



A Sociological Study on the Women Cancer Patients in Bangalore City, India

Manjunatha S.

Dos in Sociology, University of Mysore, Mysore, INDIA

Available online at: www.isca.in

Received 2nd June 2013, revised 22nd June 2013, accepted 9th July 2013

Abstract

Though, India made considerable progress in social, economic, cultural and political arenas in recent decades, while, it lagged behind in improving women health, particularly the women cancer patients. In 2010 there were 5,17,378 women cancer patients in India and it gradually increased on 2011 and 2012. But the efforts governmental agencies made to provide the desirable treatment yielded no results. In this context the present study was placed and which aimed at analyzing the conditions of women cancer patients and also to find out the causal factors for different types of cancer disease among them in Bangalore city. For the said purpose the secondary data has been collected from 25 major hospitals in Bangalore city. The major findings of the study show that the prevalence of cancer diseases among women is more comparing to men in Bangalore city. Cervix cancer (28.2%) and Breast cancer (16.4%) constitute for more number of women cancer patients among the major 10 types of cancer diseases. When the educational levels among women for particular type of cancer are considered, the percentage of illiterates were more in Oral Cavity cancer (89.1%), Pharynx cancer (65.7%), Oesophagus cancer (75.9%) compared to Breast cancer (55%) and Ovary cancer (56.3%). In general, it is also evident that the majority, 68% of the women cancer patients were illiterates and it proves that the lack of education is being the sole and major reason for the existence of cancer disease among women. The findings of the study help to understand the conditions of the women cancer patients particularly in Bangalore city and in general in the country and also help to prevent the cancer disease itself.

Keywords: Women Cancer Patients, Cervix Cancer, Breast Cancer, Bangalore city, Women Health in India.

Introduction

Today, throughout the world women are the major victims of cancer disease¹. India is also no exception. In India the women health is largely neglected in general and this led to the lack of medical treatment for the women cancer patients². Existence of gender discrimination in providing medical facilities to the women is clearly apparent in India³. In 2010 there were 5,17,378 women cancer patients in India⁴. On the same year the number of male cancer patients was 4,62,408⁵. Though, India made considerable progress in social, economic, cultural and political arenas in recent decades, while, it lagged behind in improving women health, particularly the women cancer patients⁶.

Cancer is a disease, in which a group of cells display uncontrolled growth through division beyond normal limits, invasion that intrudes upon and destroys adjacent tissues, and sometimes metastasis, in which cancer cells spread to other locations in the body via, blood or lymph⁷. Cancer is characterized by out of control cell growth⁸. There are 100 different types of cancer and each is classified by the types of cell that is initially affected⁹.

Here, in this study the major ten types of cancer disease among women have been considered for the analysis, which are: Cervix, Breast, Oral Cavity, Oesophagus, Ovary, Leukaemia, Thyroid, Pharynx, Stomach and Lymphoma¹⁰.

The major causes for the different types of cancer diseases among women are: i. Tobacco – the majority of the women cancer patients get the disease mainly due to the usage of tobacco. Common cancers caused by smoking tobacco are lung, larynx, pharynx and oesophagus, while cancers of the mouth, tongue and lip are due to chewing and smoking tobacco¹¹. ii. Diet – diets high in fat or associated with increased risk for cancers of breast, prostate and uterus. Alcohol drinking increases the risk of cancers of oral cavity, pharynx, oesophagus and liver¹². iii. Obesity – it increases the risk of cancer and probably the risk of breast and kidney cancer. The risk of cancer increases as body mass index increases over 25 kg. iv. Exposure to sun – no-melanoma skin concerns one induced by cumulative exposure to ultra violet radiations. v. Environmental agents and Occupational factors. vi. Reproductive and Genetic factors¹³.

Hence, the present study is placed in this context to analyse the conditions of women cancer patients and also to find out the causal factors for different types of cancer diseases among them in Bangalore city¹⁴.

