledge of degree students regarding awareness of anti cancers diet to reduce the risk of cancer.

Keywords: Anti cancer diet, prevention, cancer, structured teaching programme, degree students, selected demographic variables, convenience sampling, selected colleges, pre experiment study, one group pre test and post test design

1. Introduction

“Education limits cancer, optimism is built with education!”

Health is a fundamental human right which is essential to the satisfaction of the basic needs and to improve the quality of life. When health is lost everything is lost. If one is free from disease then the person is considered to be healthy. So promotion of health by preventing the modifiable risk factors can improve the quality of life to a greater extent. A healthy lifestyle leaves us fit, energetic and it reduces the risk for disease. Good nutrition, daily exercise and adequate sleep are the foundations for continuing good health. There are many factors contributing to the degeneration of health among many people today. Chronic diseases of lifestyle are a group of diseases that share risk factors such as unhealthy dietary choices, smoking, and lack of physical exercise, sedentary behavior and life - stress. These results in high morbidity and mortality due to cardiovascular and cerebrovascular problems, diabetes, cancer, chronic bronchitis, emphysema, stroke, dementia, osteoporosis,

mental illness and obesity. With industrialization in the world and modernization of life the incidences of cancer is growing day by day in the society. 2 Cancer; the word instills fear and sense of dejection, cancer is simply an uncontrolled growth of non - functional cells. These changes are the result of person's genetic factors and three categories of external agents such as physical carcinogens, chemical carcinogens and biological carcinogens. Cancer affects the body as well as the mind. Most of the causes are modifiable except some which are heredity. 1 According to World Cancer Report, Geneva, cancer rates could further increase by 15 million by the year 2020. According to WHO in 2010, approximately 2826000 people died in India due to cancer. Cancer Research UK has found that around 1, 34, 000 cancer each year are the result of a poor lifestyle. 3. The International Agency for Research on Cancer confirmed that smokeless tobacco causes oral cancer. It has been estimated that 43% of cancer deaths worldwide are due to tobacco, unhealthy diet, physical inactivity and infections. Tobacco use and excessive alcohol consumption have been estimated to account for about 90% of cancers in the oral cavity.

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2. Methods

“Methods are tools. Use them; don’t let them use you.”

Research methodology is a way to solve the problem systematically. It is a procedure in which the research starts from initial identification of the problem to final conclusion. Methodology of research organizes all the component of the study in a way that is most likely to lead to valid answer to the problems that have been posed⁵⁴.

This chapter deals with the methodology adopted for the present study such as Research approach, research design, setting, variables, population, sample, sampling technique, sampling criteria, development of tool, content validity, reliability, pilot study, method of data collection and plan for data analysis. The present study is aimed to evaluate the effectiveness of Structured Teaching Programme on knowledge regarding Anti cancers diet to prevent cancer among degree students in selected colleges, Bangalore.

3. Results

In order to find a meaningful answer to the research question the collected data is processed, analyzed in some orderly coherent fashion, so that patterns and relationships are discerned. Analyzing refers to categorizing, ordering, manipulating and summarizing data to obtain answers to the research questions. Pre experimental approach with one group pre test post test design was used in the present study, to assess the knowledge on healthy lifestyle practices to prevent cancer among degree students in selected colleges, Bangalore. Data collected from 60 degree students of selected colleges at Bangalore were tabulated, analyzed and interpreted by using descriptive and inferential statistics based on the objectives of the study.

Section I:

Description of socio demographic variables in frequency and percentage.

Section - II:

This section deals with findings related to overall and aspect wise pre test knowledge scores of the degree students regarding awareness of anti cancers diet to reduce the risk of cancer.

Section - III

This section deals with findings related to overall and aspect wise post test knowledge scores of the degree students regarding awareness of anti cancers diet to reduce the risk of cancer.

Section - IV:

Analysis and interpretation of effectiveness of STP by comparing pre and post - test knowledge scores regarding awareness of anti cancers diet to reduce the risk of cancer among degree students

Section - V:

This section deals with the association of mean pre test knowledge scores of degree students regarding awareness of

anti cancers diet to reduce the risk of cancer and their selected socio demographic variable.

This chapter has dealt with analysis and interpretation of data by using descriptive and inferential statistics. Analysis was carried on the basis of objectives and hypothesis of the study. Paired ‘t’ test was done to evaluate the effectiveness of structured teaching programme for degree students regarding awareness of anti cancers diet to reduce the risk of cancer. Chi - square test was done to find out the association between mean pre test knowledge scores and selected socio demographic variables. The level of significance for all inferential analysis was set at 0.05 level of significance.

