

NUTRITION AND LIFE STYLE OF CANCER PATIENTS

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A well balanced nourishing diet is necessary to maintain the strength and resistance required to combat the disease and enhance the effects of treatment. The diet of a cancer patient must be tailored according to the type of therapy being given. Nutrition management is highly individualized depending on the type and degree of the disease. A healthy lifestyle with no smoking sans excess use of alcohol should always be kept in mind.

INTRODUCTION

Nutrition plays an important role in our everyday life; our health, energy, enjoyment, etc., depend upon our diet. Abnormal diet leads to a large number of diseases. Cancer is not contagious; it is usually caused by genetic damage that happens inside individual cells. Symptoms and treatment protocols vary according to the type and stage of the cancer. Some cancer can be prevented by taking simple precaution in our day to day life. The International Agency for Research on Cancer reviewed sufficient evidence for an association between body weight and cancer (Zarena and Gopal, 2012).

The American Cancer Society estimated that in 2012 about 173,200 cancer deaths would be caused due to increased usage of tobacco and about one third of the 577,190 cancer deaths are expected to be related to obesity, physical inactivity and poor nutrition.

Cancer is strongly associated with the dietary practices and lifestyle behaviour of people all over the world. The present investigation was, therefore, designed with the objective of assessing the health and dietary profile of cancer patients which helps to know the causes of cancer in Jharkhand and overcome the nutritional and health problem.

MATERIALS AND METHODS

A total of 300 cancer patients comprising 150 males and 150 females were selected purposively from cancer hospitals. Cancer patient was taken as dependent variable. The independent variables studied were of three broad categories, viz., diet, nutrition and life style.

Expatriation was as :

- ┆ Anthropometric measurement.
- ┆ Laboratory investigations.
- ┆ Dietary survey by 24 hours dietary recall method.
- ┆ General Investigations.

RESULTS AND DISCUSSION

The various factors associated with the cancer patients studied included family history, dietary behaviour, physical activities, personal habits, sunlight and radiation, physical ailments and blood group. Non-communicable diseases are bound to rise in India because of change in lifestyle and longevity. Cancer is one of the non-communicable diseases. Through effective education and communication, lifestyle and behaviour can be changed. In modern times lifestyle has become a very important factor to study in any society or

institution and is also associated with the health and well being of human formation. Genetic and environmental factors are invariably involved in the etiology of cancers. In many families there is a strong hereditary tendency to cancer. Majority of them (88 %) had no family history; however, 12 % reported family history of cancer. Table-1 shows that 46 % patients were vegetarians, 4 % eggitarians and 50 % non-vegetarians. Chandra Sekhar and Sujatha (1989) reported occurrence of cancer more in non-vegetarians. Intake of the right kind and amount of food can ensure good nutrition and health. Nutrition is the science that deals with digestion, absorption and metabolism of food.

Men and women whose lifestyle includes regular and vigorous physical activities have the lowest risk of colon cancer. Physical activity may also protect against breast cancer by reducing body weight. Most of them (73%) reported normal levels of activity followed by 21 % with low level of physical activity and only 6% with high level of physical activity. Physical activity is associated with lower risk of cancer of the colon and breast. Physical inactivity, high energy intake and large body mass are associated with increased risk of developing colon cancers in men and women.

Cancer is the disease of uncontrolled and abnormal cell division. Some physical factors are found as probable causes of cancer, e.g., excess betel and tobacco chewing, smoking, heavy exposure of body parts etc. Alcoholism often damages the liver and precedes the development of liver cancer. Alcohol, especially beer consumption has been associated with an increased risk for colorectal cancer. Tobacco is the most clearly identified cause of cancer. Cancers of head and neck correlate strongly with the use of alcohol and tobacco. Excessive solar ultra violet radiation increases the risk of all types of cancer of the skin. Table-1 shows that only 2.33% cases of cancer are reported to be caused by sunlight and 6.33% by radiation while 91.33 % non-prolonged exposure to ultra violet radiation from the sun can lead to melanoma and other skin malignancies (Cleaver and Mitchell, 2000).

Diet includes normal diet. It may be modified and used for ill persons as a part of diet therapy. Prior to the onset of the disease 34% were suffering from hypertension followed by 17% from diabetes, 12 % from lump in breast and 11 % from heart disease. Breast cancer is 10-23 % higher in diabetic women compared to non-diabetic women (De *et al.*, 2013). Maximum cancer patients had B blood group followed by AB (25%), O (14%) and A (7.7 %). There are contradictory reports

available about the association of blood group with breast cancer. Jayant (1971) reported that breast cancer has no relation with any blood group whereas according to Surekha *et al.* (2004) high incidence of breast cancer was in B blood group individuals. Maximum females had less than 11 hemoglobin (82.5%) and 17.5 % within normal range (11-14)

whereas in case of males it was 13-16 (40 %) and less than 13 (60%).

Nutrition is the provision to cells and organisms of the materials, i.e., nutrients and nutraceuticals necessary to support life. Many common health problems can be prevented with a healthy balanced diet.

TABLE-1 : Factors associated with Cancer Patients.

Factors	Number	Percentage
Family history		
Yes	36	12.0
No	264	88.0
Dietary behaviours		
Vegetarian	138	46.0
Non vegetarian	150	50.0
Eggitarian	12	4.0
Physical activities		
Sedentary workers	62	21.0
Moderate workers	219	73.0
Heavy workers	19	6.0
Personal Habits		
Alcohol	63	21.0
Smoking	69	23.0
Pann	35	12.0
Tobacco chewing	75	23.0
Narcotic drug	13	4.0
None	10	3.0
Multiple	40	14.0
Sunlight & radiation		
Exposed sunlight	7	2.3
Exposed radiation	19	6.3
None	274	91.3
Physical ailments		
Hypertension	103	34.0
Heart disease	25	9.0
Disables	51	17.0
Tuberculosis	34	11.0
Kidney dialysis	7	2.0
Lump in breast	36	12.0
Fever	33	11.0
Blood Group		
A	23	7.7
B	159	53.0
AB	76	25.3
O	42	14.0

Lifestyle related diseases are now killing more Indians than the infectious ones. High intake of fat has been indicated as a risk factor in the incidence of breast and colon cancer. A high intake of meat is also known to increase the risk of colon cancer. Drinking alcohol regularly in large amounts and smoking are two habits which are associated with increased risks of cancer. There are several nutrients like Vit A and Vit C, which have been known to exert anti-cancer effects and help to protect the body from cancer. Lifestyle is also responsible for the incidence and spread of cancer in these days, e.g., insufficient income, increasing cost of the commodities, tension, distress and depression. Eating fresh foods regularly and following healthy lifestyle help to strengthen the immune system. Cancer is a dangerous disease but it can be cured when detected early. Due to negligence at the early stage, it becomes complicated leading to unavoidable death.

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