Methodology

The present study is largely based on the secondary data collected from 25 major hospitals in Bangalore city, which are: Kidwai Memorial Institute of Oncology, Bangalore Institute of Oncology, Manipal Hospital, M. S. Ramaiah Medical College

and Hospital, Karunashraya, Curie Institute of Oncology, St. John's Hospital, Victoria Hospital, St. Martha's Hospital, St. Philomina's Hospital, Bhagwan Mahavver Jain Hospital, Agadi Hospital, Mallya Hospital, NIMHANS Hospital, Bangalore Baptist Hospital, Mallige Medical Centre, Kempegowda Inst. of Medical Sciences and etc. The secondary data comprises; the total number of women cancer patients registered in 2010 under different types of cancers, their educational, religious, economic, social and personal information has also been gathered. To analyze the decadal growth of the women cancer patients, data from 2000 to 2010 has also been collected.

Objectives: i. To analyse the conditions of women cancer patients in Bangalore city. ii. To find out the causal factors for different types of cancer diseases among the women cancer patients in Bangalore city

Prevalence of cancer diseases among the women in India: The total number of cancer patients in both men and women are largely increasing in India. Although the focus of public health has been mostly on infectious disease in the developing countries, non communicable disease like cancer also take an increased toll on resources¹⁵. In spite of good advancements for diagnosis and treatment, cancer is still a big threat to our society¹⁶. Cancer is the second most common disease after cardiovascular disorders for maximum deaths in the world¹⁷.

The prevalence of cancer in India is estimated to be around 2.5 million, with about 8,08,000 new cases and 5,50,000 deaths per annum. During the last one decade, 70% of cancer cases have been diagnosed and treated with survival of a few patients¹⁸. It is also believed that in the near future the total number of cancer patients will increase in the developing and underdeveloped countries, which may rise up to 70%. The magnitude of cancer problem in the Indian sub-continent is increasing because of poor living standards and most importantly inadequate medical facilities¹⁹.

Table-1
Number of Women Cancer Patients

Year	Number of Women Cancer Patients
2004	4,28,545
2005	4,30,100
2006	4,31,000
2007	4,25,000
2008	4,36,000
2009	5,07,990
2010	5,17,378
2015	5,58,000
2020	5,70,000

The below table shows that the number of women cancer patients from 2004 to 2020 (a few years have been predicted)²⁰. In 2004 the number of women cancer patients all over India was 4,28,545, in 2010 it was 5,17,378²¹. The table clearly shows the gradual growth in the numbers over a period of time. On the basis of this growth 2 more years have been predicted. It is quite interesting to note here that on the same year (2004) the total number of male cancer patients was only 3,90,809, which increased to 4,54,842 in 2009 and in 2010 it was 4,62,408. Hence the numbers of male cancer patients have remained less compared with the number of women cancer patients in India²².

Results and Discussion

A Sociological Analysis on the Conditions of Women Cancer Patients in Bangalore City: The prevalence of cancer disease among women is more comparing to men, not only in India but also in Bangalore city. To understand the conditions and causal factors of women cancer patients in Bangalore city the data has been collected by visiting twenty five major hospitals in Bangalore, where women cancer patients have registered. The table below shows the number of women cancer patients registered in major 25 hospitals in Bangalore city during 2010. Among these hospitals Kidwai Memorial Institute of Oncology stands first, in which 3211 women cancer patients were registered, in Bangalore Institute of Oncology 1352 were registered, which stands at second place and in Manipal Hospital 742 cases were registered.

Bangalore city being called IT city is enormously equipped with the advanced health care facility compared to any part of the country, with the international standards. The below stated hospitals provide desirable medical treatment to the women cancer patients in Bangalore city. It is important to note that these stated hospitals do not alone provide services to the local needs, instead they cater the needs of other parts of the country also.

The table below indicates the number and percentage of women cancer patients of 10 major types of cancer diseases. Cervix cancer (28.2%) and Breast cancer (16.4%) constitute for more number of women cancer patients among the major 10 types of cancer diseases. As I stated earlier that in this present study ten major types of cancer disease among women have been considered for the analysis. Among these the prevalence of Cervix, Breast and Oral Cavity types of cancers are more compared to other types of cancers.

