

Research article Available online www.ijsrr.org ISSN: 2279–0543

# International Journal of Scientific Research and Reviews

# Breast Cancer Awareness Among Christian and Muslim Women in Mangalore City: an Analysis

# E. Thippeswamy<sup>\*</sup>

Field Marshal K. M. Cariappa College Madikeri (A Constituent College of Mangalore University) Kodagu (District) 571201 Karnataka Email:ethiipeswamy@yahoo.com Mobil:9448639972

## ABSTRACT

Health is an important component of human development index which significantly contribute to productivity and progress of the economy. Increase in economic growth of the country offered various goods and services which are closely associated with several kinds of health problems never heard before. Breast cancer is the most common invasive cancer in women and second main cause of cancer death in women after lung cancer. Field survey was conducted during the month of January 2018 to examine the level of breast cancer awareness among women belonged to Muslim and Christian community. The pre tested schedules were used to collect the primary data from 60 sample respondents. It consists of 30 respondents from Muslim community and remaining 30 from the Christian community. The results of the study indicated that age of the respondents ranges from 19 to 25 years and the higher percentage of women belonged to Muslim community were married whereas it was lowest among Christian women. Awareness about medicines was found to be more among women belonged to Christian (76.7%) community than the Muslim women (6.7%). It was also found that the level of awareness about availability of alternative medicines was more among Christian women than the Muslim women. Christian women were well aware of different types of cancers compared to their counterparts in the Mangalore city. The level of awareness regarding methods of detention of BC was high among Christian women than the women belonged to Muslim community. Finally, the level of awareness about availability of alternative medicines was also found to be more among Christian women compared to the Muslim women.

**KEY WORDS:** Lump, Flaky, Palate, Mammography And Oncologists.

## \*Corresponding author

## Dr. E. Thippeswamy

Associate Professor of Economics, Field Marshal K. M. Cariappa College Madikeri (A Constituent College of Mangalore University) Kodagu (District) 571201 Karnataka Email:ethiipeswamy@yahoo.com Mobil:9448639972

#### **1.BACKGROUND**

Breast cancer can occur in both men and women however it is most common kind of cancer in women. It is estimated that 1 in 8 women born in the United States today will get breast cancer at some point of time in their life. India with a population of 1.2 billion is the most populous democracy in the world. Although the focus of public health has been mostly on infectious diseases in the developing countries, non communicable disease like cancer also take an increased toll on resources<sup>1</sup>. The breast cancer is the second most common cancer in women with an estimated annual incidence of 0.145 million and mortality of 0.070 million, as reported in 2012<sup>2</sup>. Many women can survive breast cancer if it is found and treated early as well as increase in public awareness about the importance of early detection of breast cancer. According to National Cancer Registry Programme (NCRP) recent report for the 2008, the load of breast and cervical cancers together was 23.6 to 38.7 percent of total cancers in North Eastern States while in all the other states these two cancers contributed to 35.2 to 57.7 percent of the total cancers<sup>2</sup>. Unlike other cancers, breast cancer is eminently treatable if detected at an early stage. However, there is a need for culturally appropriate breast cancer education and intervention strategies. Breast cancer accounts for 19 to 34 percent of all cancer cases among women in India. There is a high mortality due to late stage diagnosis as patients usually present at an advanced stage because of lack of awareness and non-existent breast cancer screening programmes.

Though we celebrated October is Breast Cancer Awareness Month, still a large proportion of population in India unaware about the signs of cancer disease. Symptoms of breast cancer are; a lump or pain in the breast, thickening or pain in breast, irritation or dimpling of breast skin, redness or flaky skin on the breast, pulling in of the nipple or pain in the nipple area, fluid other than milk from the nipple especially blood and a change in the size or shape of the breast<sup>4</sup>. The 'low cancer awareness', also referred to as 'awareness deficit' or 'scarcity of awareness' among women, the presence of stigma, fear, gender inequity and reduced engagement in screening behaviours, such as breast self-examinations, contribute to high mortality rates. Continuing medical education programmes with enhanced emphasis on breast cancer in the curricula of nursing at institutional level and other healthcare training institutions should be a priority for women's health in the country. Across the world, breast cancer is the leading cancer amongst women. It accounts for about 14 percent of new cancer cases detected in India. The guidelines now suggest that women as young as 30 years should be given the right information about breast cancer. Women between the ages of 40 and 60 years should be clinically screened, at least once every three years. In this backdrop, the present study has undertaken to verify the breast cancer awareness among Muslim and Christian women with special reference to Mangalore city in Karnataka state.

