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1162 – The impact of the COVID-19 pandemic on breast reconstruction in the Brazilian public health system: a pre- and post-pandemic analysis

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Introduction: Post-mastectomy breast reconstruction is a fundamental component of comprehensive care for breast cancer patients and is mandatorily covered by the Brazilian Unified Health System (SUS). The COVID-19 pandemic significantly disrupted the performance of these procedures, potentially compromising the functional, aesthetic, and psychosocial recovery of these patients. This study aims to perform a comparative analysis across pre-pandemic, pandemic, and post-pandemic periods in Brazil to evaluate the association between the health crisis and the reduction in breast reconstructive procedures.

Methods: An ecological, retrospective study using secondary data from the Brazilian Hospital Information System (SIH/SUS) via DATASUS/TABNET. The analysis included hospital admissions for post-mastectomy breast reconstruction with implant placement from January 2016 to December 2025, stratified by geographic region. The timeline was divided into three periods: pre-pandemic (2016–2019), pandemic (2020–2021), and post-pandemic (2022–2025). Descriptive analysis was performed using absolute frequencies, annual means, and percentage variations.

Results: A total of 12,600 hospitalizations for breast reconstruction were recorded. The annual mean, which stood at 1,400.5 procedures in the pre-pandemic period, fell to 831.5 during the pandemic — a 40.6% reduction. The years of 2020 and 2021 recorded 838 and 825 procedures, respectively, representing the lowest values in the historical series. In the post-pandemic period, the annual mean rose to 1,333.8; however, this recovery remains 4.8% below pre-pandemic levels, indicating a persistent deficit in surgical volume.

Conclusion: The COVID-19 pandemic profoundly impacted breast reconstruction within the SUS, characterized by a sharp decline during 2020–2021 and only a partial recovery in subsequent years. These findings suggest that healthcare reorganization, the suspension of elective surgeries, and the prioritization of urgent cases severely compromised access to reconstructive care. The lingering deficit highlights the need for targeted public health strategies to clear the surgical backlog and ensure the integral rights of women transitioning from cancer treatment to physical and emotional rehabilitation.

Ethics: Public data.

Keywords: breast reconstruction; COVID-19; public health system.