

## Profiling Breast Diseases Attended in Breast Clinic of A Tertiary Care Hospital

Raful Karim Khan<sup>1\*</sup> Rajib Dey Sarker<sup>2</sup> Md. Nur Hossain Bhuiyan<sup>3</sup>

### Abstract

**Background:** Due to global rise of awareness and bonafide role of multi sector media towards breast diseases, women are becoming concern of any health issues of breast and many of them are attending breast clinics. Besides breast cancer is the second most common cause of cancer deaths in the world. We confidently rely on the triple assessment protocol comprising clinical, radiological and pathological examination to escort the management schedule in any breast disease. However, benign breast lumps are most commonly found, but association with morbidity has to be checked and evaluated accordingly. This study was aimed to profiling the breast diseases attended in breast clinic of a tertiary care hospital. To evaluate and categorized the patients with breast diseases which are referred to Breast and Endocrine Clinic (BEC) of Shaheed Suhrawardy Medical College Hospital.

**Materials and methods:** This is a cross sectional done in Breast and Endocrine Clinic (BEC) of Shaheed Suhrawardy Medical College Hospital from January 2019 to January 2021. 376 patients with breast symptom included in this study. Demographic data, painful breast, nipple discharge, nipple retraction and breast lump were analyzed.

**Results:** During the study period 376 female patients of different age groups underwent in this study who visited the BEC with a breast symptom detected incidentally by themselves or by other physician, lump in 102 individuals. Demographic pictures were framed in the mean age group of patient was  $35.1 \pm 9.2$  where 30% subjects were postmenopausal and the mean BMI picture revealed stat of  $22.5 \pm 2.1$ . Among the afore mentioned objects 154 patients complained of painful breast symptoms of which 64 found with bilateral breast pain, 05 with discharge from nipple and 18 with retracted nipple, 3 with symptoms associating axilla. Breast lump were seen in 61 cases out of which 06 malignant cases were sorted whereas 55 patient came up with benign pathologies.

1. Assistant Professor of Surgery  
Shaheed Suhrawardy Medical College, Dhaka.
2. Assistant Registrar of Surgery  
Shaheed Suhrawardy Medical College Hospital, Dhaka.
3. Associate Professor of Surgery  
Shaheed Suhrawardy Medical College, Dhaka.

**\*Correspondence:** Dr. Raful Karim Khan  
E-mail: rafulronyaz@gmail.com  
Cell : 01752 47 77 45

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**Conclusion:** History quest, proper methods of clinical examination of breast is and histopathology are the most predominating screening procedure to recognize pathologies in breast.

**Key words:** Breast examination; Breast lump; Breast clinic; History; Triple assessment.

### Introduction

To be brief, breast cancer ferociously threatens the lives women being affected, taunting a greater burden and a lower survival rate worldwide.<sup>1</sup> While evaluating a patient at BEC in our facility, we commenced to a sordid picture of women suffering breast cancer. There has been a remarkable rise in the number of patient to whom we offer our service in BEC due to their consciousness about breast cancers. Breast cancer secures its rank as the second most common cancer and is fifth in chronology as the commonest cause of cancer death in the world.<sup>2</sup> 502,000 deaths due to breast cancer was recorded worldwide in 2005 and the picture is becoming alarming annually.<sup>2-3</sup>

Bangladesh is not much away from the hazardous statistics of worldwide breast cancer scenario. And having said that we received awful female death rates of 13 to 17% due breast cancer in Bangladesh as per hospital reports.<sup>4</sup>

We need to follow step-by-step diagnosis procedure which may comprise of mammography, FNAC, USG, but is has to be kept in mind that every element of this assessment procedure aren't without impunity.<sup>5</sup> Majority of patients visiting the OPDs, may diagnosed confidently with proper clinical examination correlating history check boxes even before biopsy and thus a system developed projecting the importance of clinical examination a lot earlier in the nineteenth century.<sup>6</sup> So as the most noninvasive tool of breast disease evaluation, the examination with history is definitely predominating and valuable.<sup>7</sup>

Female patient may come to us with any breast complains, as simple as mastitis or unpleasant sensation in any quadrant of breast. Not all symptoms will take us to disease or pathology. But there has to be an examination protocol that will be honored as rails roads to a certain decision.

