

# Assessment of Personal Profile of Breast Cancer Patients

ABDUL SALAM MALIK<sup>1</sup>, KHALIL AHMAD SHAHID<sup>2</sup>, AREEBA NIAZ<sup>3</sup>

## ABSTRACT

**Aim:** To assess the personal profile of breast cancer patients.

**Methodology:** The descriptive study was carried out at Bahawalpur institute of nuclear medicine and oncology (BINO) for the period of one year from January 01, 2016 to December 31, 2016. A Questionnaire Performa was designed for interview of patients. The purposive convenience sample of 84 patients was selected for study. The data was collected from breast cancer patients. The basic medical profile such as height and weight was collected from their file records. Social, Economical, Educational and other variables were included.

**Results:** It was found that 44(52.3%) women were continuing menstrual cycle while 47(55.9%) were from rural areas. There were 52(61.9%) women without Vale (Pardah) and 65(77.3%) were house wives. No awareness of breast cancer was among 52(61.9%). Family history of breast cancer was among 67(79.7%) patients. The majority (53.5%) were obese. Breast self examination was never done by 73(86.9%) but 59(70.2%) had exclusive breast feeding practice. Majority (78.5%) did not use contraceptives and 39 (46.4%) patients belong to lower socioeconomic class. The most patients (64.2%) take meal three times daily and (58.33%) belong to 41-60 years age group while 41(48.8%) patients married at 15-20 years and (89.28%) were not drug addict. There were 52(61.9%) illiterate patients and 40(47.6%) were diagnosed at large nodule stage while 75(89.28%) were vegetarian and given psychological support by their family.

**Conclusion:** The breast cancer patients are more frequently emerging due to the negligence of breast self examination, lack of early radical surgery before metastasis, lack of social support and financial constraints to diagnose this cancer long before complications. The majority was obese, illiterate and house wives with frequent family history of breast cancer.

**Keywords:** Breast, Cancer, Education, Exclusive, Hormones

---

## INTRODUCTION

There are about one million new cases of breast cancer all over the world. It is one of the commonest malignancy in women either married or unmarried and makes malignancy load of 18% of all the female cancers. In England the incidence reaches 2 per thousand women at age 50 years and mortality is the highest in the world. There are 14 thousands deaths each year particularly among women at age 50-64 years most probably by the breast cancer<sup>1</sup>. Many factors related to cause breast cancer are linked to oestrogen because fluctuation of this hormone in life of women under different conditions affect upon the frequency of this cancer. Mutation in minor group of people is one of the factors also which greatly increases the risk of this cancer<sup>2</sup>. Age at menarche menopausal status, use of oral contraceptives, parity,

breast cancer risk among women<sup>3</sup>. Breast cancer women suffer from depression or anxiety due to fear of death. They require psychological support from their family or any other person which mitigate depression significantly to low level<sup>4</sup>.

Ignorance at early stage due to any factor leads to metastasis to all over the body, commonly increases women death rate of any country due to this cancer. However death is less frequent among higher class educated people who are well aware about this dreadful disease. This is because of early alertness and treatment affordability of the upper class which save their life more frequently as compared to other community groups. However death rate can be reduced by community health education and awareness of women at all ages and all community classes by achieving the goal of very early detection and treatment<sup>9</sup>.

## METHODOLGY

A descriptive study was conducted at Bahawalpur Institute of Nuclear Medicine and Oncology ( BINO) Bahawalpur for the period of one year from January 1st to 31st December 2016. The married women with breast cancer, who were diagnosed, surgically operated or with metastasis were selected. All

---

<sup>1</sup>Associate Professor Community Medicine Department, Quaid-I-Azam Medical College, Bahawalpur.

<sup>2</sup>Associate Professor Community Medicine Department, Bakhtawar Amin Medical And Dental College, Multan.

<sup>3</sup>WMO, Bahawalpur Institute of Nuclear Medicine And Oncology, Correspondence to Dr. Abdul Salam Malik,

Email: salammalik62@hotmail.com Cell: 03006846272

addiction and strong family history of breast cancer are the personal profile factors which affect upon the

unmarried females and male patients with breast cancer were excluded. All of these patients were receiving treatment either chemotherapy or radiotherapy after registration from this health care facility. Their name, address, height, weight and other required data was taken from their record files with cooperation and permission from the director of this institute. A Questionnaire Performa was designed for interview from these patients after informed consent with the help of local tetra lingualspeaking auxiliary helping staff to minimize the translation bias during questions and answers. The variables included were age, gender, menarche, menstrual cycle, family planning history, addiction, residential area, education; breast self examination and other personal profile informations. The patients were ensured for confidentiality about use of their personal profile for research purpose only, to reduce the attrition bias. The study was conducted on self finance basis without financial support from any institution. The data was composed and analyzed to draw conclusion and formulate hypothesis.

