Original Article

# **Outcome of Breast Lump in**

**Breast Lump** 

# Females attending Surgical Outpatient Department, Jinnah Hospital Lahore

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### **ABSTRACT**

**Objective:** Main focus of this research was to identify the consequence of breast lump in females attending surgical outpatient department, Jinnah Hospital Lahore.

**Study Design:** Observational / descriptive / cross sectional study.

**Place and Duration of Study:** that was conducted at the Outdoor of Surgical Units of Jinnah hospital, Lahore dated 15 April 2016 to 15 May 2016.

**Materials and Methods:** All data was collected by patients through a feedback form that was prepared according to the knowledge of patients about breast diseases. Collected data analyses was made by SPSS version 13 and results was presented in different forms like tables, frequencies and percentages of variables

**Results:** Total sample of 95 patients affected from breast lump taken. All the patients were divided into different age groups. 58 (61.05%) were age group between 16-35 years of age, 31 (32.63%) were between 36-55 years of age and 6(6.31%) patients were between the age group 56 years and above. In our study, 41 % patients had malignant carcinoma of the breast followed by fibroadenoma in 36% and breast accessible 15%.

Most common age group suffering from carcinoma was 26-35 years of the age where it was found to be 13 (31.1%) Fibro adenoma was the most common disease of younger age group age 15-25 years of age.

**Conclusion:** Conclusion of this study is the incidence of breast malignancy, fibro adenoma and inflammatory diseases is greater in our setup. However, there should be breast clinics screening programs so that breast cancer diagnosed at early stage. It is recommended now the surgeons managing patient's age 30 years and above with breast lump should be vigillant and cautious so that early diagnosed and management of malignant breast lump should be carried out.

Key Words: Fine needle aspiration cytology: Breast Lump

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## **INTRODUCTION**

Breast lumps are the supreme presenting complaints in Surgical Outdoor Department of hospitals in Pakistan.<sup>1</sup> About 90% of Breast lump are Benign causing no lethal affects but malignant breast lumps are also in a significant percentage. A strong and affective awareness campaign in general population especially discussion on breast pathologies and their affects and stress on that point to seek medical advice when having any breast lump and breast disease.<sup>2</sup>

Breast is the organ which is associated with femininity and fertility and is a source of nurturing the infants; therefore, any disease in the breast is a very sensitive issue for a female.

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Studies shows that one from every fourth female after puberty suffer with breast disease.<sup>3</sup>

Breast disease may present with nipple discharge, breast pain, asymmetry, nodularity, nipple inversion or as inflammatory lesion but a lump in breast is usual presenting complaints of breast disease.<sup>4</sup> Presentation of breast disease may be delayed due to socioeconomic cultural and religious factors, lack of awareness and knowledge.<sup>5</sup>Breast lump may be either benign or malignant.

Malignancy or breast cancer is a dangerous consequences of any woman with a breast lump, however, most of the reports indicate that majority of the breast lumps show non-proliferative epithelial and benign lesions. 6 In the USA, certain studies have shown that round about 60% of patients having benign breast disease while 10% patients have cancer. Benign breast lumps are caused by two main conditions, fibroadenoma in young women and cyst in pre & postmenopausal women. It is now being increasingly realized that cancer may develop from benign premalignant lesions. Diagnosis of breast cancer at early stage is important for patient survival <sup>7.</sup> Diagnosis is based on complete history, past family history of examination of cancer and physical lump .Ultrasonography for younger women under 35 years of age and Mammogram (MMG) for women more than 35 years are employed. Invasive procedures like FNAC and biopsy are the most common diagnostic procedures that must be used to rule out any malignancy and to save the patient from any unnecessary mutilation in a case of a benign disease. Deaths of females above 30 years of age in USA and Worldwide is high due to breast cancer and breast cancer is the 2<sup>nd</sup> leading cause of death.<sup>8</sup>

In Europe, breast cancer is about 27% of all cancers in females and 1 out of 14<sup>th</sup> female expected to have breast cancer in her life. 26.6% females in Pakistan also suffering from Breast cancer.<sup>9-10</sup> This is why we have conducted this research to further expand our knowledge about outcomes of breast lump in this region.

#### MATERIALS AND METHODS

The data was collected during one month from 15 April 2016 to 15 May 2016 in surgical outdoor Jinnah Hospital Lahore. After verbal consent interview was done. Only females of all age group attending surgical OPD were included while Unwilling patients excluded from this study.

