

# Reasons for Delayed Presentation of Women with Breast Cancer

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## Abstract

**Objective:** The purpose of this study was to determine the reasons for late presentation of women with breast cancer in Rawalpindi and Islamabad. The influence of socio-demographic factors on the major reason for late presentation was also investigated.

**Subjects and Methods:** It was a cross-sectional survey conducted in the surgical departments of different government hospitals of Rawalpindi and Islamabad. Through non-probability consecutive sampling, we included women diagnosed with breast cancer, who, in spite of presence of positive symptoms of breast cancer, delayed seeking medical advice for  $\geq 3$  months. The data was analyzed using SPSS version 20.

**Results:** Out of 100 women (mean age: 47 years $\pm$ 11.2 SD), majority was married (85%), illiterate (53%), housewife by profession (93%), and belonged to rural areas (69%). The first symptom of breast cancer reported by the majority (81%) was a lump. Most of the subjects (62.3%) reported late because they did not consider the symptoms important due to lack of information about breast cancer. This factor was not significantly related to age, primary area of living, education, marital status, and profession ( $p=0.274$ ,  $p=0.415$ ,  $p=0.304$ ,  $p=0.654$  and  $p=0.533$  respectively).

**Conclusion:** Majority of women with breast cancer in our sample delayed seeking professional health care because they did not consider their first symptom of breast cancer significant. This lack of knowledge and information was not significantly related to age, primary area of living, education, marital status, and profession.

**Key words:** Breast cancer, Delayed presentation, Socio-demographic factors, Women

cancer among females. According to GLOBOCAN 2012, 14.1 million new cancer cases were identified in 2012 worldwide, out of which 1.7 million women were diagnosed with breast cancer. Since 2008 estimates, breast cancer incidence has risen by more than 20%, while mortality rate has increased by 14%.<sup>1</sup> Pakistan has the highest rate of breast cancer amongst all other Asian countries (excluding Israel) as over 90,000 women develop breast cancer annually.<sup>2</sup>

The diagnosis of breast cancer in most cases is delayed due to various factors including lack of awareness about the symptoms of breast cancer, hesitancy of females to get themselves examined by male doctors, poverty, and shyness to discuss their problems to spouses or other members of the family. The Pakistani females, especially those belonging to rural areas prefer to go to spiritual healers for therapeutic touch or to traditional herbal medicine practitioners (Hakims), and homeopaths, rather than reporting to allopathic doctors. Ignorance, poverty, illiteracy, lack of resources, disease stigma, use of alternate medicine, and poor access to health care facilities are the key factors for delay in the diagnosis of breast cancer.<sup>3</sup>

Previously, in Pakistan, different studies have been carried out to find the causes of late presentation of women with breast cancer.<sup>3-10</sup> This study was aimed to determine the reasons for delayed presentation in women of twin cities i.e. Rawalpindi and Islamabad, who reported to the government hospitals. The influence of socio-demographic factors on the primary cause of late presentation was also investigated. These results would further supplement the current native data to help devise better measures for earlier detection of breast cancer.

## Subjects and Methods

This descriptive cross-sectional study was carried out in the surgical departments of different government hospitals of Rawalpindi associated with Rawalpindi Medical College namely, Holy Family Hospital, Benazir Bhutto Hospital, and District Headquarters Hospital, Rawalpindi and Nuclear Medicine, Oncology and Radiotherapy Institute (NORI), Islamabad. The delayed presentation was defined as waiting for three or more months to seek help from a physician after

## Introduction

Breast cancer is the commonest malignancy in females all over the world, and second leading cause of death due to

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identification of breast signs or symptoms.<sup>4,11,12</sup> The permission for the study was obtained from the ethical review committees of Rawalpindi Medical College and Allied Hospitals and NORI, Islamabad. The study was carried out from March to April, 2015.

We included all women suffering from breast cancer through non-probability consecutive sampling. These females in spite of presence of a lump or other positive symptoms or signs of breast cancer, delayed seeking any medical advice for at least 3 months. The women, who had breast cancer in stages 1 or 2 (early stage), were excluded.<sup>13,14</sup>

The study participants, after informed verbal consent, were interviewed using structured questionnaires, and their responses were recorded in written forms. We tried to identify the reasons for delay at two levels, i.e. at the level of the patients himself/herself, and at the level of spouse, family, friends, relatives, or peers. The reasons at both levels were suggested based on review of literature and our cultural traditions. The different reasons at the level of the patients were: 1) I did not consider it important due to lack of knowledge and awareness about breast cancer, 2) I was shy of telling someone about my problem, 3) I had serious other family problems due to which I could not give due importance to my symptoms, 4) I did not have enough financial resources to bear the expenses of treatment, 5) I had a fear of diagnosis of serious ailment, 6) I had a fear that the treatment may cause serious side effects and make my life more difficult, 7) Other reasons. The reasons at the level of family or friends were identified from the suggestions given to the patients by their family members or friends. i.e. 1) Use home remedies for symptomatic relief, 2) Wait for some time as symptoms may disappear, 3) Go to spiritual healers for therapeutic touch, 4) Consult traditional herbal medicine practitioners "Hakims" 5) Consult homeopaths, 6) Consult doctors, 7) Consult doctors, 8) Other suggestions.

