



**ORIGINAL ARTICLE**

**Profiles of Breast Diseases among Women Seeking for Treatment during Covid-19 Pandemic at Surgery OPD of Medical University of Bangladesh**

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[Received on: 1 November 2020; Accepted on: 20 December 2020; Published on: 1 January 2021]

**Abstract**

**Background:** Different pathology of breast is found among the women. **Objective:** The purpose of the present study was to see the profiles of breast disease among women seeking for treatment during Covid-19 pandemic at the OPD of medical university of Bangladesh. **Methodology:** This descriptive cross-sectional study was conducted in the Department of Surgery at Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh from 1 April to 31 October 2020 for a period of six months. All the women who were attended at the OPD of the Department of Surgery with the different complaints of breast at any age were selected as study population. The different disease profiles were recorded in the data sheet. **Result:** A total number of 1625 women were recruited for this study. The mean age with standard deviation of the study population was 36.4±12.54 years. Among 1492 women the most common breast complaints was mastalgia which was 492(29.9%) cases followed by fibrocystic disease, breast lump, fibroadenoma and carcinoma breast which was 296(18.0%) cases, 202(12.3%) cases, 141(8.6%) cases and 84(5.1%) cases respectively. Similarly duct ectasia, fibroadenoma, fibrocystic disease and lipoma were also most common among the less than or equal to 45 years age group of women which were 47(94.0%) cases, 137(97.2%) cases, 269(90.9%) cases and 75(51.4%) cases respectively. **Conclusion:** In conclusion breast lump and fibrocystic disease are the most common diseases among the women attending during covid19 era. [*Journal of Current and Advance Medical Research, January 2021;8(1):3-6*]

**Keywords:** Disease profiles; breast pathology; women; Covid-19 pandemic

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**Cite this article as:** Debnath BC, Ghosh A, Chowdhury AK, Jahangir R, Alam F, Joardar AI, Alam AHMT. Profiles of Breast Diseases among Women Seeking for Treatment during Covid-19 Pandemic at Surgery OPD of Medical University of Bangladesh. *J Curr Adv Med Res* 2021;8(1):3-6

**Funding:** This study has been performed without any funding from outside else.

**Conflict of Interest:** There was no conflict of interest to any of the authors.

**Contributions to authors:** Debnath BC, Ghosh A, Chowdhury AK: literature collection, data collection, analysis; Jahangir R, Alam F, Joardar AI, Alam AHMT: involved in manuscript writing & revision of the manuscript;

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## Introduction

The present COVID-19 pandemic represents an unprecedented challenge leading to care disruption, which is more severe in low-income countries due to existing economic obstacles<sup>1</sup>. In Bangladesh first case of COVID-19 was detected on 8 March 2020 and as of 29 August 2020, there are 308,925 confirmed cases including 4,206 deaths with case fatality rate 1.4% and recovery rate 64.4% cases<sup>3</sup>. Bangladesh is a small country with about 165 million populations situated in the South East Asia<sup>4</sup>. It is a lower-middle-income developing country with 15% of its population has some form of disability; furthermore, it is the most densely populated country on the world and has the lowest ratios of health care workers and hospital beds to patients<sup>5</sup>. It's health system is poor with poor emergency treatment facilities, inadequate number of health care workers and has limited rehabilitation facilities.

Bangladesh had few rehabilitation work forces with mal-distribution of the therapists and rehabilitation physicians at limited numbered institutes across the country<sup>6</sup>. With the limited resources, great concerns is about the national preparedness including the testing capacity and mitigation process to adapt COVID-19 upsurge patients at the peak of the pandemic. The purpose of the present study was to see the profiles of breast disease among women seeking for treatment during Covid-19 pandemic at the OPD of medical university of Bangladesh.