4. Discussion

Lifestyle is a term refers as the personal customs or habits of an individual or group of individuals. It alludes to their active adaptation to the social milieu, which develops as a product of need for integration and socialisation. With regard to health, lifestyle refers to dietary habits, physical activities, the social use of substances such as alcohol and tobacco and exposure to other risky behaviours. Chronic diseases of lifestyle are a group of diseases that share risk factors such as unhealthy dietary choices, smoking, lack of physical exercise, sedentary behaviour and life - stress. These result in various disease processes culminating in high morbidity and mortality due to which cancer can occur. Therefore the present study was conducted to evaluate the effectiveness of a structured teaching programme on awareness of anti cancers diet to reduce the risk of cancer among degree students in selected colleges at Bangalore.

- 1) Socio demographic characteristics of degree students.
- 2) Pre test knowledge scores of degree students awareness of anti cancers diet to reduce the risk of cancer
- 3) Post test knowledge score of degree students regarding awareness of anti cancers diet to reduce the risk of cancer
- 4) Analysis and interpretation of effectiveness of STP by comparing mean pre and post test knowledge scores regarding awareness of anti cancers diet to reduce the risk of cancer.
- 5) Analysis and interpretation of association between the selected socio demographic variables and the knowledge score.

5. Conclusion

The study was conducted to evaluate the effectiveness of structured teaching programme regarding awareness of anti cancers diet to reduce the risk of cancer in selected colleges at Bangalore. In the present study, 100 degree students were selected using convenience sampling technique.

Research approach adopted in the present study is pre experimental approach. The study was conducted with a view to measure the pre test knowledge and effectiveness associated with the post test followed by the structured teaching programme for degree students regarding awareness of anti cancers diet to reduce the risk of cancer. A structured knowledge questionnaire was used to assess the knowledge of degree students regarding awareness of anti

cancers diet to reduce the risk of cancer. The data interpreted by using statistical method.

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Table 1: Frequency and Percentage Distribution of Degree Students according to their age in years, gender and religion
N= 100

Characteristics	Category	Respondents	
		Frequency	Percentage
Age in years	18 - 20	78	78
	21 - 23	22	22
	24 and above	-	-
Gender	Male	58	58
	Female	42	42
Religion	Hindu	18	18
	Muslim	2	2
	Christian	78	78
	Others	2	2
Total		100	100.0

Table 2: Frequency and Percentage Distribution of Degree Students according to their degree courses and academic year
N=100

Characteristics	Category	Respondents	
		Frequency	Percentage
Degree courses	BBA	10	10
	BBM	21	21
	BCA	36	36
	B. COM	33	33
Academic year	1 st year	50	50.0
	2 nd year	50	50.0
Total		100	100.0

Table 3: Frequency and Percentage Distribution of Degree Students according to their parent's occupation and parents income, N=100

Characteristics	Category	Respondents	
		Frequency	Percentage
Parents occupation	Business	15	15.0
	Agriculture	30	30.0
	Professional	12	12
	Others	43	43
Parents income in rupees	Rs.5000 - Rs.10000	53	53
	Rs.10001 - Rs.15000	25	25.0
	Rs.15001 and above	22	22
Total		100	100.0

Table 4: Frequency and Percentage Distribution of Degree Students according to their pattern of diet and sources of information, N=100

Characteristics	Category	Respondents	
		Frequency	Percentage
Pattern of diet	Vegetarian	16	16
	Non vegetarian	10	10.0
	Mixed	74	74
Sources of information	Mass media	58	58
	Health professional	28	28.3
	Parents and relatives	7	7
	Others	7	7
Total		100	100.0

Table 5: Classification of Respondents on over all pre test Knowledge scores on awareness of anti cancers diet to reduce the risk of cancer, N=100

Knowledge Level	Category	Classification of Respondents	
		Pre test	
		Frequency	Percentage
Inadequate knowledge	< 50 % Score	66	66
Moderately adequate knowledge	51 - 75 % Score	34	34
Adequate knowledge	> 75 % Score	-	-
Total		100	100

Table 6: spect wise Pre test Mean Knowledge scores of the degree students regarding awareness of anti cancers diet to reduce the risk of cancer, N=100

No.	Knowledge Aspects	Statements	Max. Score	Respondents Knowledge		
				Mean	SD	Mean (%)
I	Anatomy and physiology of Gastro intestinal tract	3	3	1.82	1.033	60.67
II	General information of cancer	3	3	1.38	0.865	46
III	Oral, stomach and colon cancer	11	11	4.75	1.753	43.18
IV	Anti cancers diet to reduce the risk of cancer	13	13	6.45	1.702	49.61
Combined		30	30	14.4	3.087	48

Table 7: Classification of Respondents on over all post test Knowledge scores on awareness of anti cancers diet to reduce the risk of cancer, N=100

Knowledge Level	Category	Classification of Respondents	
		Post test	
		Frequency	Percentage
Inadequate knowledge	< 50 % Score	-	-
Moderately adequate knowledge	51 - 75 % Score	4	4
Adequate knowledge	> 75 % Score	96	96
Total		100	100