# 2. MAJOR TYPES OF CANCER IN INDIA

According to WHO's Cancer Report<sup>5</sup> in India, lung, oral, lip, throat and neck cancers are the most common among men while women suffer more from cervix, breast and ovarian cancers. A group of some India's leading oncologists have developed new guidelines to help screen for and detect the top three cancers in the country as early as possible. These are breast cancer, cervical cancer and oral cancer.

**2.1. Breast cancer:** Across the world, breast cancer is the leading cancer amongst women. It accounts for about 14 percent of new cancer cases detected in India. Many oncologists also believe that women should be made aware of the genetic factors that contribute to this cancer so that they can voluntarily follow a regular screening schedule. However, "over-testing" is not the answer to the problem of detecting breast cancer and this is why education and accurate information become so critical.

**2.2.***Cervical Cancer:* Cervical cancer, caused by the human papillomavirus (HPV), is the second most common cancer among Indian women and accounts for roughly 12 percent of all new cancer cases diagnosed each year. Several developed countries have seen a significant drop in cervical cancer cases in the last 40 years, thanks in part to effective pap-based screening programmes. Such a screening programme would be challenging to implement in India because of the cost and personnel needed.

**2.3.** *Oral cancer:* Globally, oral cancer is not very common, but in India, it accounts for about 7 percent of all new cancers diagnosed annually. Oral cancer includes cancers of the lip, mouth, palate, inner cheek, and most of the tongue. This is ascribed to the Indian habit of chewing betel leaf and nut, using smokeless tobacco, cigarettes, bidis and alcohol abuse. The guidelines recommend that those who are at a high risk of these cancers (who use tobacco products or chew pan) should be screened every three years, especially in the age group of 30 and 60 years.

# **3. REVIEW OF LITERATURE**

Review of research articles helps researchers to understand the concept of cancer disease, objectives set in the study, methodology adopted and more importantly to identify the research gap in different studies. In this section, therefore, the review of literature related to present topic was undertaken here as under;

Breast Cancer (BC) incidence is growing in younger age and elder women population not only in developed countries even in developing countries like India the incidence of breast cancer is very high especially in rural women. Poverty, lack of education, shortage of screening facilities, advanced stages at diagnosis and gender inequality in healthcare activities etc.., are some of the important factors contribute to increasing in breast cancer incidence in the country. A study was carried out to identify the level of knowledge to understand the awareness of breast cancer among tribal women in the Nilgiris District of Tamil Nadu. The sample was collected from both married and unmarried women in the age group of 18-70 years. 40 women were randomly selected by using lottery method. Results of the study showed that the awareness regarding the breast cancer was relatively poor. However, there is significant association between the age, marital life, education level and the level of awareness.

The knowledge and practices about breast cancer among women in Dhaka. Data were collected from 250 female respondents by a pre-structured questionnaire in different locations of the country. The study indicated that breast cancer was known to 70 percent women and 74 percent of the respondents were married and 87 percent of the respondents had children. Knowledge about sign, symptoms, diagnosis and treatment was good among the women. However, the 21 percent of women had knowledge about performing breast self-exam and 17 percent had heard about mammography. Overall, to controlling the morbidity and mortality rate of breast cancer we should increase the level of knowledge.

Inadequacy of knowledge regarding breast cancer among a high proportion of female university students and on knowledge about the risk factors, warning signs and methods for early detection of breast cancer. Most frequent misconception reported was "treatment for breast cancer affects woman's feminity". The majority of the participants (more than 70%) correctly identified personal and family history of breast cancer as risk factors, lack of knowledge regarding warning signs of breast cancer was noticed in more than 40 percent of participants for most of the signs listed in the study. However, lack of knowledge was noticed among a large proportion regarding the modifiable risk factors for breast cancer. Only 35 percent knew about the benefit of longer breast feeding in reducing the risk of breast cancer. The proportion of those who knew that obesity, lack of physical activity and cigarettes smoking increased the risk were 53 percent 55 percent and 65 percent respectively.