## Methodology

This cross-sectional study was conducted in the Department of Surgery at Banghabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh from 1 April to 31 October 2020 for a period of six months. All the women who were attended at the OPD of the department of Surgery with the different complaints of breast at any age were selected as study population. The SARS CoV2 was first detected on end of the March 2020 in Bangladesh and the lockdown was implemented on 27 March 2020. The women with different morbidities were seeking medication in the only medical university in Bangladesh. This was representing the whole country patients' burden. The age, pattern of disease were recorded in a predesigned data sheet. The research protocol was approved by the Local Ethics Committee. Statistical analysis was performed by Windows based software named as Statistical Package for Social Science (SPSS), versions 22.0 (IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.). Continuous data that were normally distributed were summarized in terms

of the mean, standard deviation. Categorical or discrete data were summarized in terms of frequency counts and percentages. For end points analysis, Chi-square test was performed which was corrected by Fisher's exact test was used for categorical variables. A two-sided P value of less than 0.05 was considered to indicate statistical significance.

## Result

A total number of 1625 women were recruited for this study. Among these most common age group was 26 to 45 years age group which was 935(57.5%) cases followed by less than or equal to 25 years and 46 to 65 years which was 459(28.2%) cases and 214(13.2%) cases respectively. Only 17(1.0%) cases were in the age group of more than 66 years. The mean age with standard deviation of the study population was 36.4±12.54 with the range of 21 to 71 years (Table 1).

**Table 1: Age Distribution among Study Population (n=1625)**

Age Group	Frequency	Percent
≤25 Years	459	28.2
26 to 45 Years	935	57.5
46 to 65 Years	214	13.2
> 66 Years	17	1.0
<b>Total</b>	<b>1625</b>	<b>100.0</b>

Among 1625 women the most common breast complaints was mastalgia which was 492(29.9%) cases followed by fibrocystic disease, breast lump, fibroadenoma and carcinoma breast which was 296(18.0%) cases, 202(12.3%) cases, 141(8.6%) cases and 84(5.1%) cases respectively. Breast abscess and lipoma were in 66(4.0%) cases each. Other pathologies like nipple discharge, duct ectasia and sebaceous cyst were also found in 64(3.9%) cases, 50(3.0%) cases and 31(1.9%) cases respectively (Table 2).

**Table 2: Profiles of Breast Diseases of Study Population (n=1492)**

Breast Diseases	Frequency	Percent
Breast Abscess	66	4.1
Breast Lump	202	12.4
Carcinoma Breast	84	5.2
Duct Ectasia	50	3.1
Fibroadenoma	141	8.7
Fibrocystic Disease	296	18.2
Lipoma	146	9.0
Mastalgia	492	30.3

Nipple Discharge	64	3.9
Sebaceous cyst	84	5.2
<b>Total</b>	<b>1625</b>	<b>100.0</b>

Breast abscess was most common in less than or equal to 45 years which was 63(95.5%) cases. Breast lump was highest in less than or equal to 45 years which was 169(83.7%) cases. Carcinoma breast was more commonly reported in less than or equal to 45 years old women. Similarly duct ectasia, fibroadenoma, fibrocystic disease and lipoma were also most common among the less than or equal to 45 years age group of women which were 47(94.0%) cases, 137(97.2%) cases, 269(90.9%) cases and 75(51.4%) cases respectively. Mastalgia, Nipple Discharge and Sebaceous cyst were also more common in less than or equal to 45 years age group of women which were 462(93.9%) cases, 62(96.9%) cases and 64(76.2%) cases respectively (Table 3).

**Table 3: Relationship between Age group and Breast Diseases**

Breast Disease	Age Group	
	≤45 Years	>45 Years
Breast Abscess	63(95.5%)	3(4.5%)
Breast Lump	169(83.7%)	33(16.3%)
Carcinoma Breast	46(54.8%)	38(45.2%)
Duct Ectasia	47(94.0%)	3(6.0%)
Fibroadenoma	137(97.2%)	4(2.8%)
Fibrocystic Disease	269(90.9%)	27(9.1%)
Lipoma	75(51.4%)	71(48.6%)
Mastalgia	462(93.9%)	30(6.1%)
Nipple Discharge	62(96.9%)	2(3.1%)
Sebaceous cyst	64(76.2%)	20(23.8%)
<b>Total</b>	<b>1394(85.8%)</b>	<b>231(14.2%)</b>

