



CANCER CASES IN KANNUR DISTRICT: A COMPARITIVE STUDY OF THREE PANCHAYATHS

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ABSTRACT

Cancer is one of the dreadful diseases to human kind from its history. In our places this disease considered as that it will cause to death of the effected person and also causes the loss of all wealth of the effected person's family. When the cells of the body divide in a particular pattern normally the body growth takes place, but the division of cells takes place in an uncontrolled manner it become malignant. This disease does not consider the age, social status, gender or any other qualities of a man. Scientific studies shows that 35% of all cancers are related with diet and the other factors such as genetic mutations, environmental pollutions, U.V rays and emotional stress also causing cancer (Science Reporter, August 2015). Now cancer becomes a curable disease when it detected on time and treated not only with medicine but also with physical and mental therapy.

This paper aims to do a comparative study of religion wise, gender wise and economic division wise study of cancer patients in three panchayaths of Kannur District that is Mayyil Panchayath, Narath Panchayath and Kolachery Panchayath which are highly populated. These Panchayaths include mainly two communities that are Hindus and Muslims and the number of Christians in these Panchayaths is very low.

This study aims to find out the relationship between the cancer patients and their diet, life habits (smoking, drinking and chewing), hereditary, economic condition, marital status and delivery status in case of females) in these three Panchayaths.

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INTRODUCTION

Cancer is one of the world wide diseases which killed more than 6 million every year and about more than 23 million persons live with cancer (Park, 2005). According to W. H. O by 2050 out of three persons, one will be affected by cancer. Cancer is one of the dreadful diseases to human kind throughout history. This disease is considered as dreadful as it will cause death of the effected person and also causes the loss of all wealth of the affected person's family. When the cells of the body divide in a particular pattern normally the body growth takes place, but when the division of cells takes place in an uncontrolled manner it become malignant. This disease affects all irrespective of the age, social status, gender or any other qualities of a man.

Now our society is faced with the burden of cancer disease and day by day it affect the society in particular the family of the affected person, even though today we got a higher probability of cure as outcome. Scientific studies show that 35% of all cancers are related with diet and the other factors such as genetic mutations, environmental pollutions, U.V rays and emotional stress (Science Reporter, August 2015).

Now cancer becomes a curable disease when it is detected on time and treated not only with medicine but also with physical and mental therapy.

This paper is based on a comparative study of prevalence of Cancer patients in three panchayaths of Kannur district in Kerala with regard to the number of patients based on gender, religion, age and economic condition. Regarding methodology, a household survey was conducted to collect statistical data and both structured and unstructured interviews were used to substantiate the household data. Secondary data was collected from Panchayaths and Health Department as well as from online sources and books on microbiology and medicine.

Background

Three panchayats of Kannur District that is Mayyil, Narath, and Kolachery were selected where population density is very high. It also aims to present the relationship between the cancer patients and their diet, life habits (smoking, drinking and chewing), heredity, marital status and delivery status especially of females. These Panchayats include mainly two communities, Hindus and Muslims and the number of Christians in these Panchayats is very low.

In Mayyil Panchayat total population is 36899 living in 38km where Hindu population is 19495, Muslim population is 17389 and Christian population is 20. The number of total families is 6437 where B.P.L (Below Poverty Line) families are 1841 and the A.P.L (Above Poverty Line) families are 4596 (Census

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report 2011, Mayyil Panchayat).The number of cancer patients in this panchayat is 38 (CHC Mayyil).

In Kolachery Panchayat total population is 34650 living in 20.72km where Hindu population is 19120, Muslim population is 15526 and Christian population is 5.The number of total families are 6408where B.P.L families are 1525 and the A. P.L families are 4883(Census 2011,Kolacery|Panchayat).The number of cancer patient in this panchayat is 21 (PHC Kolachery).

In Narath Panchayat total population is 31850 living in 31.8km where Hindu population is 18549,Muslim population is 13301 and Christian population is 287.The number of total families are 6270 where B.P.Lfamily is 1641 and the A. P.L family is 4629(Census report 2011,NarathPanchayat). The number of cancer patient in this panchayat is 53 (PHC Narath). Here the numbers of cancer patients are higher in Narath panchayat because the population in this panchayth consumes more crustaceans easily available from the nearest Valapattanam river. Studies show that shell fish contains copper, iron, selenium and Omega-3fatty acids which are causatives for breast cancer and colorectal cancer (<https://food for breast cancer.com/foods/shellfish>).

