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Effects of COVID-19 on breast cancer in public healthcare system in Brazil (2018–2022)

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Objective: This study aimed to evaluate COVID-19 effects on breast cancer screening and clinical stage at diagnosis in patients of 50–69 years of age receiving care within the public healthcare system (SUS) in 2018–2022 in Brazil. **Methodology:** This ecological study analyzes the absolute and relative frequency of screening and staging, using a secondary database of SUS sources: SUS Network Outpatient Data System and Oncology Brazil Panel. **Results:** There was a decrease in mammographic coverage in 2020 (20%) and 2021 (26.7%) compared with 2018 (34.8%) and 2019 (33.9%). For 2022, we observed an increase in the percentage coverage rate (32.7%), which was still lower than in the years before the pandemic. The number of reported cases decreased by 31.5% in 2020–2021 compared with 2018–2019, but there was an increase of 21.2% compared with 2022. There was a 4% increase in the proportion of stage III/IV cases in 2020–2022 compared with 2018–2019, now surpassing the number of cases of early-stage breast cancer. **Conclusion:** COVID-19 led to a reduction in breast cancer screening and an expressive increase in advanced tumors in users of the public healthcare network. Urgent interventions in public policies are required as the negative effects of the pandemic on the diagnosis/treatment of breast cancer.

Keywords: breast cancer; COVID-19; Brazil; breast cancer screening; clinical staging of breast cancer.