

## Short Report

### **Battling with breast cancer... addressing the issues**

Saima Amin, Nida Wahid, Bushra Wasim, Shabana Tabassum  
Patel Hospital, Gulshan-e-Iqbal, Karachi.

#### **Abstract**

In the background of the current situation of breast cancer in Pakistan, with its rising incidence and mortality, non affordability and inaccessibility to screening, diagnosis and treatment, Patel Hospital took up the task of addressing these issues at a local level, by initiating an annual free breast camp in the year 2006. In 2008 an inclusion criteria was defined to focus on high risk women for breast cancer. A comparative analysis over a period of three years was done. In the focused camps, in which 28% patients were found to have a positive family history. Most women were symptomatic. Total 11 patients were diagnosed to have cancer after evaluation. Six patients underwent definitive treatment. A problem with lack of awareness, regarding screening and treatment protocols was identified. Family history seems to be an important risk factor in our set up signifying the need to introduce extensive screening programmes.

**Keywords:** Breast camp, Early intervention, Non affordability, Breast cancer.

#### **Introduction**

Breast cancer incidence and mortality vary considerably globally. In general the incidence is high >80/100,000 in the developed regions of the world, however the mortality rate is much lower 6-23/100,000.<sup>1</sup> In Karachi, the Age standardized incidence rate (1998-2002) is 69.1, which is known to be the highest recorded rate in Asia next to the Jews of Israel.<sup>2</sup> The rising trend of breast cancer over the period of 1998-2002(69.1) in comparison to, 1995 to 1997(53.1) is an area of greater concern. This can also partly

be attributed to a better database system. The biggest dilemma among the treating oncologists and surgeons however is not the rising incidence but the late stage presentation of the disease. The Karachi cancer registry, reports that >65.0% of patients present at stages 3 or 4. The exact mortality rate however is unknown, but the disease is responsible for almost 40,000 deaths a year.<sup>2</sup>

Numerous risk factors have been associated with breast cancer, and have been categorized according to the relative risk.<sup>3</sup> The major risk factors for breast cancer, with relative risk of >4.0 include, female gender, age >65yrs, family history of cancer in first degree relatives, previous history of breast cancer, certain inherited genetic mutations, atypical hyperplasia (biopsy confirmed) and dense breast tissue. Relative risk of 2.1-4.0 includes one first degree relative with breast cancer, and high dose radiation exposure to chest. Factors associated with relative risk of 1.1-2.0 include factors associated with circulating hormones: nulliparity until the age of 30years, early menarche (<12years), late menopause (>55years), never breast fed a child, recent use of oral contraceptive (OCP)'s (in last 5years) or Hormone Replacement Therapy (HRT) (in last 10years) and obesity.

Five years survival rate depends highly on the stage of presentation, and also the type of cancer. Prognosis can only be improved through early detection, by adopting screening protocols. However in an underdeveloped country like ours, where even detected cases have affordability issues with treatment, the cost of screening together with the lack of awareness makes it inaccessible for the underprivileged sector.

In the background of the current situation of breast cancer, Patel hospital took up the task of addressing these issues at a local level, by initiating an annual free breast camp for all non affordable patients providing accessibility to screening, diagnosis and treatment.

### Methods

Breast camp was introduced in the year 2006, and initially catered to all women with any breast complain, regardless of age or any other factor. By the year 2008, an inclusion criteria was defined, to make the programme more cost effective and focus the camp on high risk individuals. The inclusion criteria were, age >40 years, positive family history, an abnormal nipple discharge, and a breast lump/mass. The camp was advertised through brochures, leaflets, banners and media. In 2009 a nursing staff was assigned to filter only high risk women, meeting any one of the above criteria, to visit the camp. A self structured questionnaire was designed, which included, risk factors related to breast cancer, including, age, BMI, age of menarche and menopause, age at first child birth, history of breast feeding, use of exogenous hormones, family history of breast cancer, prior history of breast diseases, previous mammograms or ultrasound, practice of self breast examination followed by the symptoms, signs and finally the advised investigations and the treatment offered. The questionnaire was filled individually for each woman visiting the camp. BMI between 25 - <30 was considered over weight, and that of 30 or more was considered obese. Of the four years, three years of data was available for assessment and evaluation. The data collected was comparatively analyzed using SPSS version11.5.

### Results

A total of 108 women in 2007, 140 in 2008 and 77 in the year 2009 were seen in the camp.

Women were categorized according to age. In 2007, most patients were from the younger age group, as compared to 2008 where a higher proportion of people were from the middle age group, and more so in 2009.

Women were further categorized according to the purpose of the visit, in 2007 more women had come in for screening (43.5%), although, a significant number (38.2%) had no known risk factor. In the successive years(marked by defining the target group), most women presented with a symptom, however most women in 2008 and all in the year2009 from the screening group had a known risk factor for breast cancer. High risk group included women positive with any one of the risk factors defined by the American society of breast cancer including, either age greater than 40 years, a positive family history, prolonged use of exogenous hormones, nulliparity until the age of 30, no history or breast

Table-1:

Risks factors	2007	2008	2009
Family hx	14.8	27.8	28.4
Early menarche	5.6	10.4	33.3
Age at1st child?30	4.6	5.6	9.2
No hx of breast feed	22	21	30
OCP	11.1	16.7	11.9
hRT	2.8	1.4	5.1

Table-2:

Suspicious Lesions	U/S	Mammography
2007	03(5%)	2%(1)
2008	06(5.5%)	2.3%(2)
2009	05(10%)	9.8%(5)

feeding, history of radiation exposure, previous history of breast cancer and increased BMI .