In another study, a total of 90 young females were selected for examining the changing trends of breast cancer awareness in young females of north India. Of these 90 respondents, 49 (54.44%) belonged to the 18-25 years age group followed by 22 (24.44%) were in the 26-30 years group and 19 (21.11%) belonged to the 31-35 years group. In the study, 73 out of the 90 young females were educated at least up to secondary school and were aware of the basic signs and symptoms of BC in particular. Although only a few patients knew the methodology of breast self-examination and they were keen to learn and demonstrated satisfactory compliance on follow-up. Owing to the improved education levels and awareness, the young rural females are more informed about breast related

symptoms and are seeking proper care for the same. In another study, BC among Indian women accounts for the second most common cause of cancer. Although the incidence in urban areas is increasing, the rural India is notorious in presenting at an advanced stage that accounts for 50-70 percent of the cases. Lack of awareness regarding the disease coupled with no affordability or non availability of facilities for early detection and treatment are some of the major determinants of breast cancer.

A literature review was undertaken to evaluate the awareness levels of risk factors for breast cancer among Indian women and health professionals. The study revealed that low breast cancer literacy with regard to risk factors among Indian women, irrespective of their socio-economic and educational backgrounds, with little correlation between awareness levels and strength of evidence of the risk factors. It was found no increase in the cancer literacy over time; low levels of awareness were consistently observed for important risk factors such as age at menarche, age at menopause and age at birth of first child in the general population. Relatively low and wide variation in awareness of risk factors for breast cancer among women in India over the 8-year period of publications, even as breast cancer became the most common cancer in the country. Women more commonly believed that unhealthy habits related to alcohol and tobacco consumption were more important risk factors than reproductive history which is a much stronger determinant of breast cancer.

Internet was conducted to examine the breast cancer awareness among urban Indian women. The study was found that nearly 43 to 85 percent of women had knowledge of breast cancer symptoms. More than 50 percent of women mentioned about reporting to doctor within a month of detection of changes in breast and most of the women didn't feel embarrassed or apprehensive or worried about visiting a doctor if required. The level of awareness among educated urban females was not satisfactory. As far as awareness about self-checking of breasts, 42.4 percent rarely/never did it and 25 percent didn't know about it at all; however, the highest frequency of checking was once a month reported by 19.8 percent women whereas 71.7 percent women were aware of breast cancer screening procedure. Finally, the probability of taking second opinions before sending responses always remains in absence of a personal meeting.

A study was undertaken to analyze the women's awareness of cancer symptoms. The study indicated that the majority of women are able to recognize the more common cancer symptoms when provided with a list, but are unable to recall symptoms when asked to name warning signs of cancer. Symptom awareness was associated with higher educational attainment, higher income and a member of the dominant cultural group. The association with age was varied and the level of awareness of general cancer symptoms appearing to be higher among older women. Awareness of breast and gynaecological cancer symptoms specifically appeared to be lower among older women. Further, the communication campaigns to increase women's awareness help to detect the many cancers symptoms. The increasing awareness of cancer symptoms at a population level may reduce patient delay in help-seeking by enabling women to recognize that their symptoms may represent a significant medical condition.

The awareness of breast cancer in women of an urban resettlement Colony was reported by Somdatta and Baridalyne. A total of 333 women were selected and contacted for the study. Out of the 333 women interviewed, eighty-eight percent were aware of cancer as a disease however only about half of women were aware of breast cancer. It was found that the proportion of women who were aware breast cancer increased as the literacy status increased, and this was statistically significant. Similarly, those who belonged to higher socio economic status were more aware about breast cancer as compared to those belonging to a lower socio economic status. Only 185 (56%) women were aware of breast cancer; among them, 51 percent knew about at least one of the symptoms, 53 percent were aware that breast cancer can be detected early and only 35 percent mentioned about risk factors. Awareness about breast cancer is low amongst women in this community. There is a need for awareness generation programs to educate women about breast cancer, propagation of correct messages and promote early detection of breast cancer. This study has shown that women of this resettlement colony have poor knowledge about breast cancer be it about risk factors, warning signs, or early detection procedures.

Breast and cervical cancers in India with the objective to compute risk of breast and cervical cancers using updated data from different cancer registries of India and its trends. Data on incidence rates of breast and cervical cancers were obtained from six major cancer registries of India for the years 1982-2008 and from the recently initiated cancer registries. The final results of this trial when available may provide some leads in early detection of the disease and on likely impact on cancer mortality. In the meantime educating women about the importance of breast changes and life-style modifications through mass communication and implementation of feasible screening programs at community level for these two cancers is the immediate need.