And these decisions sorted out from clinical examination criteria will be definitive in making due diagnosis and framing treatment course of malignant diseases with or without surgical treatment, or to avoid unnecessary patient hassles for admission or investigations. Patient benefit is to be prime concern of evaluation protocols for all cases.<sup>8</sup>

Diagnostic sensitivity of clinical examination solely was found to be immensely powerful, around 98%, by Crone Pet et al that inspires us to resume our effort in BEC for maximum outputs from OPD cases.<sup>9</sup> So when we don not have access to modern methods of imaging, we may or have to rely on our perceptions through examination of patients. Mammography, though taking upper hand in evaluating breast symptoms, cannot out run the significance of clinical screening of a female patient with breast issue.<sup>10</sup>

American Cancer Society clearly states that female aging from 20 to 39 should go for this established screening procedure for at least every 3 years and this should be annually for women aging 40 and above.<sup>11</sup> Clinical examination with history may solely contribute in declaring underlying pathologies in case of most of the breast symptoms.<sup>6</sup> So, for early detection of the disease or to get rid of unwanted stress, we should motivate our female patients and their families to ponder over the role of getting in touch to BEC at their feasible opportunities.

To evaluate and categorized the patients with breast diseases which are referred to Breast and Endocrine Clinic (BEC) of Shaheed Suhrawardy Medical College Hospital.

### Materials and methods

This is a cross sectional done in Breast and Endocrine Clinic (BEC) of Shaheed Suhrawardy Medical College Hospital from January 2019 to January 2021. 376 patient with breast symptom included in this study. Demographic data, painful breast, nipple discharge, nipple retraction and breast lump were analyzed.

#### Inclusion criteria

Patient with breast symptom attended in Breast and Endocrine clinic of Shaheed Suhrawardy Medical College.

#### Exclusion criteria

- Patient with prior chemotherapy or breast surgeries.
- Pregnant patients.

- Lactating patients.
- Patients with any preexisting inflammatory or allergic conditions to skin.
- Patients not willing to included in this group.

Clinical breast examination is the physical examination of the breast, comprising of specific points of inspection and palpation of entire breast and regional lymph node.

History allows in understanding the breast symptoms correlating with criteria for pain or discharge, progression of lump, weight loss, personal habits, familial history. Overlooking any point may turn into misguidance to accurate diagnosis. Age, social status, pain, progression of lump, pain, nipple conditions, past medical history, family history and personal history were taken in consideration.

Proper permission was taken for this study from the Ethical Committee of the SSMCH.

### Results

Total 376 patients were nominated considering the inclusion criteria in the BEC under Department of Surgery of Shaheed Suhrawardy Medical College Hospital at Dhaka Bangladesh. We observed mean age were 35.1±9.2 amongst them 30% were postmenopausal with 02% patients provided history of breast cancer.

**Table I :** Socio-demographic features of patient in BEC (n=376)

Age			
		Mean	35.1±9.2
BMI (In kg/m <sup>2</sup> )		Mean	22.5±2.1
		Range	-
Menstrual status	Premenopausal	270	(70.1%)
	Post menopausal	106	(29.9%)
Parity (%)	Nulliparous	112	(29.8%)
	Multiparous	264	(70.2%)
History of OCP (%)	Yes	171	(45.5%)
	No	205	(54.5%)
Positive family history	Yes	06	(1.6%)
	No	370	(98.4%)

Table I shows the mean age of the patient is 35.1±9.2, average BMI 22.5±2.1 kg/m<sup>2</sup>. 70.1% are pre menopausal and 29.9% are post menopausal, 29.8% are nulliparous and 70.2% are multiparous, H/O taking OCP 45.5% and 54.55 are not taking OCP, 1.6% have positive family history and 98.4% have no family history.

**Table II :** History and presenting complains (n=376)

Complains	Number	Percentage of subjects
Lump	154	40.95
Pain	102	27.12
Nipple discharge	18	04.52
Retracted nipple	18	04.42
Lymphadenopathy	3	00.79
Others	81	22.07

Table II : Presenting complains and history of patients, amongst which 154(40.95%) patients were palpated of breast lump by physician in BEC, 102(27.12%) patient scomplains mastalgia and 18(04.52%) patients complained of nipple discharge, retracted nipple 18(04.42%) patient. Only 3(0.79%) patients complained of axillary lymph node enlargements and others 81 (22.07%) patients (n=376).

