

# **The COVID-19 Impact on Symptomatic Breast Cancer Referrals and Diagnosis**

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## **Abstract**

### ***Aims***

To determine the impact of the COVID-19 pandemic on the number of new patients attending a symptomatic breast unit and number of patients diagnosed with primary breast cancer.

### ***Methods***

Anonymised data of new attendances and breast cancer diagnoses between February and July 2020 were analysed and compared with data from 2019 and 2018.

### ***Results***

The average number of new patient attendances in February-July 2020 was 2,111 vs 3,008 during the same time period in 2018 and 2019 (30% less). The average number of breast cancers diagnosed in April/May 2020 was 36 vs 73 in April/May 2019 and 2018 (50% less). The number of breast cancers diagnosed in July 2020 was 60 vs 35 in July 2019 and 2018 (43% greater).

### ***Conclusion***

Less breast cancers diagnosed at the height of our nationwide COVID-19 lockdown and higher numbers diagnosed in July 2020 suggests a delay in presentation of these women to their GPs during lockdown.

## **Introduction**

The COVID-19 pandemic is an ongoing global health emergency caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It has rapidly spread since December 2019 from its origin in Wuhan, China.<sup>1</sup>

The first case in Ireland was reported on the 29<sup>th</sup> February 2020. On March 27<sup>th</sup>, 2020, Ireland was placed on full lockdown with all non-essential journeys banned. Easing of COVID-19 restrictions did not start to occur until May 18<sup>th</sup> 2020.<sup>2,3</sup> The COVID-19 pandemic has led to profound changes of our health-care system with possible impact on the care of patients with cancer.<sup>4</sup>

The aim of this study was to assess the effects of the COVID-19 pandemic on new patient attendances at a symptomatic breast clinic and examine the incidence of breast cancer diagnoses during this time.

## **Methods**

This study was performed at an Irish tertiary referral symptomatic breast cancer centre.

Anonymised data of new attendances at the breast unit during a 6-month period between 1<sup>st</sup> February and 31<sup>st</sup> July 2020 were analysed. These data were compared with corresponding data from the same 6-month time period in 2018 and 2019. Anonymised data of cancer diagnosis during these same time periods in 2020, 2019 and 2018 were also collected and analysed. This study was granted approval by the local audit committee at St. Vincent's University hospital, Dublin.