#### 4. RESEARCH GAP

Breast cancer in women is a most important health burden for both developed and developing countries. It is the second most common cancer in the world and the most common cancer among women. Review of research articles focused on various types of cancer and the symptoms of the cancer in general and breast cancer in particular. Several studies reported the breast cancer awareness among rural and urban women was depending upon socio economic conditions. Education is an important variable because education has helped to raise awareness of breast cancer and hence education significantly and directly associated with the level of awareness of breast cancer. Majority of the studies found that the lack of early detection of breast cancer signs led to increase in mortality rate all over the world. It was also observed mixed results from the studies that there is difference in the level of breast cancer awareness among rural and urban women. A few studies reported that level of awareness of breast cancer was more among rural women than the urban women in the country. However, there is a dearth of studies regarding the caste wise, religion wise, inter religion based, rural versus urban regarding the level of awareness of breast cancer among mural the level of awareness of breast cancer among Muslim and Christian women in Mangalore City with the following objectives.

## **5. OBJECTIVES OF THE STUDY**

The study has been undertaken on the basis of specific objectives. Primary objective of the study is to examine the awareness of different types of cancer in general and the level of breast cancer awareness among Muslim and Christian Women in Mangalore City in particular. Finally, the study also intended to suggest some measure to increase the level of breast cancer awareness in women.

#### 6. METHODOLOGY OF THE STUDY

Primary and secondary data have been collected for verification of the research problem and hence the present study was based on both primary and secondary data. Well structured and pre tested schedules were used to collect the information from respondents through the field survey conducted during month of January 2018. Total 60 women sample respondents were randomly selected for this study from Mangalore City. Out of 60 women sample respondents, 30 women respondents were belonged to Muslims community and remaining 30 sample respondents were selected from Christian Community. Secondary data related to the study has been collected from research articles published in peer reviewed journal, Central and State Government reports, WHO Reports. Health and Family Welfare Departments of Central and State Governments Research Reports, Annual Reports etc. Published and unpublished research reports of the various stake holders in the health sectors as well as reports published in News Papers and Magazines are also collected for the verification of the current research problem.

## 7. SCOPE AND LIMITATIONS OF THE STUDY

Present study covers only the Mangalore city and it is confined to Mangalore. Hence, the scope of the study is limited to the Mangalore urban. It is also intended to know the level of awareness about different kinds of cancer in general and more importantly the breast cancer awareness related to women belonged to the minority community. Due to lack of adequate medical knowledge, only common perception of the respondents regarding breast cancer responses of the respondents collected and analyzed in this study. Respondents selected in this study are neither cancer patients nor any earlier experience in breast cancer. There are only common respondents and tested their level of knowledge regarding cancer.

#### 8. RESULTS AND DISCUSSION

In this section, the results of the study have been presented and discussed according to the objectives set in the study. Therefore, results of the study are discussed in the following sub headings here as under;

#### 8.1. General Profile of the Sample Respondents

Socio economic conditions of the respondents are presented here which is necessary to understand the respondents' family background and level of knowledge regarding the cancer. In this study, the respondent means not the senior member of the family but one who gave the response to the schedule is considered as a respondent. Age, marital status, education, occupation, size of the family and household income are considered for general profile of the respondents. The information related to socio economic conditions of respondents has been collected and presented in the table 1.

Age of the respondents' ranges from 19 years to more than 25 years and therefore the respondents are categorised as those up to 19 years, followed by between 20 and 24 years and finally more than 25 years. Overall category consists of both Muslim and Christian women. In the overall category, majority of respondents belonged to the age between 20 and 24 years followed by 19 years and more than 25 years. Therefore, it was inferred that the young age (Up to 19 years) and middle aged (20 to 24 years) women from both the community participated in the study. Out of 60 sample respondents, more than 56.7 percent of respondents were unmarried and remaining 43.3 percent are married. In the disaggregate category, out of 30 Muslim women, 20 women were found to be unmarried whereas 16 women belonged to Christian community were found to be married and thus the more married Muslim women participated in this study than Christian women.

Education is an important demographic variable which influences on the status of the family, decision making and awareness about cleanliness, healthcare practices etc. Therefore, the information related to the level of education of the respondents collected and presented in the table 1. Overall category indicated that the majority of the respondents were completed degree education (31) followed by pre university college education (23) and post graduate degree (06). It was interesting to note that the number of respondents completed the post graduation were found to be more among Muslim women (5) than the women belonged to the Christian community (01). Hence,

it could be inferred that the level of education is more among Muslim respondents than the Christian women.

Family size reflects the socio economic conditions of the respondents and hence data related to number of members in the family collected and results are summarised in the table.

