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## Education evaluation with breast cancer: an ecological study

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**Objective:** This study aimed to analyze the association between education level and breast cancer in Brazil among women from 2013 to 2022 and observe the relationship between education level and mortality rate in different regions of Brazil, under the hypothesis that women with lower education levels are diagnosed at more advanced stages, resulting in higher mortality rates. **Methodology:** This is an ecological study, using a time series design, based on the data collected from the national DATASUS database, including female individuals affected by malignant neoplasm of the breast between 2010 and 2022. **Results:** Among the risk factors related to a worse prognosis for breast cancer, education level stands out. A higher number of cases can be observed in patients with lower levels of education, which is more evident in the south, southeast, and midwest regions. The low level of education combined with socioeconomic factors leads to a lack of knowledge about the disease and its early detection methods, resulting in restricted access to healthcare services, delays in conducting and receiving tests, and difficulties in transportation to consults and treatment centers. Furthermore, a higher mortality rate was observed in regions such as the south, southeast, and midwest, reinforcing that women with lower education levels have a higher probability of presenting a more advanced stage of cancer at the time of diagnosis, resulting in a worse prognosis. **Conclusion:** The education level of patients proved to be an important factor related to worse outcomes in women with breast cancer in most regions of Brazil, associated with a lack of education and hindered access to healthcare services.

**Keywords:** breast neoplasms; education; mortality records.