## RESULTS

It was found that 44(52.3%) women were still continuing their menstrual cycle with breast cancer while 47 (55.9%) were coming from rural areas. There were 52(61.9%) women who were not practicing Vale (Pardah) and 65(77.3%) were house wives.

Unfortunately no awareness about breast cancer was found among 52(61.9%) patients. However family history of this malignancy was present among 67(79.7%) patients. Half of the women (50%) began menses and reached menopause at 13-14 and 46-50 years of age respectively while majority (53.5%) were obese on BMI bases as shown in Table-1.

It was found that 73 (86.9%) patients never do their breast self examination but 59 (70.2%) had exclusive breast feeding practice. Majority (78.5%) of them had never used contraceptives and 39 (46.4%) belong to lower socioeconomic class. The most patients (64.2%) take three times daily meal and belong to 41-60 years age group (58.33%). There were 41 (48.8%) patients married at 15-20 years while majority (89.28%) was not drug addict. There were 52(61.9%) illiterate patients, doing moderate physical activity (42.8%) and coming from >90 kilometer distance (66.6%) as depicted in Table.1 The time of breast cancer diagnosis was inquired. There were 40 (47.6%) who were diagnosed at large nodule stage while 75(89.28%) patients were vegetarian and given psychological support by their family as shown in Table.2 The majority 45 (53.57%) have produced children within 1-2 years after marriage while 28 (33.3%) have produced 3-4 children and 28 (33.3%) were receiving cancer treatment expenses from their husbands only as shown in Table.2.

Table 1: Community demographics of breast cancer cases (n= 84 patients) Mean BMI=27.18

1. Menses		2. Resident		3. Vale/Parda		4. Occupation		5. Aware		6. Family BC	
Yes	No	Rural	Urban	Yes	No	H/wife	job	Yes	No	Yes	No
a=40	b=44	a=47	b=37	a=32	b=52	a=65	b=19	a=32	b=52	a=17	b=67
47.6%	52.3%	55.9%	44%	38%	61.9%	77.3%*	22.61%	38%	61.9%	20.2%	79.7%
7. Menarche age			8. Menopause age			9. Body wt (BMI)**			10- Breast Self Exam		
10-12	13-14,	>14	40-45	46-50	> 50	Thin	Normal	Obese	Never	off/on	Regular
a=20	b=42	c=22	a=23	b=42	c=19	a=1	b=38	c=45	a=73	b=10	c=1
23.8%	50%	26.19%	27.38%	50%	22.6	1.19%	45.2%	53.5%	86.9%	11.9%	1.19%
11. Breast Feed			12. Contraceptive			13. Socio-economics			14. Daily Meal intake		
Nil	Partial	Exclus.	Never	<5yrs	>5yrs	Lower	Middle	Higher	1 time	2 time	3 time
a=9	b=17	c=59	a=66	b=15	c=3	a=39	b=32	c=13	a=5	b=25	c=54
10.7%	20.2%	70.2%	78.5%	27.7%	3.5%	46.4%	38%	15.4%	5.9%	29.7%	64.2%
15. Age of Patient years				16. Age (years) at marriage				17. H/o Addiction			
<20	21-40	41-60	>60	15-20	21-25	26-30	>30	Nil	Alcohol	smoking	Other
a=0	b=28	c=49	d=7	a=41	b=34	c=9	d=0	a=75	b=0	c=3	d=6
nil	33.33%	58.33%	8.33%	48.8%	40.47%	10.71%	0%	89.28%	0%	3.57%	7.14%
18. Education				19. Physical Activity				20. Home distance km			
Nil	5 <sup>th</sup>	10 <sup>th</sup>	Higher	Sedentary	light	Mod.	Heavy	<30 km	31-60	61-90	>90
a=52	b=18	c=11	d=3	a=15	b=18	c=36	d=25	a=17	b=10	c=1	d=56
61.9%	21.4%	13%	3.5%	17.85%	21.42%	42.8%	29.7%	20.2%	11.9%	1.1%	66.6%

\* One digit is written after decimal due to short space, \*\* BMI a=<18.50, b=18.5- 25, c=>25