Sl.	Particulars	Socio Economic Conditions of Sample Respondents			
No		Muslin Women	Christian Women	Overall	
1	Age of the Respondent				
	i) Up to 19 Years	14(46.7)	12(40.0)	26(43.3)	
	ii) Between 20 and 24 Years	11(36.7)	16(53.3)	27(45.0)	
	iii) More than 25 Years	05(16.6)	02(6.7)	07(11.7)	
	Total	30(100.0)	30(100.0)	60(100.0)	
2	Marital Status				
	i) Unmarried	20(66.7)	14(46.7)	34(56.7)	
	ii) Married	10(33.3)	16(53.3)	26(43.3)	
	Total	30(100.0)	30(100.0)	60(100.0)	
3	Level of Education				
	i) Up to PUC	10(33.3)	13(43.4)	23(38.3)	
	ii) Degree	15(50.0)	16(53.3)	31(51.7)	
	iii) Post graduation and Above	05(16.7)	01(3.3)	06(10.0)	
	Total	30(100.0)	30(100.0)	60(100.0)	
4	Size of Family				
	i) Small Family	14(46.7)	20 (66.7)	34(56.7)	
	ii) Big family	16(53.3)	10 (33.3)	26(43.3)	
	Total	30(100.0)	30 (100.0)	60(100.0)	
6	Occupation				
	i) Employed	17(56.7)	24(80.0)	41(68.3)	
	ii) Other	13(43.3)	06(20.0)	19(31.7)	
	Total	30(100.0)	30(100.0)	30(100.0)	
7	Household Income				
	i) Less than Rs. 50000	19(63.3)	18(60.0)	37(61.7)	
	ii) Between Rs 50000 to 100000	06(20.0)	04(13.3)	10(16.6)	
	iii) More than Rs 100000	05(16.7)	08(26.7)	13(21.7)	
	Total	30(100.0)	30(100.0)	60(100.0)	

Table. 1: General Profile of Sample Respondents

#### Source: Field Survey January 2018. Note: figures in parenthesis are percentage to total

A family in which less than four members are living categorised as small family (<4) and more than four members constituted is termed as big family (>4). In the overall category, the small families (34) are found to be more than the big families (26) however disaggregated data clearly showed the Muslim women (16) were found to be belonged to the big family compared to Christian women (10). It was inferred that the Muslim women prefer the big family to the small families compared to Christian women where they prefer more small families. Occupation is important determinant of socio economic status of women in the society in general and family in particular. In this study, occupation of the respondents was categorised as employed and other because employed means working in public, private and any other informal sector are considered as employed whereas housewives, students were also a part of the survey and hence all of them put in the category of other. It was observed from the study that the majority of the respondents were found to be employed in different activities compared to the others in the overall category. Household income is another determinant of the standard of living and economic status in the society. In the overall category, 67.7 percent of families were found to be having annual income of less than Rs 50000/-followed by middle income (Rs. 50000 to Rs. 100000)and high income household families (More than Rs. 100000). Thus the majority of respondents participated in this study are belonged to the low income households in Mangalore city.

## 8.2. Awareness about different types of cancer

Health awareness is better than the unaware of things because which reduces half of the problems in the life. The level of awareness of different kinds of cancer depends upon the level of education, exposure, interaction with the concerned personnel, sharing the views, reasons for cancer, sharing the symptoms of diseases etc. Therefore, the information about awareness of different types of cancers has been collected from the sample respondents and results were summarised in the table 2. Experts have highlighted the three major kinds of cancers in India on the basis of number of people suffering from the deadly disease such as Breast, Cervical and Oral cancer. Other types of cancer are bladder cancer, colorectal cancer, kidney cancer, lung cancer, lymphoma, pancreatic cancer, prostate cancer, thyroid and uterine cancer.

Sl.		Religion-Wise distribution of Respondents				
No.	Particulars	Muslim Women (30)		Christian Women (30)		
		Aware	Unaware	Aware	Unaware	
1	Breast cancer	18 (60.0)	12 (40.0)	22 (73.3)	08 (26.7)	
2	Cervical cancer	10(33.3)	20(66.7)	26 (86.7)	04 (13.3)	
3	Oral cancer	05 (16.7)	25 (83.3)	19 (63.3)	11(36.7)	
4	Other	06 (20.0)	24 (80.0)	18 (60.0)	12 (40.0)	

Table.2: Awareness of Sample Respondents about Major Types of Cancer

#### Source: Field Survey January 2018. Note: Figures in parentheses are percentage to total

It was observed from the table that the higher percentage of Muslim (60%) and Christian women (73.3%) were found to be aware of breast cancer compared to unawareness of other types of cancer with respect to both the community. Awareness of Cervical cancer was found to be more among Christian women (86.7%) than the women belonged to the Muslim community (33.3%). Similar results were visible in case of Oral cancer and followed by other types of cancer. Hence it could be inferred that the Christian women were well aware of different types of cancers than the Muslim women in the Mangalore city.