Common reasons for the existence of these three major types of cancer diseases in large number among women patients are ignorance, lack of medical knowledge and treatment, usage of tobacco products. Since the majority of the women cancer patients are uneducated or partly literature with having little or no consciousness about their health. These types of cancer disease can be reduced by increasing medical awareness among women in general, providing good health care facilities and etc.

Table-2
Number and Percentage of Women Cancer Patients Registered in Major 25 Hospitals in Bangalore (2010)

Name of the Hospital	No. of Patients	Percentage
Kidwai Memorial Institute of Oncology	3211	36.5
Bangalore Institute of Oncology	1352	15.9
Manipal Hospital	742	9
M. S. Ramaiah Medical College and Hospital	655	8
Karunashraya	632	7.5
Curie Institute of Oncology	528	6
St. John's Hospital	448	5.5
Victoria Hospital	121	1.3
St. Martha's Hospital	114	1.3
St. Philomina's Hospital	116	1.1
Bhagwan Mahavver Jain Hospital	100	1.1
Agadi Hospital	96	1
Mallya Hospital	78	0.8
NIMHANS Hospital	45	0.5
Bangalore Baptist Hospital	33	0.3
Mallige Medical Centre	8	0.09
Kempegowda Inst. Of Medical Sciences	12	0.1
Others	411	4.1
Total	8702	100

Table-3
Total Number and Percentage of Women Cancer Patients in Bangalore city (2010) among 10 major types of cancer diseases

Type of Cancer	Cervix	Breast	Oral Cavity	Oesophagus	Ovary	Leukaemia	Thyroid	Pharynx	Stomach	Lymphoma	Other	Total
No.	2458	1424	972	484	476	336	308	210	192	180	1662	8702
%	28.2	16.4	11.2	5.6	5.5	3.9	3.5	2.4	2.2	2.1	19.1	100

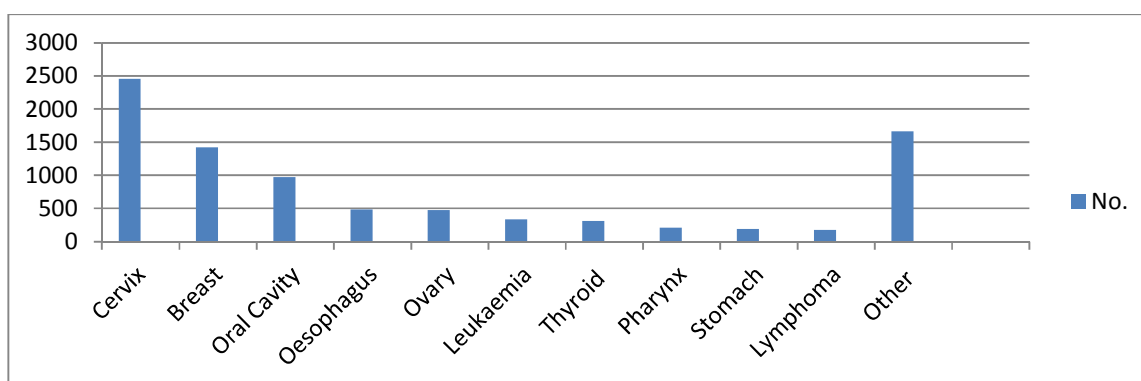


Figure-1

Total Number and Percentage of Women Cancer Patients in Bangalore city (2010) Among 10 Major Types of Cancer Diseases

Table-4
Educational Status of the Women Cancer Patients in Bangalore City (2010)