Further assessment of the risk factors, revealed more women with positive family history in the year 2008 and 2009.

When asked about self breast examination, only 18% practiced self breast examination.Over all BMI assessment was done over the last two years and 30% of women were found to have a normal BMI, 34.7% were overweight and 28% were obese. Calculation of Post menopausal BMI revealed, >85% in 2008 and 60% in 2009 to be either over weight or obese.

Assessment of the symptoms revealed that in the year 2007 most patients presented with a lump (57.8%) which was predominantly fibroadenomas as supported by the younger age distribution pattern of women. A few cases were reported as lipomas, cysts, duct ectasias and fat necrosis.

In 2008, 41.8% of women presented with a lump, and 35.6% with mastalgia.

In the year 2009 there were still lesser number of patients with lumps (29.8%), interestingly how ever, in both these years, greater proportion of patients were found to be suspected for malignancy.

In the year 2007, 25 women were not offered any investigations because of ineligibility to the screening criteria, however only two such patients were encountered in 2008 and none in 2009.

In 2007 total of 6 fnac's were performed of which two were positive whereas in 2008 of 8 fnac's 5 were positive, one of which underwent definitive treatment. In 2009 fnac's were performed of which four were positive and one inconclusive. All underwent definitive treatment, including MRM, chemotherapy and radiotherapy. One found inconclusive on cytology, was subjected to wide local excision and lymph node sampling followed by radiotherapy.

## Discussion

Breast cancer is a unique disease as its name ties together a multi symbolic organ of the female anatomy and a potentially fatal affliction, the treatment of which commonly is a body mutilating procedure. Because of its special nature breast cancer is shrouded in fears and myths, reaching far beyond the objective clinical understanding of the disease.<sup>4</sup> In a developing country like Pakistan, with a female literacy rate of <25%, structural barriers including lack of facilities, in affordability, poor health motivation, mistrust to cancer treatment, it is beyond any doubt that health care providers at national and local level, should take up the task of resolving these issues to what ever extent they can. A cohort study done by Z. Aziz et al<sup>5</sup> on socioeconomic status and breast cancer survival in Pakistani women concluded a strong association between low socioeconomic sector and advanced disease, delay in diagnosis, limited access to minimum expected treatment, inferior disease free survival, and over all survival.<sup>5</sup> Lack of awareness, is another major issue. Although this was not an exclusive screening camp, the target group did include asymptomatic high risk women. However, when categorized, most women were found to be symptomatic in the last two years. A descriptive study done on third world issues on breast cancer detection at Shaukat Khanum Hospital revealed that most patients received their first mammograms when they already had clearly palpable disease, partly due do economic reasons and mainly because of low level of awareness.<sup>6</sup> Also, several local studies have been conducted to assess knowledge regarding breast cancer detection, concluding unsatisfactory results. This calls for attention towards introducing extensive awareness programmes to help these women understand the whole concept behind screening and early detection. Even at national level treating stage1 disease and introducing extensive cancer screening programmes are most cost effective breast cancer interventions.<sup>7</sup> However, affordability issues for detected cases also needs to be addressed. It is indeed a struggle for women, by women. Female physicians

and gynaecologists, have a wider access to female patients and so, can play a fundamental role in spreading awareness regarding screening, and promoting the practice of breast self examination.

## Conclusion

Defining inclusion criteria did prove to be more cost effective as anticipated. Breast feeding practices, a modifiable risk factor, needs to be promoted. Furthermore raised BMI especially in post menopausal women, seems to be another modifiable risk factor in our population. A significant number of women were found to have a positive family history, signifying the importance to screen high risk women. Mastalgia seems to be a symptom of concern in many patients, highlighting the need to educate women, about the causes and management of mastalgia. Unfortunately, a problem of follow up after detection and treatment was also identified.

## Acknowledgement

Funding for the camps was done by Patel Hospital, for which we are grateful. We acknowledge the help and assistance of all research officers in the breast camp for data collection.

## References

1. Parkin DM, Fernandez LM. Use of statistics to assess teh global burden of breast cancer. *Breast J* 2006; 12: S70-80.
2. Bhurgi Y, Bhurgi A, Nishter S, Ahmed A, Usman A, Pervez S, et al. Pakistan — Country Profile of Cancer and Cancer Control 1995-2004. *J Pak Med Assoc* 2006; 56: 124-30.
3. American Cancer Society. *Cancer facts and figures-2005*. Atlanta: ACS, 1990.
4. Remmennick. The challenge of early breast cancer detection among immigrant and minority women in multicultural societies. *Breast J* 2006; 12: S103-4.
5. Aziz Z, Sana S, Akram M, Saeed A. Socio economic status and breast cancer survival in Pakistani women. *J Pak Med Assoc* 2004; 54: 448-53.
6. Badar F, Faruqui ZS, Ashraf A, Uddin N. Third world issues in breast cancer detection. *J Pak Med Assoc* 2007; 57: 137-40.
7. Groot MT, Baltussen R, Uyl-de Groot CA, Anderson BO, Hortobavayi GN. Cost and health effects of breast cancer interventions in epidemiologically different regions of Africa, north America and Asia. *Breast J* 2006; 12: S81-90.