#### 8.3. Assessment of Breast Cancer Awareness level among Sample Respondents

Awareness of breast cancer is very important for avoiding fall into deep trouble after inflicted the disease and hence it depends upon the openness of the individual, freely discussing the signs of breast cancer and its consequence with friends and concerned health personnel, using available technology i.e. mobile phone etc. Therefore, data related to the awareness of breast cancer has been collected from the sample respondents and results are presented in the table 3. Awareness about breast cancer among Muslim and Christian women was categorised as general awareness of breast cancer, awareness about symptoms of breast cancer, awareness regarding identifying methods of breast cancer and finally the awareness of breast cancer treatments available in medical field. General awareness of breast cancer includes the incurable, communicable, inherited, only women get it, occurs in old age women and stop of breast feeding at early stages.

It was observed from the table 3 that the higher percentage of Christian women (80.0%) were found to be more awareness about breast cancer is not curable disease compared to the Muslim women (76.7%). In the opposite case the large percentage of Muslim women (23.3%) were not aware about cancer is incurable compared to the Christian women (10.0%). It could be inferred that the majority of women belonged to the Muslim and Christian community perceived that the breast cancer is incurable. It is interesting to note that the level of awareness regarding BC is communicable was found to be lowest among both Muslim (9) and Christian women (6) with respect to not aware of communicable nature of BC. Further, more or less equal percentage of respondents belonged to both the community aware that the BC is inherited however the slightly higher number of Muslim women (12) is unaware about the inheritedness of BC compared to Christian women (11). Majority of women belonged to Muslim and Christian community were found to be higher level of awareness about BC that occurs only among women, inflicted at old age and stopping breast feeding compared to the level of unawareness with respect to similar opinions about BC. Therefore, it was inferred that the women at old age and the stopping of breast feeding at the early stage are the prime reasons for breast cancer.

Awareness of breast cancer symptoms helps the persons to undergo the treatment at an early stage that increases the survival rate and also reduces the risk of life. Three major symptoms of breast cancer were selected in this study for testing the level of awareness of BC such as lump, pain and all breast lumps lead to breast cancer. The level of awareness about the symptoms of BC was found to be lowest among the respondents belonged to the Muslim community whereas it was highest among the Christian community respondents with respect to all the three symptoms of BC. Against this, the level of unawareness was found to be more among Muslim women (60%) compared

to their counterparts with respect to symptom of lump. Further, the not aware about the symptoms of all breast lump is leading to breast cancer was found to be relatively higher with respect to the respondents belonged to the Muslim (52.75) and Christian (53.3%) community. It is interesting to note that awareness of symptom of all breast lump lead to BC was very lowest even among Christian women (46.7%). Therefore it could be inferred that the level of awareness about the symptoms of BC well understood both the communities.

Though the awareness about BC symptoms reduces life risk of cancer, it is not sufficiently contribute to survival of rate and hence the method of BC detention awareness is equally important for increasing survival rate. Therefore, information related to the BC detention methods was collected from the respondents and presented in the table. There are four methods of BC detention selected in this study and tested the level of awareness of respondents belonged to Muslim and Christian. It was observed from the table that the level of awareness of BC detention methods was found to be the lowest among Muslim women compared to their counterparts of Christian community women. Hence, it could be inferred that the level of awareness regarding methods of detention of BC was high among Christian women than the women belonged to Muslim community.

A popular saying is that the precaution is better than cure which is more suitable to medical field than any other. In fact, if fail to recognise the early symptoms of BC; the popular saying would have no meaning. Therefore it is important to know the treatments available for different diseases in general and BC in particular. To test the level of awareness about the BC treatment, three treatments were identified viz. Surgery for BC means partial removal of breast, Operation for BC means removal of entire breast and alternative medicines. It was found from the study that the higher percentage of respondents of Muslim and Christian were aware of the surgery was the treatment available for BC and both community women believed surgery for BC means partial and entirely removal of breast. Therefore it could be inferred that the respondents are misinformed and low level awareness about the treatments available to Christian (76.7%) community than the Muslim women (6.7%) and hence it could be inferred that the level of awareness about availability of alternative medicines was higher among women belonged to Christian community than the Muslim community.