Type of Cancer	Total No.	Illit.	Pri.	Mid.	Sec.	Hig.	Tech.	College	Oth.
Oral Cavity	972	89.1	1.4	3.7	2.5	1.0	0.0	0.2	2.1
Pharynx	210	65.7	4.8	8.6	4.8	5.7	0.0	3.8	6.7
Oesophagus	484	76.9	2.9	5.4	5.0	5.0	0.0	1.7	3.3
Lung	102	60.8	3.9	3.9	9.8	7.8	2.0	7.8	3.9
Cervix	2458	81.5	2.6	5.6	3.3	3.8	0.0	0.6	2.5
Breast	1424	55.1	4.2	14.6	10.1	6.5	0.8	5.6	3.1
Ovary	476	56.3	4.2	15.1	15.1	3.8	0.8	1.7	2.1
Total	8702	68.4	3.9	10.1	7.0	4.4	0.4	2.3	2.6

As I stated earlier in this page that the majority of the women cancer patients are uneducated or partly literate. This is being proved in the table no. 3. The educational status of women cancer patients for selected types of cancer is given in the below table. 68.4% of the women patients are illiterate among the total number of registered women cancer patients. When the educational levels among women for particular type of cancer are considered, the percentage of illiterates were more in Oral Cavity cancer (89.1%), Pharynx cancer (65.7%), Oesophagus cancer (75.9%) compared to Breast cancer (55%) and Ovary cancer (56.3%). Here we can observe that the numbers of illiterates are high among oral cavity women cancer patients. Hence it shows the co-relation between lack of education and chewing gutka or paan. Among the educated women the oral cavity cancer disease is less compared to uneducated.

In general, it is also evident that the majority, 68% of the women cancer patients were illiterates and it proves that the lack of education is being the sole and major reason for the existence of cancer disease among women. Therefore the Govt.-central or state should consider this phenomenon quite seriously and has to provide education along with medical awareness to the girl children in India.

As the table below shows more than 81 percent of the women patients are married, only 5 percent are unmarried and 12 percent are widow. This shows that majority of the women cancer patients are married. Hence among the married women the cancer disease is more compared to any other category. This shows that particularly unmarried, young girls may not be addicted to tobacco products.

And more importantly majority of these married women's life styles contribute more to their cancer disease. Mainly majority of them stay in their respective houses, not going outside for the work and work quite less compared to outside working class women. Along with constant watching of television and bad eating habits increase obesity among these women which ultimately lead to the cancer disease. Hence with adopting good health habits like constant exercises, less watching television, examining their health and body frequently, having good medical care can present cancer disease among these married women.

Table-5
Marital Status of the Women Cancer Patients in Bangalore City (2010)

Marital Status	No.	%
Unmarried	474	5.4
Married	7108	81.7
Widow	1076	12.4
Divorced	10	0.1
Separated	30	0.3
Unknown	4	0.0
Total	8702	100

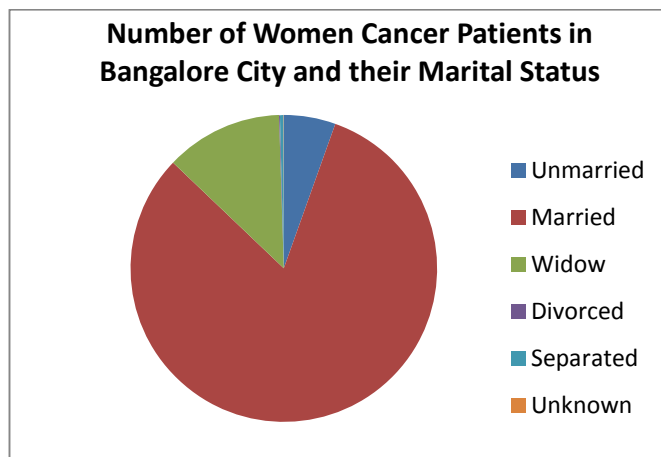


Figure-2
Marital Status of the Women Cancer Patients in Bangalore City (2010)

The table below depicts the number and percentage of women cancer patients seen in different religious groups. About 90 percent of the total cancer cases are Hindus, about 7.6 percent belonged to Islam religion and only 2 percent of the cancer patients were Christians.

