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Delays in the initiation of breast cancer treatment in Brazil: an analysis by age and region

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Introduction: Breast cancer is the most prevalent malignancy among women in Brazil. **Objective:** This study aimed to identify the regions and age groups most affected by delays in the initiation of breast cancer treatment and to assess the potential clinical consequences of such delays on patient outcomes. **Methods:** Data were collected from the Department of Informatics of the Unified Health System (DATASUS) platform, which provided information on the date of diagnostic examination, date of first treatment, regions, and age groups of patients. According to guidelines from recent cancer committees, the optimal time to initiate oncological treatment is within 60 days of the diagnostic examination. Consequently, delay in treatment initiation was defined as any interval exceeding 60 days from the diagnostic exam. **Results:** In 2024, a total of 53,401 breast cancer patients initiated treatment, with 31.5% (n=16,830) experiencing delays in treatment commencement. The Central-West region exhibited the highest delay rate, with 39.9% (n=1,190) of cases, followed by the North region with 34.0% (n=735). Among the age groups, patients aged 65–69 years experienced the highest treatment delay, with a 35.1% (n=2,038) rate. Delays in initiating breast cancer treatment can result in a range of clinical consequences, which may vary according to the tumor's grade and histological type. However, studies consistently demonstrate that delayed treatment is associated with an increased risk of metastasis, local disease progression, and decreased survival rates. **Conclusion:** These findings underscore the critical importance of initiating treatment as early as possible for the progression of the disease, highlighting that regional and social disparities significantly influence the timing of treatment initiation. Further in-depth studies are necessary to better understand the underlying causes of these disparities reflected in the statistics.

Keywords: breast neoplasms; treatment delay.