Table 2: Community demographics of breast cancer cases

21. B. Cancer was known at a= Very early stage b=Large nodule stage c=De-shape breast stage d= After surgery stage				22. Psychological support a=No body b=Religious people c= Family members d= Hospital staff				23. Food taken exclusively? a= Vegetables b= Meat/Fish c= desserts and Fruits d= Oil/butter			
a=29	b=40	c=2	d=13	a=6	b=3	c=75	d=0	a=75	b=9	c=0	d=0
34.5%	47.6%	2.3%	15.4%	7.1%	3.5%	89.2%	0%	89.28%	10.7%	0%	0%
24. First child born after marriage? <1year 1-2 2-3 3-4 4-5 >5years						25. Children (live +dead) have produced? None 1-2 3-4 5-6 7-8 >8					
a=13	b=45	c=11	d=5	e=4	f=6	a=4	b=26	c=28	d=13	e=10	f=3
15.47%	53.57%	13%	5.95%	4.76%	7%	4.76%	30.9%	33.3%	15.4%	11.9%	3.5*
26. Who take care of expenses for treatment of cancer in this hospital? Husband Children Brothers Government Self-income Other sources											
a=28		b=17		c=13		d=18		e=1		f=7	
33.33%		20.23%		15.47%		21.42%		1.19%		8.33%	

\*One digit after decimal is written due to short space.

## DISCUSSION

The breast cancer is one of the leading causes of death among women all over the world. There are many reasons responsible for the death of breast cancer patients. It has been found that there were more than half i.e., 45(53.5%) women with breast cancer who were obese which is the same as quoted in other studies<sup>2,5</sup> as well. There were 13(15.47%) breast cancer women who produced first child within < 1 year after marriage but 45(53.57%) produced first child after 1-2 years time showing sudden up surge wave of breast cancer. It shows that early first birth is clearly protective against breast cancer which is concordant with the findings by other researchers<sup>2</sup> also. Similarly there were only 3(3.5%) women with >8 children, suffering from breast cancer showing protective effect of large number of births which is the same as mentioned by Key TJ<sup>2</sup> also. Breast self examination has never been done by 73(86.9%) breast cancer women which is mentioned in other literature<sup>6</sup> also. It leads to diagnosis at very late metastatic stage.

There were 65(77.3%) house wives suffering from breast cancers. Similarly 39(46%) women were from poor socioeconomic status which is consistent with the similar findings by Yost K<sup>7</sup> who had mentioned that breast cancer risk is attenuated as socioeconomic status rises. This is most probably due to poor economy of house wife women who cannot afford expenses for early diagnosis. It is further supported by our finding that maximum numbers of 28(33.33%) patients were financed for cancer treatment expenses by their husbands only. It was found that 73(86.9%) patients never do their breast self examination which has caused 40(47.6%) women to be diagnosed at late large nodule stage making worse clinical outcome<sup>8</sup>.

The lower income is associated with late stage diagnosis among these women which is the same as mentioned by Clegg LX<sup>9</sup> and Vainshtein J<sup>10</sup> also. There were 52(61.9%) women with no education who make almost half number of breast cancer patients which is similar to the findings depicted in other literature<sup>11</sup> also. There were 4(4.76%) nulliparous while 28(33.3%) were having 3-4 children which is opposite to the other literature<sup>12</sup> describing that married women with no children have high risk.

There were 54(64%) patients taking daily meal three times and 75(89.28%) were taking vegetable diet which shows that majority of women were vegetarian. However Potischman N<sup>13</sup> have observed increased risk of breast cancer among sodas and dessert eaters while Sangrajrang S<sup>5</sup> have mentioned vegetarian to be less sufferers which is opposite to our finding. We have found that 52(61%) women with breast cancer were illiterate. There were 3(3.5%) patients only who were more than secondary school educated, showing sharp decline of breast cancer cases among higher educated women which is the same as mentioned by Martikainen P<sup>14</sup> also. However we have found 47(55.9%) cases from rural area and 37 (44%) from urban population which is less than that of rural area. It is contradictory to Chang CC<sup>15</sup> who had mentioned urban women to be more sufferers from breast cancer.

Vale/parda observing were 32 (38%) women while non-observing were 52(61.9%) which is higher than the previous women. However Imtiaz S and Siddiqui N<sup>16</sup> have described no difference between cases and controls which is different from our study. Personal profiles of women with breast cancer have influence upon the frequency variation of this malignancy. Modifications of these factors through long term strategies can minimize rapid rise of this deadly cancer among women.

## CONCLUSION

The personal profile of breast cancer patients reveal that this cancer is more frequent among women having negligence of breast self examination, common family history of breast cancer, illiteracy, vegetarian diet, obesity and living at long distance from cancer centre. The house wives with lack of early radical surgery before metastasis, lack of social support and financial constraints to diagnose, suffer more frequently from this cancer with complications. We can conclude our hypothesis that removing or reducing intensity and frequency of these factors can decrease burden of this cancer significantly in our community.

