Original Research Paper

Risk Behaviors of Cancer Among People in A Selected Community: A Cross Sectional Study

Nursing

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ABSTRACT
Cancer is one of the greatest public health concerns of today. Being predominantly found in all age groups, the incidence of cancer is likely to increase manifold in future in India. The aim of the study was to assess the risk behaviors of cancer in a selected community. Objectives of the study were to identify the risk behaviors of cancer in a selected community and to find out the association between risk behaviors of cancer and selected demographic variables. Consecutive sampling technique and descriptive survey design were used for the present study .Study was conducted among 50 samples belongs to the 6th ward of Karimannoor Grama Panchayath. The tool consisted of demographic data and questionnaire to assess the risk behaviors of cancer among people. The result showed that 58% of the samples had low risk behaviors, 42% had moderate risk behaviors of cancer and no one was in the category of severe risk behaviors. Researchers concluded that people in the community exhibit low to moderate risk behaviors of cancer.

Introduction:

Cancer is a disease that begins in the cells of the body. In normal situations, the cells grow and divide as the body needs them. No more no less. This orderly process is disturbed, when the new cells from that the body was not needed and old cells don't die when they should. These extra cells lump together to form a growth or tumor.

There were approximately 14.1 million cancer cases in the world during 2012, from which 7.4 million cases were found in men while on 6.7 million cases were observed in women. It shows men are more likely to be affected with this dangerous disease as compared to the women. The report also predicted that the number of these cases will increase up to 24 million till 2035. This quickly rising disorder inside the entire context of non – communicable diseases (NCDS) was a most important focus of the September 2011 UN higher level gathering on VNDS, the Lung Cancer is more popular in men throughout the world that contributes to 17% of the overall number of cancer disorders diagnosed in 2012.

A total of 1,658,370 new cancer cases & 589,430 cancer deaths are projected to occur in the United States in 2015. During the most recent 5 years for which there are data, delay – adjusted cancer incidence rates declined by 1.8% per year in men and were stable in women, while cancer death rate nationwide decreased by 1.8% per year in men and by 1.4 % per year in women. The overall cancer death rate decreased from 215.1 in 1991 to 168.7 in 2011, to total relative decline of 22%.

The incidence of cancer in India is 70.90% per 100,000 population and cancer prevalence is established to be around 2,500,000 with over 800,000 new cases and 5,50,000 deaths occurring each year. About 6% of all deaths in India are due to Cancer which contributes to 8% of global cancer mortality. In male the most common are cancer of mouth, esophagus, stomach, lung or Bronchi while as in females the common cancers are cervix, breast, mouth and esophagus. Breast cancer is the leading cancer among females.

Kerala has roughly 35,000 new cancer cases every year, based on the cancer registry data. There are 913 male and 974 female cancer patients per million in Kerala. A total of 100,000 cancer patients are in prevalence annually in the state. Though the rate of cancer occurrences in Kerala is much lower compared to western countries, the large population will give rise to a large number of cancers.

A comparative case control study of stomach and large intestinal cancers in relation to dietary habits was conducted in Nagoya, Japan involving 93 cases with stomach cancer 93 cases with colorectal cancer and 186 control was conducted in 2008 March 17 using common questionnaire. The result showed that salted foods such as pickled vegetable, dried and salted fishes, which are typical traditional Japanese foods showed a significantly positive association with stomach cancer.

From the prevalence rates, it's clear that cancer is spreading like a forest fire. There are a number of ways to reduce the chance of getting cancer including not using tobacco products, choosing foods low in fat, eating a diet rich in vegetables, fruits whole grains, exercising regularly, maintaining a healthy weight, avoiding overexposure to sun, early detection by regular checkups and screening exams etc. Even though we know that risk behaviors associated with cancer, many peoples just try to ignore the risk factors and thus they become more vulnerable to get cancer. In this situation we planned to conduct a study to assess the risk behavior of cancer in a selected community and thereby reducing or eliminating the risk factors by informing the prevalence of risk behaviors to the appropriate authority in that community setting, through them mass campaigns are arranged to reduce the risk factors or modify the life style.

Materials and methods:

This cross sectional study was conducted upon people residing in 6th ward of Karimannoor gramapanchayath located in Idukki district. Fifty subjects were recruited using consecutive sampling technique, both men and women in the age group of 18 – 65 yrs. Two tools were used to collect data; Section A : Demographic Data: It consist of items relating to basic information about the subject such as age sex, religion, marital status, numbers of child, occupation, economic status, education, Type of family, and Type of diet. Section B: It consist 33 items under 6 sub divisions, in order to understand the risk factors of cancer in detail. They are; Dietary factors, Occupations, Habit, Life style, Family history, Environmental factors. Content validity of the tool was ensured by giving it to 5 subject experts. The reliability was assessed by split – half technique using Rulon / Gutt's man's formula, the reliability score was 0.9. The pilot study was conducted on 04/07/2015 in 6th ward of Karimannoor gramapanchayath. The samples were collected by using consecutive sampling technique and the risk behaviors were assessed by using questionnaire. The pilot study revealed that the study was feasible. Formal permission was obtained from the concerned authorities. Data was collected on 08/07/2015. The investigators explained about the research study to the subjects and obtained informed

consent from the participants. The investigators selected 50 subjects by consecutive sampling technique. A self-administered questionnaire was distributed to each sample. The subjects took an average 25-30 minutes to complete the tool. Confidentiality was maintained throughout the study.