Chi-square test was performed to see the level of significance; p value=0.000

**Discussion**

The coronavirus disease 2019 (COVID-19) outbreak which is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has escalated into a global pandemic at a formidable rate<sup>1</sup>. This has caused unprecedented disruption to populations globally and it is a particularly worrying time for vulnerable groups with pre-existing health conditions, including women with a breast pathology diagnosis especially breast cancer<sup>5-7</sup>. The immunosuppressant effects of cancer and its treatment, coupled with the multimorbidity that often occurs in cancer patients, suggests that those affected by breast cancer and other cancers may be at particular risk from the impact of COVID-19 disease<sup>6</sup>. Indeed, in the UK, estimates predict

approximately 18,000 excess cancer deaths over the next 12 months as a result of the COVID-19 emergency<sup>7</sup>.

During the pandemic of Covid19, healthcare systems worldwide have delayed elective care especially surgeries, screenings, and other treatments that are not considered urgent or emergencies<sup>8</sup>. Hospitals began canceling some surgeries and limiting other services to protect people from being exposed to COVID-19 and to save resources such as hospital beds, personal protective equipment (PPE), blood supply, and staff time so they could be used to care for seriously ill patients with COVID-19 disease<sup>9</sup>. In this type of situation the department of surgery in BSMMU has faced this patients load with the different breast pathology. This study does not indicate the relation of breast pathology with the Covid19 infection, however, this pandemic has hindered the timely screening among the women.

Bangladesh health care delivery system in acute, post-acute and chronic care services were jeopardized by the COVID-19 pandemic<sup>10</sup>. The misery of doctors and other frontline health care workers were surging with COVID-10 war. According to Bangladesh Medical Association (BMA) and Bangladesh Doctors’ Foundation (BDF) many physicians died due to the disease with about 7500 Health care workers including members of the rehabilitation team were infected by the corona virus<sup>11</sup>. There were concerns of personal protective equipment (PPE) and safety procedures of these health care workers. With the imposition of the lockdown restrictions, Physical Medicine and Rehabilitation (PMR) research and academic schedule for residency and other post-graduate skilled development training courses were affected seriously. A publication on COVID-19 Bangladesh rehabilitation perspectives described the various ways of affecting the training programs including rehabilitation team meeting, bed side teaching, hands on skill developing programs, interactive and interventional residents’ group program<sup>12</sup>. Country wide post graduate doctors of different specialties including rehabilitation medicine enrolled at course were also in anxiety about their future carrier plan as some of the course ending examinations are postponed and many of them are also affected by COVID-19 disease<sup>13</sup>.

Rehabilitation services are affected in a number of core areas including inpatient, outpatient (OPD) and community services; many of which were closed or suspended routine schedules<sup>14</sup>. Services at Bangabandhu Sheikh Mujib Medical University (BSMMU) and other government, non-government

centers have been closed which adversely affected rehabilitation for long care of disable patients like stroke, traumatic brain injury or spinal cord injury.

During working in the COVID-19 pandemic it has also been likened to war due to similarities of long hours in challenging, high-pressure environments, concerns about the lack of personal protective equipment provision, and working above expertise and comfort levels in unfamiliar surroundings for a workforce already compromised by large vacancies, high turnover rates, high attrition rates, heavy workloads and increasing levels of stress<sup>15</sup>. These factors compound the risk of moral injury, such as the inability to provide high-quality care and healing in the context of healthcare.

## Conclusion

In conclusion breast lump and fibrocystic disease are the most common diseases among the women attending during Covid-19 era. However, mastalgia is the most common complaints of women. Furthermore, fibroadenoma, carcinoma of breast, breast abscess and lipoma are also reported in a significant number of women. Therefore the different complaints and abnormalities of breast have been reported during the Covid19 pandemic era and it should be monitored very cautiously.

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