**Recommendations:** The breast cancer disease load can be reduced considerably in our society by promoting awareness about very early diagnosis, free medical and surgical treatment of these Breast Cancer patients by the state, reducing hormonal use, changing their socio-economic, educational and marriage life style.

**Limitations of study:** There are limitations of this study such as small sample size, no consideration of death rate of these patients during treatment and no attention to the management of financial crises episodes of patients during long term costly treatment. The male breast cancer patients have not been included.

**Conflict of interest:** Authors have no conflict of interest with any person or organization.

**Acknowledgement:** This research work was supported and encouraged by the Chief / Director of Bahawalpur Institute of Nuclear Medicine and Oncology (BINO) Pakistan. The cancer hospital services of Pakistan Atomic Energy Commission at Bahawalpur are greatly appreciated for facilities to breast cancer patients, making it feasible to approach them in bulk for research work.

## REFERENCES

1. McPherson K, Steel CM, Dixon JM. Breast cancer-epidemiology, risk factors and genetics. *BMJ* 2000 Sep 9; 321(7261):624-628
2. Key TJ, Vorkasalo PK, Banks E. Epidemiology of Breast Cancer. *Lancet Oncol* 2001 Mar;2(3):133-40
3. Mirzota Y, Yamamoto S. Prevalence of breast cancer risk factors in Japan. *Jpn J Clin Oncol* 2012 Nov; 42(11):1008-12
4. Bjorneklett HG, Lindemalm C, Rosenblad A, Ojutkangas ML, Letocha H, Strang P et al. A randomized controlled trial of support group intervention after breast cancer treatment: results on anxiety and depression. *OctaOncol* 2012 Feb; 51(2):198-207
5. Sangrajrang S, Chaiwerattana A, Ploysawang P, Nooklang K, Jamsri P, Somharnwong S. Obesity, diet and physical inactivity and risk of breast cancer in Thai women. *AsianPac J Cancer Prev* 2013; 14(11):7023-7
6. Dunn RA, Tan A, Samad I. Does performance of breast self-exams increase the probability of using mammography: evidence from Malaysia. *Asian Pac J Cancer Prev* 2010; 11(2):417-21
7. Yost K, Perkins C, Cohen R, Morris C, Wright W. Socio-economic Status and breast cancer incidence in California for different race/ethnic groups. *Cancer Causes Control*, 2001; 12(8):703-11
8. Huo Q, Cai C, Zhang Y, Kong X, Jiang L, Ma T et al. Delay in diagnosis and treatment of symptomatic breast cancer in China. *Ann Surg Oncol* 2015 Mar; 22(3):883-8
9. Clegg LX, Reichman ME, Miller BA, Hankey BF, Singh GK, Lin YD et al. Impact of socio-economic status on cancer incidence and stage at diagnosis: selected findings from the surveillance, epidemiology and end results: National Longitudinal Mortality Study. *Cancer Causes Control* 2009 May; 20(4):417-35
10. Vainshtein J. Disparities in breast cancer incidence across racial/ethnic strata and socioeconomic status: a systematic review. *J Natl Med Assoc* 2008 Jul; 100(7):833-9
11. Merkin SS, Stevenson L, Powe N. Geographic socioeconomic status, race and advanced-stage breast cancer in New York City. *Am J Public Health* 2002 Jan; 92(1):64-70
12. Helewa M, Levesque P, Provencher D, Lea RH, Rosolowich V, Shapiro HM: Breast Disease Committee and executive Committee and Council, Society of Obstetricians and Gynaecologists of Canada. *J ObstetGynaecol Can* 2002 Feb; 24(2):164-80; quiz 181-4
13. Potischman N, Coates RJ, Swanson CV, Carroll RJ, Daling JR, Brogan DR et al. Increased risk of early stage breast cancer related to consumption of sweet foods among women less than age 45 in the United States. *Cancer Causes Control* 2002 Dec; 13(10):937-46
14. Martikainen P, Valkonen T. Diminishing educational differences in breast cancer mortality among Finnish women: a register-based 25-years follow up. *Am J Public Health* 2000 February; 90(2):277-280
15. Chang CC, Chung YH, Liou CB, Lee YC, Weng WL, Yu YC, et al. Influence of residential environment and life style on multiple primary malignancies in Taiwan. *Asian Pac J Cancer Prev* 2015; 16(8):3533-8
16. Imtiaz S, Siddiqui N, Raza SA, Loya A, Muhammad A. Vitamin D deficiency in newly diagnosed breast cancer patients. *Indian J EndocrinolMetab* 2012 May; 16(3):409-13.