A comparative study of A.P.L families and B.P.L families show that in Kolachery Panchayat out of 21 cancer patients, 5 are from A.P.L families and 18 are from B.P.L families. And out of these 21 cancer patients 5 are males and the remaining 18 are females. In the case of religion, out of 21 cancer patients 9 are Muslims and the remaining are 12 Hindus.

A comparative study of A. P.L families and B. P. L families show that in Mayyil panchayat out of 38 cancer patients, 16 are from A. P.L families and 22 are from B. P. L families. And out of 38 cancer patients, 14 are males and the remaining 18 are females. In the case of religion out of 38 cancer patients, 14 are Muslims and the remaining are 24.

A comparative study of A. P.L and B. P. L families show that in Narath panchayat out of the 53 cancer patients, 9 are from A. P.L families and 44 are from B. P. L families. And out of 53 cancer patients, 14 are males and the remaining 39 are females. In the case of religion out of 53 cancer patients, 21 are Muslims and the remaining 32 are Hindus (Table:1).In these three panchayaths, out of the total of 112 numbers, 86are from B. P.L families(77%)and remaining 23% are from A.P.L families. The number of female cancer patients is 78 and it is 70%. The remaining 30% are males that are 34 in number. The number of patients from Hindu community is 70 (62.5%) and the Muslim patients are 42 that are 37.5%.

Table 1 Classification of cancer patients based on Economy, Gender and Religion

Panchayath	APL				BPL			
	Male		Female		Male		Female	
	Muslim	Hindu	Muslim	Hindu	Muslim	Hindu	Muslim	Hindu
Kolachery	2	0	0	1	3	1	4	10
Narath	1	0	5	1	5	9	8	24
Mayyil	2	5	6	3	1	5	5	11
Total	5	5	11	5	9	15	17	45

Source: Field Data

From the above table it is found that in BPL families, and the females are the more vulnerable group easily bonded by cancer when compared to other groups. The number of Muslim population is lower when compared with Hindu population

even though the percentage of cancer patients from this community is also low.

Table 2 Stage wise numbers of cancer patients

	1st		2nd		3rd	
	Male	Female	Male	Female	Male	Female
Kolachery	2	8	1	7	2	1
Narath	5	16	9	12	5	6
Mayyil	3	5	6	12	6	6
Total	10	29	16	31	13	13

Source: Field Data

Here out of 112, 39 cases passed through the 1st stage of cancer and 47 cases passed through the 2nd stage of cancer which means the treatment become successful and they can lead a normal life. The remaining 26 have passed through the 3rd stage but the correct treatment along with physical and mental support can extend their life time. Improvement of treatment in first and second stage along with increase in awareness of cancer symptoms ensured that more and more people can detect the disease at early stage and have been cured it.. New forms of treatments like immunotherapy, targeted therapy, hormonal therapy, new methods in radiation, image guided radiation therapy and possibility of nuclear medicines helped in better treatment (ArogyaMasika, February2019).

Table 3 Leading rate of cancers in three panchayaths

Type	Narath	Mayyil	Kolachery	Total
Breast Cancer	14	12	8	34
Oral Cancer	6	3	1	10
Cervix Cancer	4	2	3	9
Stomach	1	5	3	9
Rectum	5	1	0	6
Brain tumor	1	3	2	6
Leukemia	5	0	0	5
Lung	3	2	0	5
Skin	4	1	0	5
Ovary	1	3	0	4
Prostate	2	0	2	4
Tongue	2	1	1	4
Esophagus	3	0	0	3
Joint	0	2	0	2
Thyroid	0	1	1	2
Gall Bladder	1	0	0	1
Kidney	1	0	0	1
Liver	0	1	0	1
Total	53	38	21	112

Source: Field Data

From the above table it is understood that the highest number is for breast cancer that is out of 112, 34 cases are reported as breast cancer (30%). The main cause of this disease is the presence of female sexual hormone named oestrogen. In this 34 number, 6 ladies are not married and they have more chance to get this disease (Park 2005) and the 28 are married, delivered and breast fed. The genetic factor also has some roles here. An example is in Narath panchayat where a lady died by breast cancer before 8 years and her elder sister is passing through the 3rd stage of breast cancer. Another example is in the same panchayath that a mother have only 2 daughters - the elder one is 33 years old and effected by cervical cancer and the younger one is 31 years old effected with breast cancer and the two are married and having children.