All data was collected by patients through a feedback form that was prepared according to the knowledge of patients about breast diseases. Collected data analyses was made by SPSS version 13 and results was presented in different forms like tables, frequencies and percentages of variables

#### RESULTS

95 females were included in our study. The most common age group 58 (61%) came in surgical outdoor with the complaints of breast lump was 16-25 years of age Table -1.

Out of 95 females, 24 (26%) were unmarried, 71 (74%) married. From all the married population 45(63%) were multiparous while the rest 26(32%) were nulliparous.

Menstrual history revealed that 73(77%) of the females had a regular cycle of 28-30 days. 13 (19%) females were using oral contraceptives and 19(21%) of the females show family history positive for breast cancer.

In our study 30(41%) patients had malignant carcinoma of the breast Followed by fibroadenoma in 27(36%) and breast accessible 11 (15%), table.

Most common age group suffering from carcinoma was 26-35 years of age where it was found to be 13 (31.1%) Fibroadenoma was the most common disease of younger age group age 15-25 years of age.

Females with the positive family history of breast lump were 19(21%) While 76(79%) had no family history of a breast lump. 16(80%) females having positive family history had carcinoma of breast and 5(20%) had fibroadenoma. Out of 76(79%) females having no family history of breast lump 26(34%) had carcinoma of the breast, 32(42%) had the fibroadenoma, 15(20%)

had abscess/cyst, 3(2%) had fibrocystic changes and lipoma. (Table no. 2)

73(76.8%) subjects had regular menstrual history out of which 30(41%) have carcinoma of breast and fibroadenoma, 10(13.6%) have abscess/cyst,2(2.7%) have fibrocystic changes and 1(1.3%) have a lipoma. 21(23%) subjects reported with irregular menstrual history out of which 11(50%) were diagnosed as carcinoma of the breast, 5(22.7%) cases were of fibroadenoma, 5(22%) cases were of abscess/cyst and1(4%) cases were of lipoma. (Table no. 3)

Subjects who had used oral contraceptives are 11(13.68%) out of which 5(46.15%) were used by females having carcinoma of the breast, 4(38.46%) were used by females having a fibroadenoma, 2(15.38%) were used by females having abscess/cyst. 60(86.31%) females did not use oral contraceptives out of which 26(42.68%) were diagnosed as carcinoma of breast,23(36.58%) were diagnosed as fibroadenoma, 9(15.85%) were cases of abscess/cyst, and 2(2.43%) were cases of fibrocystic changes and lipoma. (Table no. 4).

**Table No.1: Age Distribution of Patients** 

Sr. no.	Age group	N	Percentage
1	16-35	58	61.
2	36-55	31	33.
3	56-75	6	6.

**Table No.2: Menstrual History** 

Mens- trual history	CA		Fibro adenoma		Abscess/ cyst		Fibro cystic change		Lipoma	
		N%	N	%	N	%	N	%	N	%
Regular	30	41	30	41	10	14.	2	3	1	1
Irregular	11	50	5	23.	5	23.			1	5

**Table No.3: Distribution According to Marital Status** 

Marital Status	CA		Fibro adenoma		Abscess/ cyst		Fibro cystic change		Lipoma	
		N%	N	%	N	%	N	%	N	%
Married	41	58.	12	16.90	14	20.	2	3.	2	3.
Un -			23	96.	1	4.				
Married										

**Table No.4: Distribution According to Educational Status** 

Educa- tional Status	CA		Fibro adenoma		Abscess/ cyst		Fibro cystic change		Lipoma	
		N%	N	%	N	%	N	%	N	%
Un- educated	25	62.5	8	20	4	10.	2	5	1	2.5
Educated	16	29.09	27	49.9	11	20.			1	1.81

#### DISCUSSION

A palpable lump in breast is a frequent problem for the diagnosis for the surgeons and practitioner. It is said that all breast lumps are malignant until diagnosis made on investigations and pathological examinations. In our