Sl.	Doutionloss	Muslim Women (30)		Christian Women(30)	
No.	Particulars	Aware	Not Aware	Aware	Not Aware
1	General Awareness of BC				
	a) BC is an incurable disease	23(76.7)	07(23.3)	24(80.0)	06(10.0)
	b) BC is communicable	09(30.0)	21(70.0)	06(20.0)	24(80.0)
	c) BC is usually inherited	18(60.0)	12(40.0)	19(63.3)	11(36.7)
	d) Only women get BC	26(86.7)	04(13.3)	25(83.3)	05(16.7)
	e) BC occurs in older aged women	22(73.3)	08(26.3)	23(76.7)	07(23.3)
	f) Stop feeding of milk at the early stage leads to BC	28(93.3)	02(6.7)	27(90.0)	03(10.0)
2	Awareness about BC Symptoms				
	a) BC usually presents as a Lump	12(40.0)	18(60.0)	20(66.7)	10(33.3)
	b) Pain is one of the initial sign of BC	11(36.7)	19(63.3)	18(60.0)	12(40.0)
	c) All breast lumps are BC	13(43.3)	17(52.7)	14(46.7)	16(53.3)
3	Awareness of BC Detention Methods				
	a) Observing Breast is Useful in Early	05(16.7)	25(83.3)	19(63.3)	11(36.7)
	b) Have you heard of CBE*	01(3.3)	29(96.7)	16(53.3)	14(46.7)
	c) Have you heard of BSE**	03(10.0)	27(90.0)	21(70.0)	09(30.0)
	d) Have you heard of Mammography	04(13.3)	26(86.7)	17(56.7)	13(43.3)
4	Awareness about BC Treatment				
	a) Surgery for BC means partial removal of breast	20(66.7)	10(33.3)	18(60.0)	12(40.0)
	b) Surgery/Operation for BC means removal of entire breast	28(93.3)	02(6.7)	20(66.7)	10(33.3)
	c) Alternative health care medicines	02(6.7)	28(93.3)	23(76.7)	07(23.3)

Table: 3 Awareness of Breast Cancer among Sample Respondents

Source: Field Survey January 2018.

Note: Figures in parentheses are percentage to total. \*CBE: Clinical Breast Exam, \*\*BSE: Breast Self Examination.

#### 9. SUGGESTIONS

Large general public including women in India still did not openly discuss and share the information about various deadly diseases and hence it is important to use the mobile phones for sending the health tips and symptoms of different diseases. Sending SMS related to the symptoms of breast cancers, methods of testing the breasts, availability of treatment at hospitals etc significantly contribute to reduce the life risk and helps to create the awareness regarding health and more importantly breast cancer.

There is an urgent need to explore the drivers of raising the level of awareness and remove the disgrace surrounding breast cancer, both in the general population and among health care professionals, as incidence and mortality rates continue to rise. It is evident from the study that the cancer awareness among urban population is not up to the mark and hence mass media like print and electronic media should be used for wide publicity in urban and rural areas to increase the level of breast cancer awareness.

Continuously publicity campaigns must be organised more effectively in rural and urban areas by involvement of educational institutions, local administration and Non Governmental Organisations for increasing the awareness about cancer in general and breast cancer in particular. Organising the jathas, talks, debates and discussions, involvement of medical staff etc encouraged for creating awareness about cancer disease and its effects.

In India, publicity of health related aspects restricted to hospitals and the department of health and family welfare. Majority of the people in India visit theses departments only after the disease or to meet the patients where there information about various diseases published on walls and other means used to create the awareness. Therefore, it is important to use the all the public places such as Bus stands, Railway stations, ports, local government offices, display of information on boards like commercial advertisements at public places etc to create the awareness about health.

## **10. CONCLUSION**

Health is very important component of human development index which significantly contribute to productivity and progress of the economy. Increase in growth of human society offered various goods and services which is closely associated with several kinds of health problems never heard before. Though cancer is well known disease, it has been widely spreading out all over the world and India is no exception. In fact, the level of awareness about cancer and identification of its symptoms reduces the life risk. It was observed from the study that majority of the respondents have not even been heard the different kinds of cancer and available different kinds of treatments in medical field. The large segment of the population especially women misconceived that the breast cancer occurred because of no breast feeding for long period and once breast cancer embraced cannot be cured as well as no treatment for it. Therefore, it is urgent need for increasing the level of awareness by making the involvement of local administration, health and family welfare and NGOs etc. Finally, the health awareness advertisements and display of pictures should not confine to hospitals and offices of the health departments of state and central government.