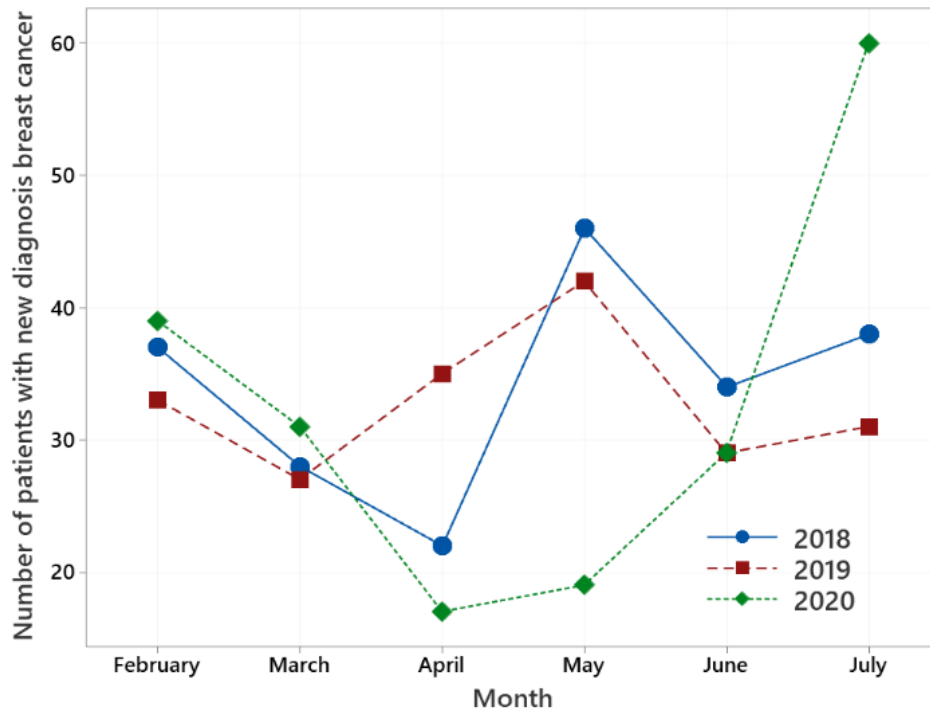
## **Results**

The number of new patient attendances at a symptomatic breast clinic during the February-July 2020 period was 30% less than the corresponding average for the same period in 2018 and 2019 (2111 versus 3008) (Figure 1).

The cumulative number of patients with a new diagnosis of breast cancer in the February-July 2020 period was 195 compared to 197 in 2019 and 205 in 2018.

While there was no significant difference in the total number of cancers diagnosed between February and July 2020, compared to 2019 and 2018, the distribution was different. There were only 36 new cancers diagnosed in April and May of 2020, compared to 77 in April and May of 2019, and 68 in April and May of 2018. Sixty women were diagnosed with primary breast cancer in July 2020 compared to 31 in July 2019 and 38 in July 2018.

There were also fewer return attendances to the breast unit between February and July 2020 compared to 2018 and 2019. There were 934 return attendances between February and July 2020, compared to 2,138 in 2019 and 2,019 in 2018.



**Figure 1:** Line graph of monthly number of newly diagnosed breast cancer patients at symptomatic breast clinic for months of February to July.

## Discussion

The COVID-19 pandemic has likely had both immediate and delayed consequences on patients with breast cancer.<sup>5,6</sup>

In Ireland, during the months of March, April and May 2020, hospital systems and patient pathways were re-configured in order to meet the health burden of the rapidly escalating numbers of patients with COVID-19. These changes effected a marked reduction of normal outpatient activity in our symptomatic breast clinic, especially during the lockdown months of March, April and May 2020. Although routine clinics were reduced, rapid access clinics continued to operate allowing symptomatic patients referred from primary care to be seen in a timely manner<sup>7</sup> throughout the lockdown months. There were no weeks where no breast clinic was available. Rapid access clinics continued throughout the pandemic. Greater than 95% of urgent referrals were seen within 2 weeks, which meets the recommendation according to the NCCP guideline<sup>7</sup>. 93.98% of patients referred via the non-urgent pathway were seen within the 12-week time period recommended for non-urgent referrals<sup>7</sup>.

Teleconsultation was not used for new referrals to the symptomatic breast service. It was used for a select group of return patients (high risk family history and patients with previous breast cancer diagnosis). If any of these patients expressed concern regarding a breast symptom, they were given an OPD appointment.

There were significantly fewer new attendances at the breast clinic between February and July 2020 compared with the same time period in 2018 and 2019. There was no significant change in the number of cancers diagnosed in this time period, however the distribution of numbers of cancers diagnosed was different. There were less cancers diagnosed in April and May of 2020 at the height of our nationwide COVID-19 lockdown. There was a higher number of cancers diagnosed in July 2020 compared with July 2018 and 2019. This suggests a possible delay in presentation of patients to their GPs with suspicious breast symptoms during the lockdown months.

Two papers published in the Lancet in 1999<sup>8,9</sup> concluded that patients with delays of 12-26 weeks had significantly worse survival rates than those with delays of less than 12 weeks. Their analyses indicated that the adverse impact of delay in presentation was associated with more advanced stage. At a national level, ongoing analysis of numbers of new breast cancer diagnoses and stage at diagnosis will inform the impact that this pandemic has had on breast services and guide strategies to ensure continued timely access to care during ongoing restrictions imparted by the pandemic.

**Declaration of Conflicts of Interest:**

The Authors declare that there is no conflict of interest.

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