Results:

Socio demographic characteristics

Half of the samples (50%) belong to the age group of 54-65 years, 26% sample belongs to 42-53 years of age and 12% belongs to 30-41 years of age and remaining 2% of sample belongs to 18-24 years of age. Among the samples, 68% were males and 32% were females. More than half of the samples (66%) were Christians, 26% were Hindus, 6% were Muslims and 2% belongs to other religion. Majority of the samples (82%) were married. 52% of the samples had 2 children, 22% of samples had three or more than 3 children, 12% had one child and 14% of people had no children. Equal number (26%) of samples were house wife and farmers, 24% were salaried, 16% were daily wages and equal number (4%) of samples were businessmen and unemployed respectively. 40% of the samples had a family income below 2000 /- month, equal number (22%) had family income between 2001 – 5000/- and more than 10000/- respectively, 16% of the samples had family income between 5001 – 10000/-month. 30% of the samples were educated up to SSLC, 28% completed degree, 14% completed pre degree, 8% were illiterate and 6% were post graduate. Majority of the samples (87%) belongs to nuclear family and 12% were joint family. Almost 98% of the samples consume mixed diet and only 2% consumes vegetarian diet.

Identification of risk behaviors of cancer

Table 1: Frequency, percentage, mean and standard deviation of risk behavior of the cancer (n=50)

Risk behaviour	Frequency (f)	Percentage (%)	Mean	Standard deviation
Low risk behaviour	29	58		
Moderate risk behaviour	21	42	45.12500	±9.96656
High risk behaviour	0	0		

Table 1 depicts that 58% had low risk behavior, 42% had moderate risk and no one was in the category of high risk behavior.

Association between risk behaviors of cancer and selected demographic variables

The chi-square value was computed between the risk behaviors of cancer and selected demographic variables such as age, sex, education, occupation, marital status, religion, number of children, type of family and type of diet. It shows that there was no significant association between risk behaviors of cancer and selected demographic variables except for sex, occupation and marital status.

Discussion:

Cancer is the most arrogant, independent, uncontrolled, highly destructive and proliferative, tissue invasive, hardly inevitable, renegade, apparently immortal population of body's own cells with the potentiality to metastasize and pollute the system with a fatal terminal. Cancer is a collective term for malignant neoplasm arising in the body cells amounting to no less than hundred disease states, each with its intrinsic natural history, etiology, methods of diagnosis and treatment.

The findings of the present study show that there is significant association between occupation and risk behaviors of cancer. This was in accordance with the study conducted by Fincham and Shirley in England. The study revealed statistically significant risk among the occupations like wood processing, pulp and paper making, sales and service

Another study conducted by Kathyrn A. Robb and Anne miles in UK to assess the perceived risk of colorectal cancer and the sources of risk judgment. The results showed that the risk of colorectal cancer was more common in people aged 60-63 years of age. This result is contradictory to the findings of the present study with no association between risk behaviors of cancer and age.

The findings of the present study showed that 48% of the samples consume red meat. It is considered as one of the risk behavior of cancer. In relation to the above result, a study conducted by David J. Hunter and Bernard A Rosner among 88410 samples who were enrolled in the Nurses' Health study, to assess the relationship of dietary fat and proteins to the risk of non-Hodgkin's lymphoma. The results showed that intake of beef, pork or lamb as a main dish was associated with a statistically significantly increased risk of non hodgkins lymphoma among 95% of samples.

REFERENCES:

1. Park k. Textbook of preventive and social medicine .20th edition. Jabalpur: Banort publishers;2002

2. National Cancer Institute. What is cancer. Available from www.cancer.gov/aboutcancer/what is cancer.

3. Langhorne, Martha E.Textbook of oncology nursing. 5th edition. Philadelphia: Elsevier publishers;2007

4. Jemal A, Bray F, Ferlay J. world cancer statistics. Available from :http://www.ncbi.nlm.nih.gov/pubmed/27292568

5. Dr.kirti Bushan. Indian cancer statistics. Available from:www.indiastat.com/health/16/diseases/77/cancer/77811297/en/statis.aspx.

6. Dr.Rengaswamy Sankaranarayan MD, Kunnambath Ramadas MD, Babu Mathew MD. Kerala cancer statistics.Available from:www.sciencedirect.com/science/article/pii/s0140673605666585.

7. Kazuo Tajimai, Suketami Tominagai. A comparative study of stomach and large intestinal cancer in relation to dietary habit.Pubmed life science journal.1985;76(8):705-16.Available from:www.ncbin/m.nih.gov/pubmed/30930448.

8. Yunhu T Fan, Jain-min, Yuan, Renwei Wang, A study to assess the alcohol, tobacco and diet in relation to esophageal cancer.PMC journals.2008;60(3):35463. Available from:www.pmc/article/pmq409004.

9. Jilji Alphonsa Muttom, Lilly Kenth, Morris Mary, Ritti Merin Abraham. Kings goal attainment theory application MRS with postpartum psychosis. Kerala Nursing forum. Volume5;5-9

10. Wilkson M Judith, Leuven Van Karen, Fundamentals of nursing theory, concept and application.1st edition. New Delhi; Jaypee brothers' medical publishers' pvt ltd; 2008.