scrutiny, most common were malignant lesions (43.7%), followed by benign lesions including fibroadenoma (36.8%), abscess and cyst (15.7%), fibrocystic change (2.1%), lipoma (2.%). Most common breast disease found in our study was Breast cancer. Similar result was obtained by Isaac and colleagues in research held in tertiary hospitals of Karachi. 11 At Fatima Jinnah Medical College, Lahore A retrospective record review of 4575 breast lump cases were made which consisted of eight years duration showed that frequency of breast cancer was 30%.12Another study of 500 breast biopsies in one year at Aga Khan University Hospital, Karachi showed breast cancer incidence was 40%. Talpur et al reported that 36% of patients lump in breaston investigation having malignant lesions. 13 Which is close to our study. These figures are higher as compared to a study Fleming et at observed at Australia that were 19.6% in the western and developed countries.14 Incidence in the study is more compared to the Europe recommends a greater incidence of breast cancer in the patients presenting to our surgical outdoor. A significant patient's population is noneducated has a little bit awareness of breast disease and breast cancer. In UK and USA the mean age of carcinoma breast is more as compared to our region this is due to differences in our customs, demographic variations and religious influences. Most frequent Histopathological diagnosis in our study was fibroadenoma that was 36.8%. This is higher as compared to USA (18.5%) and England (7.7%) and, but it is lower as compared to the Caribbean Islands of Trinidad (39.3%).15

Talpur and associates described that fibroadenoma was common benign breast lump among the patients at Karachi. A study by Rashid et al that conducted at PIMS Islamabad revealed42.1% patients were having fibroadenoma. Cysts were encountered in 15 patients only, the youngest being 15 years. Breast cysts are generally benign and usually form as a result of the growth of milk glands. Some large cysts feel like lumps. They are most common in premenopausal women in their 30s and 40s. They usually disappear after menopause, but can be found at any age. <sup>16</sup>in our study, the fibrocystic disease was found in 2.1% of all cases. Comparedwith international studies fibrocystic breast diseases which were most common benign breast lesion in United State (33.9%) and England (37%).

In our scrutiny variables age, marital status, contraceptive use, and parity and family history n menstrual history were studied. A woman whose first-degree relative developed disease before age of 50 years and a younger relative when she developed breast cancer are at high risk (Faheem, 2007).

Even though cancer of the breast is strongly age related, mostly patients in this study were young with age below 40 years. In western countries where the majority of carcinoma is seen in the postmenopausal woman and

the mean age is 54 years greater than ourregion. Mostly patients were younger age and premenopausal. Breast cancer is found more among the uneducated women, however, fibroadenoma and breast abscess/cyst are more common among educated women. No case of fibrocystic change is found among educated women. In the research by Isaac and colleagues held in tertiary hospitals of Karachi, it was found that inflammatory diseases are more common in Pakistan due to unhygienic conditions and poverty.

Among the women using oral contraceptive pills, 46.15% developed breast cancer, 38.46% had fibroadenoma and 15.38% had breast abscess. However, among women who never used contraceptive pills 42.7% had breast cancer, 36.6% had a fibroadenoma, 5.9% had breast abscess/cyst, and less than 5% had fibrocystic change and lipoma. In the researchers held by American Cancer society as well various researchers in Pakistan, it was found that the use of oral contraceptives sl increased the chances of breast malignancy. However, the risk of developing breast cancer decreased by stopping the oral contraceptive use. All of the breast cancers are found in married women. This was in accordance with the research of Safina Naheed held by Jinnah University for women in Karachi that 92.1% cases of breast cancer were married women. One reason will be that the age group in which breast cancer is common; women are mostly married by that age. In married women, followed by cancer, 19.71% women had breast abscess/cyst, 16.9% had a fibroadenoma, and less than 3% had fibrocystic change and lipoma. In 96% of unmarried women. fibroadenoma was Fibroadenoma is most common in the 15-25 year of age so, in that age group, mostly women are unmarried. Conclusion of this study is the incidence of breast malignancy, fibro adenoma and inflammatory diseases is greater in our setup. However, there should be breast clinics screening programs so that breast cancer diagnosed at early stage. It is recommended now the surgeons managing patient's age 30 years and above with breast lump should be vigilant and cautious so that early diagnosed and management of malignant breast lump should be carried out.

#### **CONCLUSION**

Conclusion of this study is the incidence of breast malignancy, fibro adenoma and inflammatory diseases is greater in our setup. However, there should be breast clinics screening programs so that breast cancer diagnosed at early stage. It is recommended now the surgeons managing patient's age 30 years and above with breast lump should be vigilant and cautious so that early diagnosed and management of malignant breast lump should be carried out.

**Recommendations:** There should be breast clinics screening programs so that breast cancer diagnosed at early stage. It is recommended now the surgeons managing patient's age 30 years and above with breast lump should be vigilant and cautious so that early diagnosed and management of malignant breast lump should be carried out.

**Conflict of Interest:** The study has no conflict of interest to declare by any author.

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