The data also included information about age, primary area of living (rural, urban), educational status (illiterate, grade 1-5, grade 6-10 and grade > 10), marital status (married, unmarried, divorced, widowed), professional status (house wives, working women), and the first symptom of breast cancer observed (pain, swelling, skin changes, others). The data were analyzed with the help of Statistical Package for Social Sciences V 20 (IBM Corp., Armonk, NY, USA). For all the socio-demographic factors and the responses of queries, frequencies along with percentages were calculated. To evaluate the impact of age, primary area of living, education, marital status, and profession, Pearson chi-square or Fisher's exact tests were used where necessary. A p-value < 0.05 was considered significant.

## Results

A sample of 168 women was initially recruited. Sixty-eight women were excluded because they had breast cancer in stages 1 or 2. The mean age of the final 100 participants was

47 ± 11.2 years (median: 45.5 years) with a range of 25-75 years. Majority of them were married (85%), illiterate

**Table-1: Demographic properties of women with breast cancer who delayed presentation to a health care physician**

Variables	No	%
<b>Age groups</b>		
≤ 45 years	50	50
> 45 years	50	50
<b>Primary area of living</b>		
Rural	69	69
Urban	31	31
<b>Marital status</b>		
Married	85	85
Unmarried	12	12
Divorced	2	2
Widowed	1	1
<b>Reasons why patients did not inform anyone about first symptom (N=69)</b>		
Did not consider it important due to lack of knowledge and information	43	62.3
Shyness	9	13
Other serious family problems were more important	6	8.7
Fear of side effects of treatment	6	8.7
Fear of diagnosis of serious ailment	2	2.9
Inadequate financial resources	1	1.4
Others	2	2.9
Missing	31	
<b>Educational status</b>		
Illiterate	53	53
Grade 1- 5	21	21
Grade 6-10	14	14
Grade > 10	12	12
<b>Professional status</b>		
House wives	93	93
Working women	7	7
<b>The first symptom of breast cancer observed</b>		
Pain		
Lump	12	12
Skin changes	81	81
Others	6	6
Missing	1	1
<b>Suggestions given by spouses, family or friends</b>		
Wait for some time for disappearance of symptoms	2	2.2
Try home remedies for symptomatic relief	1	1.1
Go to spiritual healers	17	18.7
Consult traditional herbal medicine practitioner "Hakeem"	1	1.1
Consult homeopaths	4	4.4
Consult doctors	65	71.4
Others	1	1.1
Missing	9	

(53%), house wife by profession (93%), and belonged to the rural areas (69%). (Table 1) The first symptom of breast cancer reported by the majority was “a lump” (81%) followed by “pain” (12%).

**Table-2: Association of demographic factors with the different reasons for delay in presentation of women with breast cancer (n=69)**

Variables	Did not consider it important due to lack of knowledge and information	Other reasons ??	Total	P-value
<b>Age groups</b>				
≤ 45 years	17	13	30	0.274
> 45 years	26	13	39	
<b>Marital status</b>				
Married				0.654
Single (Unmarried, divorced or widowed)	38 5	23 3	61 8	
<b>Professional status</b>				
House wives	39	23	62	0.533
Working women	4	3	7	
<b>Primary area of living</b>				
Rural	29	19	48	0.415
Urban	14	7	21	
<b>Educational status</b>				
Low education (Illiterate and grade 1- 5)	31	21	52	0.304
Better education (Grade 6-10 and grade > 10)	12	5	17	

Only 69 patients answered the question asked for the reasons for delayed presentation at the patients’ level. The bulk (62.3%) reported late because they did not consider it important due to lack of knowledge and information about breast cancer. This lack of knowledge and information was not significantly related to the age-group, primary area of living, education, marital status, and profession. (p=0.274, p=0.415, p=0.304, p=0.654 and p=0.533 respectively) (Table 2)

While exploring response of family members and friends towards the complaints of patients, 91 interviewees answered the question and we found a positive attitude from them as most of them i.e. 71.4% suggested to consult doctors. (Table 1)

