https://doi.org/10.29289/259453942023V33S1078

## Evaluation of the prevalence of breast cancer diagnosis before and during the COVID-19 pandemic in Brazil

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Objective: The coronavirus disease 2019 (COVID-19) pandemic brought significant impacts to the healthcare system due to the new demands generated, which in turn hindered the prevalence of breast cancer diagnosis in Brazil. In this context, this study sought to investigate the prevalence of breast cancer tracking and diagnosis between the federation's regions during 2018 and 2022. Methodology: This is a cross-sectional study using data collected from the Informatics Department of the Unified Health System (DATASUS) on breast cancer diagnosis between January 2018 and December 2022, in the regions of Brazil. The criteria for selection were the number of mammography exams, using the Breast Imaging-Report and Data System (BI-RADS) score, and the number of positive histopathologic exams. The results were analyzed mathematically. Results: In 2020, compared with 2019, considering the number of mammography exams and malignant breast findings, there was a reduction of 39.0% and 26.6%, respectively. In each region, save for the North, there was a higher reduction than observed at the national level. However, in 2021, there was an increase in the rate of mammography exams and malignant breast findings, and in 2022, there was the highest number of mammography exams, histopathologic exams, and breast cancer diagnoses, since 2018, across the entire country. Conclusion: There was a noticeable decrease in the number of mammography exams and histopathologic exams, particularly during 2020, and the highest number of exams and diagnoses, in the last 5 years, in 2022, after the majority of the population was vaccinated and COVID-19 cases decreased. The data show the impairment in the normal course of preventive exams in the country, considering the reduction of trips and referrals to hospitals, in non-urgent cases, given the population's fear of COVID-19, consequently reducing the frequency of prevention and early breast cancer diagnosis.

**Keywords:** breast neoplasms; COVID-19; mammography.