## **11. REFERENCES**

 Parkin D.M, Brey F, Ferlay J and P. Pisani, "Estimating the world cancer burden: globocan", International Journal Cancer, 2000;94: 153-6.

- Annual Reports 1982-2008, National Cancer Registry. New Delhi: Indian Council of Medical Research; 1985-2010 Online: June 11, 2013, (As seen 22/08/2016). Available from: URL: http://www.ncrpindia.org. Government of India, Ministry of Home Affairs, Office of the Registrar General and Census Commissioner, India http:// www.censusindia.gov.in/. (Accessed 01.17.10).
- 3. Somdatta P and Baridalyne N, "Awareness of breast cancer in women of an urban resettlement Colony" Indian Journal of Cancer, October–December 2008; 45(4).
- 4. U.S. Department of Health and Human Services: Office of Disease Prevention and Health Promotion: National Health Observances. (Online), 2016 October, Available from URL: <u>http://healthfinder.gov/NHO/PDFs/OctoberNHOToolkit.pdf</u>
- 5. WHO's Cancer Report Nov 7, 2016.
- 6. Dr. Deepak Khuntia "3 Most Common Types of Cancer in India and How to Detect Them Early Enough", Vice President, Medical Affairs, Varian Medical Systems. *The BLOG* 01/09/2016 12:12 PM IST | Updated 03/09/2016 1:07 AM IST
- Kamalaveni and J. Santhiya, "Awareness of Breast Cancer among Tribal Women in the Nilgiris District", Proceedings of the 2nd World Conference on Women's Studies, (Online) DOI, 2016 Available from URL: <u>https://doi.org/10.17501/wcws.2016.1108</u> Vol. 1, pp. 62-66 TIIKM ISSN: 2424-6743.
- 8. Naharin Syeed (2011), "A Study of awareness about Breast Cancer and Practice of Breast Self-Examination among female Respondents in Dhaka", Department of Pharmacy East West University. A thesis report submitted to the Department of Pharmacy, East West University, in partial fulfilment of the requirements for the degree of Bachelor of Pharmacy ID: 2011;3:70-022.
- Shatha Al-Sharbatti, Rizwana B Shaikh, Elsheba Mathew, and Mawahib A. Albiate (2012), -Breast cancer awareness among female University students in Ajman, UAE", GMJ, ASM 2012; 1(S2):S36-S45 Gulf Medical Journal.
- 10. Vivek Tiwari, Piyush Shukla and Gourav Gupta, "Changing trends of breast cancer awareness in young females of north India: A pilot study from a rural cancer hospital", International Journal of Medicine and Public Health | Jan-Mar 2014 : 4(1).
- 11. Das S and Patro K. C, "Cancer care in the rural areas of India: A firsthand experience of a clinical oncologist and review of literatures", J Cancer Res Ther 2010; 6:299-303.
- 12. Rao R.S, Nair S, Nair N. S and Kamath V.G, "Acceptability and effectiveness of a breast health awareness programme for rural women in India", Indian Journal of Medical Science 2005; 59:398-402.

- A. Gupta, K. Shridhar a, and P.K. Dhillon, "A review of breast cancer awareness among women in India: Cancer literate or awareness deficit?" (Online) 2015, Available from URL: Journal homepage: <u>www.ejcancer.com</u> European Journal of Cancer, Science Direct 51, 2058– 2066.
- Kazi S. Manir, Anindya Mukhopadhyay and Debanti Banerjee, "Breast Cancer Awareness among Urban Indian Women: An Internet Survey", *IOSR Journal of Dental and* Medical Sciences (IOSR-JDMS) e-ISSN: 2279-0853, p-ISSN: 2279-0861. 2017; 16(1): 88-93 X (January. 2017), (Online) 2015, Available from URL: <u>www.iosrjournals.org</u>
- 15. Jones, S. C. and Johnson, K., "Women's awareness of cancer symptoms: a review of the literature". Women's Health, 2012;8 (5): 579-591.
- 16. Smita Asthana, Sonia Chuhan and Satyanarayana, "Breast and cervical cancer risk in India: An update". (Online) 2015, Available from URL: <u>https://www.researchgate.net/publication/261762298\_Breast\_and\_cervical\_cancer\_risk\_in\_India\_A</u> <u>n\_update</u> [accessed Apr 14 2018]. *Indian Journal of Public Health* 58(1):5-10 · March 2014