

<https://doi.org/10.29289/25945394V36S11093>

1093 – Breast cancer mortality among female physicians in Brazil (2019–2024): a nationwide analysis enhanced by artificial intelligence to identify hidden patterns and inform targeted awareness strategies

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Introduction: Breast cancer is one of the leading causes of female mortality worldwide, and it is the most common type of cancer among women in Brazil. Female physicians represent a unique group, as they care for others while also being at risk of the disease. Therefore, understanding epidemiological data related to the incidence of breast cancer among female physicians is essential for identifying possible patterns of incidence and coping strategies in this field.

Methods: An epidemiological study based on secondary data from DATASUS (Mortality Information System – SIM). Deaths among female physicians due to malignant neoplasm of the breast (CID-10: C50) from 2019 to 2024 were included. Data were analyzed using descriptive statistics, with support from Artificial Intelligence to assess the findings, calculate and compare the Proportionate Mortality Ratio (PMR), ensure unbiased interpretation, identify scientific gaps, and propose strategies based on the results.

Results: From 2019–2024, 143 of 2,236 deaths among Brazilian female physicians were attributed to breast cancer. Its 6.4% PMR significantly exceeded the general female population's 2.7% (comparative PMR of 2.37). Despite the pandemic (2020–2022) temporarily shifting mortality with 262 viral-related deaths, breast cancer remained the overall leading cause across most years. Other major causes included acute myocardial infarction (91), and pancreatic cancer (76).

Conclusion: Malignant breast neoplasm is a leading mortality cause among female physicians. Over the six-year study period, it significantly surpassed acute myocardial infarction, trailing only COVID-19. Excluding the pandemic, breast cancer represents the primary risk among female physicians, revealing a clinical paradox: despite their oncological knowledge, practical barriers hinder self-care. This exposes a literature gap, as studies view physicians as healthcare providers, not vulnerable patients. Mitigating this severity, systemic interventions are required, including institutional mammography campaigns (“D-days”) and mandating preventive appointments, to ensure female physicians are able to care for patients without neglecting their own health.

Ethics: Public data.

Keywords: breast neoplasms; mortality; female physicians; Brazil.