Table-6
Religious Status of the Women Cancer Patients in Bangalore City (2010)

Religion	No.	%
Hindu	7842	90.1
Muslim	660	7.6
Christian	178	2.0
Sikh	6	0.1
Neo-Buddhist	6	0.1
Others	8	0.1
Unknown	2	0.0
Total	8702	100

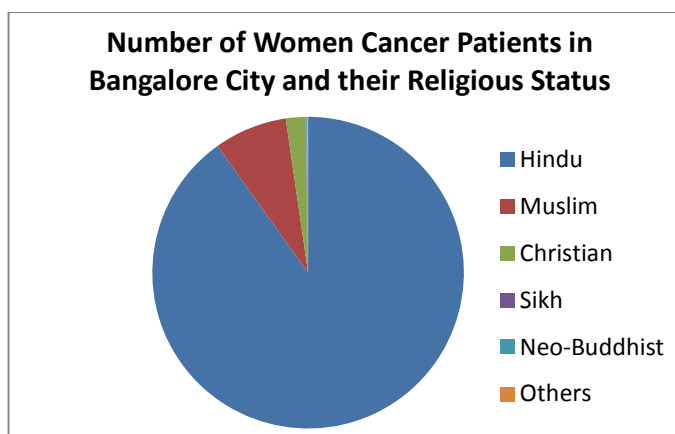


Figure-3
Religious status of the Women Cancer Patients in Bangalore City (2010)

Table-7

Proportion of Oral, Breast and Cervix cancers among Women Cancer Patients during the period of 2000 -2010

Year	Total	Cervix		Breast		Oral	
		No.	%	No.	%	No.	%
2000	7070	2762	39.1	796	11.3	134	13.2
2001	7034	2588	36.8	732	10.4	1028	14.6
2002	7436	2668	35.9	836	11.2	1106	14.9
2003	7118	2528	35.5	868	12.2	976	13.7
2004	6690	2466	35.6	802	11.6	986	14.3
2005	6928	2460	35.5	850	12.3	964	13.9
2006	12372	2690	32.1	1182	14.1	100	12.1
2007	7758	2542	32.8	1158	14.9	924	11.9
2008	8608	2634	30.6	1242	14.4	1022	11.9
2009	8900	2702	30.4	1328	14.9	1010	11.3
2010	8702	2458	28.2	1424	16.4	972	11.2
Total	146524	53994	36.85	17744	12.1	19302	13.2

The table below indicates the proportion of Oral, Breast and Cervix cancer diseases among women cancer patients during the period of 2000-2010 in Bangalore city. Among the major types of cancer Cervix, Breast and Oral cancer stand in the highest. Here an analysis has been made to know the percentage of women cancer patients particularly among these three cancer diseases. As the data shows, the number of cases for Cervix cancer has decreased significantly from 2000 (39.1%) to 2010 (28.2%). But the number of cases for Breast cancer has steadily increased from 2000 (11.3%) to 2010 (16.4%). The number of cases in Oral cancer registered during the period of 2000 – 2010 has remained unchanged. Here in this table as we can see the decline in registering cases under Cervix cancer since 2005.

Conclusion

In the present study an attempt is made to understand the conditions of the women cancer patients in Bangalore city. As the analysis shows that the prevalence of cancer disease among women is more comparing to men in Bangalore and Cervix cancer (28.2%) and Breast cancer (16.4%) constitute for more number of women cancer patients among the major 10 types of cancer diseases. When the educational levels among women for particular type of cancer are considered, the percentage of illiterates were more in Oral Cavity cancer (89.1%), Pharynx cancer (65.7%), Oesophagus cancer (75.9%) compared to Breast cancer (55%) and Ovary cancer (56.3%). In general, it is also evident that the majority, 68% of the women cancer patients were illiterates and it proves that the lack of education is being the sole and major reason for the existence of cancer disease among women. The majority of the women cancer patients are married. About 90 percent of the total cancer cases are Hindus, about 7.6 percent belonged to Islam religion and only 2 percent of the cancer patients were Christians. As the data shows, the number of cases for Cervix cancer has decreased significantly from 2000 (39.1%) to 2010 (28.2%). But the number of cases for Breast cancer has steadily increased from 2000 (11.3%) to 2010 (16.4%). The findings of the study help to understand the

conditions of the women cancer patients particularly in Bangalore city and in general in the country and also help to prevent the cancer disease itself.

