

Breast cancer mortality rates trends by race in São Paulo, Brazil

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Background:

Breast cancer is the main cause of female death by neoplasia in Brazil. Although half of the Brazilian population is black/brown (BB), socio-economic disparities translate in a vulnerable situation to those women. Access to health care is an important barrier to improve the health of BB women. This

study aims to investigate trends in breast cancer mortality rates regarding race and age.

Methods:

This is a population-based study of trends evaluation on breast cancer mortality in São Paulo state, Brazil, from 2000 to 2017. The absolute number of deaths and population figures (including race) by age-groups and years were available online from government data. Data on race were not available by ten-year age-groups, so the figures were projected according to the female age structure by year. Total rates by year and race were age-adjusted to the 'World Population (2000)'. For trend analysis, linear regression was used, with 5% level of significance.

Results:

In the period were observed 60,940 breast cancer deaths, 76.7% in white and 17.5% in BB women. The absolute number of deaths in white and BB women was respectively 2,095 and 333 in 2000, and 3,076 and 999 in 2017. The total age-adjusted mortality rates per 100,000 women of white and BB in 2000 were respectively 16.4, 17.2 and 7.5. In 2017 rates were 14.6, 16.6 and 16.1. There was a trend towards reducing the mortality rates of white women ($P=0.002$) and in their age-groups from 40 to 79 years ($P<0.03$). There was a trend towards increasing the mortality rates of BB women ($P<0.001$) and in all their age-groups ($P<0.02$).

Conclusions:

Although breast cancer figures of death and mortality rates in BB women have more than doubled in 18 years, rates reached almost the same figures of white women in the period. Changes in behaviour risk factors may explain this result. However, it is very likely that access to health care to these women has been improved, reducing the disparities in the health system.

Key messages:

- Breast cancer mortality rates in black/brown women have reached almost the same figures as white women from 2000 to 2017 in São Paulo, Brazil.
- Access to health care in black women may have improved in São Paulo, Brazil.