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# 955 – Independent sociodemographic and healthcare determinants of advanced-stage invasive breast cancer in Brazil

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**Introduction:** The diagnosis of breast cancer at advanced stages remains a persistent challenge in Brazil, with approximately one-third of the cases being identified late. Despite advances in screening, sociodemographic inequalities contribute to delays in diagnosis and treatment initiation. This study aimed to identify sociodemographic and healthcare factors associated with late diagnosis of breast cancer in Brazilian women.

**Method:** An observational, analytical, and retrospective study using data from the Brazilian Hospital Cancer Registry, including women with breast cancer diagnosed between 1990 and 2021. Staging was categorized into early (I–II) and advanced (III–IV) stages, and its associations with sociodemographic and healthcare variables were assessed using descriptive analyses, chi-square test, and multivariate logistic regression. The analysis was conducted using IBM SPSS Statistics 27.0, with results expressed as odds ratios (OR) and 95% confidence intervals.

**Results:** Approximately 42,1% of the 170,052 breast cancer cases analyzed were diagnosed at advanced stages. A higher chance of diagnosis at an advanced stage was detected among non-white women treated by the Brazilian public health system (SUS). On the other hand, a lower chance of this outcome was identified among women with higher education, with a partner, residing in rural areas, and with a family history of cancer. The overall model was statistically significant, with a Nagelkerke pseudo  $R^2$  of 0.043.

**Conclusion:** The diagnosis of breast cancer at advanced stages in Brazil was associated with sociodemographic and healthcare factors, with emphasis on ethnic-racial inequalities. The findings reinforce the need for public policies aimed at expanding screening and reducing inequities in access to health services, targeting early detection of the disease.

**Ethics:** Public data.

**Keywords:** breast neoplasms; health services accessibility; treatment delay; clinical diagnosis.