In the above table the second place is for oral cancer and is 10 in number (9%). All the 10 patients have the history of smoking (in males) and chewing (in females).In the case of cervical cancer which is 8% of the sample population, all

females are married and only one woman is divorced due to her immoral traffic. So here the causative organism may be the Human Papilloma Virus. The age may be one of the factors. In the total of 9 cases, 8 are above 40 years and from B.P.L families. So quality of diet is also another factor and the weakened immune system may cause the disease. In the case of stomach cancer, of the 9 numbers, 7 are males who have the history of drinking and smoking, and the two ladies had the habit of chewing. In the 5 numbers of rectal cancers all are above 50 years and eat meat regularly along with chewing and alcoholic consumption. The number of brain cancer are same as rectal cancer and the correct cause cannot be found out, it may be due to the malignant growth of brain cells due to the damage of DNA in the cells and become life threatening(www.google.com/search).

In the 5 cases of Leukemia it is very sad that the 4 cases are below 20 years and the last one 32 years old. Here the correct cause could not be traced and it may be due to the uncontrolled growth of white blood cells. In the 5 numbers of lung cancer, 4 are men and have the history of chain smoking, chewing and drinking and the remaining lady has no history of any bad habits but her father was a chain smoker and her mother had chewing habits. In the case of skin cancer out of the 5, 4 are engaged in farming in their early lifehood so the disease due to the U.V rays in the sunlight and one was a painter. This shows that the skin cancer is directly related with the job of the persons.

In the case of 4 ovarian cancer, out of 4,3 are above 50 years old and they first effected by collapsed uterus, the lack of correct treatment may led to cancer. The last one is 43 year old and not married. In the 4 cases of prostate cancer, all men are above 60 and the lack of correct treatment in the beginning lead to the cancerous stage of this disease. The 4 cases of tongue cancer all are have chewing habits and the 2 men affected by this cancer have smoking habits also. If one considers the 3 cases of thyroid cancer, one of the men in this group took treatment for goiter and in case of the remaining 2 ladies the cause couldn't be recognized. Remaining cancers like the liver cancer, woman had a history of Hepatitis B infection, the man infected with kidney cancer had over dose drinking habits and the man who have nose cancer is 53 year old have no bad habits. In all the above cases we cannot prove the correct cause apart from the possibilities. The correct cause is the mutation of the cells that may happen at any stage of life.

Table 4 Age and Sex wise comparison of cancer in three panchayaths

Age Wise	Kolachery		Mayyil		Narath		Total
	M	F	M	F	M	F	
0-10	0	0	0	1	0	1	2
11-20	0	1	0	0	1	0	2
21-30	0	0	0	0	0	0	0
31-40	0	2	1	3	1	6	13
41-50	1	5	2	6	0	8	22
51-60	1	5	4	8	6	7	31
61-70	1	3	3	5	6	4	22
Above 70	2	0	4	1	5	8	20
Total	5	16	14	24	19	34	112

Source: Field Data

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In the above table it is seen that in the age group of above 50years, 66% of cases are reported that is 73 out of 112 and in the category of above 40 years, 86% of cases are reported.

CONCLUSION

As a dreadful disease like cancer the society need the awareness about it, so regular awareness and check up camp is conducted by the local self government institutions with the help of Health department is very useful. Even this 21st century a stigma is retained with this disease so take measures to avoid this in government level. This disease needs costly treatment and even rich are ruined due to high treatment cost despite Government schemes like Chis plus Program, Cancer Suraksha Padhathi, Sukritham, Karunya Beloved Fund, Snehaswanthanam, etc. So Government should intervene to bring down treatment cost. Government should expand palliative care facility in government hospitals especially for cancer patients. Post Oncologists in all Primary Health Centres and Community Health Centres as possible.

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