**Table III :** Summary of Clinical examination findings (n=376)

Complains	Number	Percentage of subjects
Normal	220	58.51
Lump	61	16.22
Tenderness	58	15.42
Nipple discharge	17	04.52
Nipple abnormalities	20	05.33
Total	376	100

Table III : Summary of Clinical examination findings. Most patients 220 (58%) were found to be normal while clinical breast examination. Palpable lump in breast was found in 61 (16.22%) patients with tenderness in 58 (15%) patients, Nipple discharge are 17(04.52%) patients and nipple abnormalities 20(05.33%) were recorded (n=376).

**Table IV :** Amongst the palpable breast lump, cytology (FNAC) and histopathology (by Core cut) (n=61)

Complains	Number	Percentage of subjects
Malignant	06	09.92
Benign	55	90.18

Table IV : Amongst the palpable breast lump, cytology (FNAC) and histopathology (By Core cut) reflected 55 (90.18%) cases to be benign whereas 06 (9.92%) were malignant breast disease (n=61).

## Discussion

There has been a remarkable rise in the number of patient to whom we offer our service in BEC due to their consciousness about breast cancers. Breast cancer secures its rank as the second most common

cancer and is fifth in chronology as the commonest cause of cancer death in the world. The study was governed by Department of Surgery at Shaheed Suhrawardy Hospital in its Breast and Endocrine Clinic.

It is obvious in several studies that the incidence of breast cancer until menopause increases with age doubling almost every 10 years in women.<sup>12-13</sup> There is also a remarkable incidence of overweight and obesity on breast cancer incidences. Obesity is solely associated in doubling the risk of breast cancer in postmenopausal women.<sup>14</sup> In USA, breast cancer incidence are presumably very critical, 124 per 100,000 women per year that shakes us with a red alarm as in course of time we are also being habituated to life styles and habits of European, North-American and Indian society.<sup>15</sup>

In our study, the mean age of the patient is 35.1±9.2, average BMI 22.5±2.1 kg/m<sup>2</sup>. 70.1% are pre menopausal and 29.9% are post menopausal, 29.8% are nulliparous and 70.2% are multiparous, H/O taking OCP 45.5% and 54.55 are not taking OCP, 1.6% have positive family history and 98.4% have no family history. Most patients 220 (58%) were found to be normal while clinical breast examination. Palpable lump in breast was found in 61 (16.22%) patients with tenderness in 58 (15%) patients, Nipple discharge are 17(04.52%) patients and nipple abnormalities 20(05.33%) were recorded. Amongst the palpable breast lump, cytology (FNAC) and histopathology (By Core cut) reflected 55 (90.18%) cases to be benign whereas 06 (9.92%) were malignant breast disease.

Nulli-parity remains crucial cause of breast disease through the whole world<sup>16</sup>. Nulliparous women should be more concern about breast illness and develop tendency to visit nearest BEC at any suspicious abnormality.

Oral contraceptive pills, as we know, have tremendous role in evoking breast illness and earlier reports narrate its association as aetiological factor for carcinoma breast.<sup>13,15-17</sup>

A nine fold increased risk of breast diseases were reported in patients with familial history of benign or malignant breast diseases in first degree relatives and so genetic predisposition of breast disease should be taken in concern while investigating further.<sup>16</sup>

Women who come to BEC or General Surgery OPD, are propelled by anxiety and fear of overwhelming breast carcinoma and present usually with simple pain in their breast, unilateral or bilaterally. Having said that we also reviewed the histopathology reports, correlating data with clinical breast examination in all normal and pathological cases.<sup>18-20</sup>

#### Limitations

- Small study
- Covid pandemic period
- Careful systemic palpation should have been standardized

#### Conclusion

Clinical examination with proper history remained immensely powerful in diagnostic appropriateness in breast diseases. 376 patients were studied where 09.92% amongst all examined breast lumps were found to be malignant. This terrible picture should be taken in concern with due dignity in advising women to come at BEC for follow-up evaluation and for social awareness. Young breast carcinomas are more progressive than the older ones. Therefore, we recommend follow-ups three yearly in women under 40 and yearly for above 40.

#### Recommendations

- i) Multi center RCT needed with a large sample size to declare that procedure is standard.
- ii) Good clinical knowledge required about breast disease.
- iii) Specialized training needed to perform this examination procedure.
- iv) Long term follow up.

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#### Contribution of authors

RDS- Conception, design, data analysis, drafting and final approval.

RDS- Acquisition of data, interpretation of data and final approval.

MNH – Data analysis, critical revision and final approval

MNH – Data analysis, drafting and final approval.

#### Disclosure

All the authors declared no competing interests.

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