References

1. Abegunde D., Mathers C. and Strong K., The Burden and Costs of Chronic Diseases in Low-Income and Middle-Income Countries, *The Lancet*, **370**, 29-38 (2007)
2. Anand P., Ajaikumar B.K., Sundaram C. and Bharat B. A., Cancer is a Preventable Disease that Requires Major Lifestyle Changes, *Pharm Res.* **25**, 2097-2116 (2008)
3. Bobba R. and Khan Y., Cancer in India: An Overview, *GOR*, **5**, 93-96 (2003)
4. Brayand F. and Moller B., Predicting the Future Burden of Cancer, *Nat. Rev. Cancer*, **6**, 63-74 (2006)
5. Das B.P., Cancer Pattern in Haryana; Twenty-One Years Experience, *Health Administrator*, **17**, 29-49 (2005)
6. Dinshaw K.A. and Shastri S.S., Cancer Control Programme in India: Challenges for the New Millennium, *Health Administrator*, **17**, 10-13
7. Doll R. and Peto R., The Causes of Cancer: Quantitative Estimates of Avoidable Risks of Cancer in the United States Today, *J. Natl. Cancer Inst.*, **66**, 1191-308 (1981)
8. Doyal Lesley, What Makes Women Sick, London, *Macmillan Publications*, (1995)
9. Gajalakshmi J., Swaminathan R. and Shanta A., An Independent Survey to Assess Completeness of Registration: Population Based Cancer Registry, *India. Asian Pac. J. Cancer Prev.*, **2**, 179-83, Chennai, (2001)
10. Giddens Anthony, Sociology, *Wiley India Publications*, (2008)

11. Malkan G. and Mohandas K.M., Epidemiology of Digestive Cancers in India, *Indian J. Gastroenterol*, 16, 98-102 (1997)
12. Manjunatha S., The Usage of Social Networking Sites Among the College Students in India, *Int. Res. J. Social Sci.*, 2(5), 15-21 (2013)
13. Manjunatha S., A Sociological Study on the Influence of Social Networking Sites on the Interpersonal Relationships of College Students in Bangalore and Mysore Cities of India, *Int. Res. J. Social Sci.*, 2(6), 12-19 (2013)
14. Marimuthu P., Projection of Cancer Incidence in Five Cities and Cancer Mortality in India, *Indian J. Cancer*, 45, 4-7 (2008)
15. Murray C.J. and Lopez A.D., Global Health Status in Developing Countries: Global Burden of Diseases and Injuries in SEARO, *Harvard School of Public Health*, 1 and 2, (1996)
16. Murthy N.S. and Mathew A., Cancer Epidemiology; Prevention and Control, *Curr. Sci.*, 4-25, (2004)
17. Nandakumar A., Consolidated Report of the Population Based Cancer Registries; Incidence and Distribution of Cancer, *National Cancer Registry Programme, Indian Council of Medical Research*, 1990-96; New Delhi, India, (2001)
18. Nettelton Sarah, *The Sociology of Health and Illness*, Cambridge Publications, (1995)
19. Parkin D.M., Pisani P. and Ferlay J., Estimates of the Worldwide Incidence of Twenty-Five Major Cancers in India, *Int. J. Cancer*, 1990, 80, 827-841 (1999)
20. Roa D.N., Ganesh B., Rao R.S. and Desai P.B., Risk Assessment of Tobacco, Alcohol and Diet in Oral Cancer: A Case-Control Study, 58, 469-73 (1994)
21. Sumathi B., Ramalingam S., Navaneethan U. and Jayanthi V., Risk Factors for Gastric Cancer in South India, *Singapore Med. J.*, 50, 147-150 (2009)
22. Wahi P. N., Kehar U. and Lahiri B., Factors Influencing Oral and Oropharyngeal Cancers in India, *Brit. J. Cancer*, 19, 642-60, (1965)