## Discussion

Breast cancer, when compared to the Western population, is more common in Pakistan.<sup>5</sup> One in every nine Pakistani women suffers from breast cancer which is one of the highest prevalence rates in Asia.<sup>6</sup>

The mean age of the patients in our study was found to be 47±11.2 years with a range of 25-75 years. This is parallel to the studies carried out in Pakistani women at Karachi and Nawabshah (mean age: 47.5±12.1 years with a range of 25-77 years and mean age: 43.5±10.4 years with a range of 28-80 years). Thus, our sample was a true representative of Pakistani women with breast cancer.<sup>7,8</sup>

Our study showed that majority of the women, who delayed their report of first symptoms of breast cancer, did so because they were unaware of the grave nature of those symptoms. These results are similar to other regional studies. Memon et al. reported that majority of women delayed their consultation with doctors because they considered their symptoms harmless and momentary, and because the symptoms did not affect their routine life activities.<sup>7</sup> Malik et al. also reported lack of awareness as the key factor for delay in seeking medical attention in women with breast cancer.<sup>15</sup> In other countries e.g. Nigeria, Germany, USA, Colombia, and Iran many studies have indicated that majority of the women with breast cancer delayed pursuing professional health care because they lacked knowledge about breast cancer or considered their symptoms harmless.<sup>16-20</sup> Why women have a tendency to consider their symptoms of breast cancer harmless? The answers are suggested by Memon et al. and Lodhi et al.<sup>7,9</sup> They indicated that women, especially in Pakistan, generally are considerate more towards their children, husband or other family members, and hold an overall care-free and casual approach towards their own health. They linger on with their problems unless the problems become unendurable.

The second common reason for women to delay seeking medical attention was shyness of medical examination especially by male doctors. A study by Gilani et al. from the city of Rawalpindi identified that 13.1% of the study subjects showed shyness or unavailability of female doctor as the reason for delayed seeking of an appropriate medical advice.<sup>10</sup> Another Pakistani study by Khan et al. found that 10.6% (n=13) of the studied sample from Northern Pakistan who presented late, felt shy to let their breast examined by male doctors.<sup>4</sup> An Indian Study by Akhtar et al. found shyness as a cause of delay in 22% of the patients with locally advanced breast carcinoma.<sup>21</sup> Altwalbeh et al. found shyness as a motive for delay in 44.6 % of the study sample in Saudi women.<sup>11</sup> Shyness was identified as a significant cause of delay in presentation of breast cancer in many other studies.<sup>22-24</sup>

The influence of age, primary area of living, education, marital status, and profession on the different causes of delay was also evaluated, but, we could not find any significant correlation. Bhosai et al., in a Thai study, abstracted that patient’s socio-demographic factors were not significantly associated with delay in care-seeking of patients with cancer (p>0.05).<sup>25</sup> Another study by Ramirez et

al. suggested no significant association ( $p>0.05$ ) between marital status and patient delays.<sup>13</sup>

On the contrary, many studies have concluded different results. Khan and colleagues discovered that advanced age, low education and low socioeconomic status were significantly associated with a delay in presentation for women with breast cancer ( $p<0.05$  and OR of 2.26, 2.29 with 95% CI: 1.25-4.10 and 1.06-4.94 respectively).<sup>4</sup> Memon et al. also found that marital status and decreased level of education ( $p<0.001$  and  $p=0.002$  respectively) was associated with more prolonged delays.<sup>7</sup> Harirchi et al. suggested that delay among Iranian women with breast cancer was associated with older age, being married, lower income, less education, and residence in small cities.<sup>26</sup> Other studies have identified higher age groups, negative family history, low education, and low socioeconomic status as demographic factors associated with delayed presentation.<sup>27-38</sup>

The findings of this study, and review of related literature endorses the view that women in Pakistan have an alarmingly poor knowledge about breast cancer. Resultantly, they fail to report to the appropriate health professional in the desired time. Thus, they need to be educated about the earliest symptoms of breast cancer so that timely evaluation and intervention be commenced, and mortality related to breast cancer can be reduced. Public health department need to do an enormous job to create awareness among the masses by the help of press and media in this regard.

### **Conclusion**

Majority of women with breast cancer in our study delayed seeking professional health care because they did not consider their first symptom of breast cancer significant. This lack of knowledge and information was not significantly related to age, primary area of living, education, marital status, and profession.

### **Conflict of Interest**

This study has no conflict of interest as declared by authors

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**Authorship Contribution:**

**Author 1:** Conception, Synthesis and Planning of the research, Active participation in active methodology

**Author 2:** Interpretation, analysis and discussion

**Author 3:** Active participation in active methodology,