

# Trends in cancer mortality in children below 20 years in Brazil, period 1981 to 2008

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## OBJECTIVE

To analyze the childhood and adolescent cancer mortality trends of Brazil during 1981–2008.

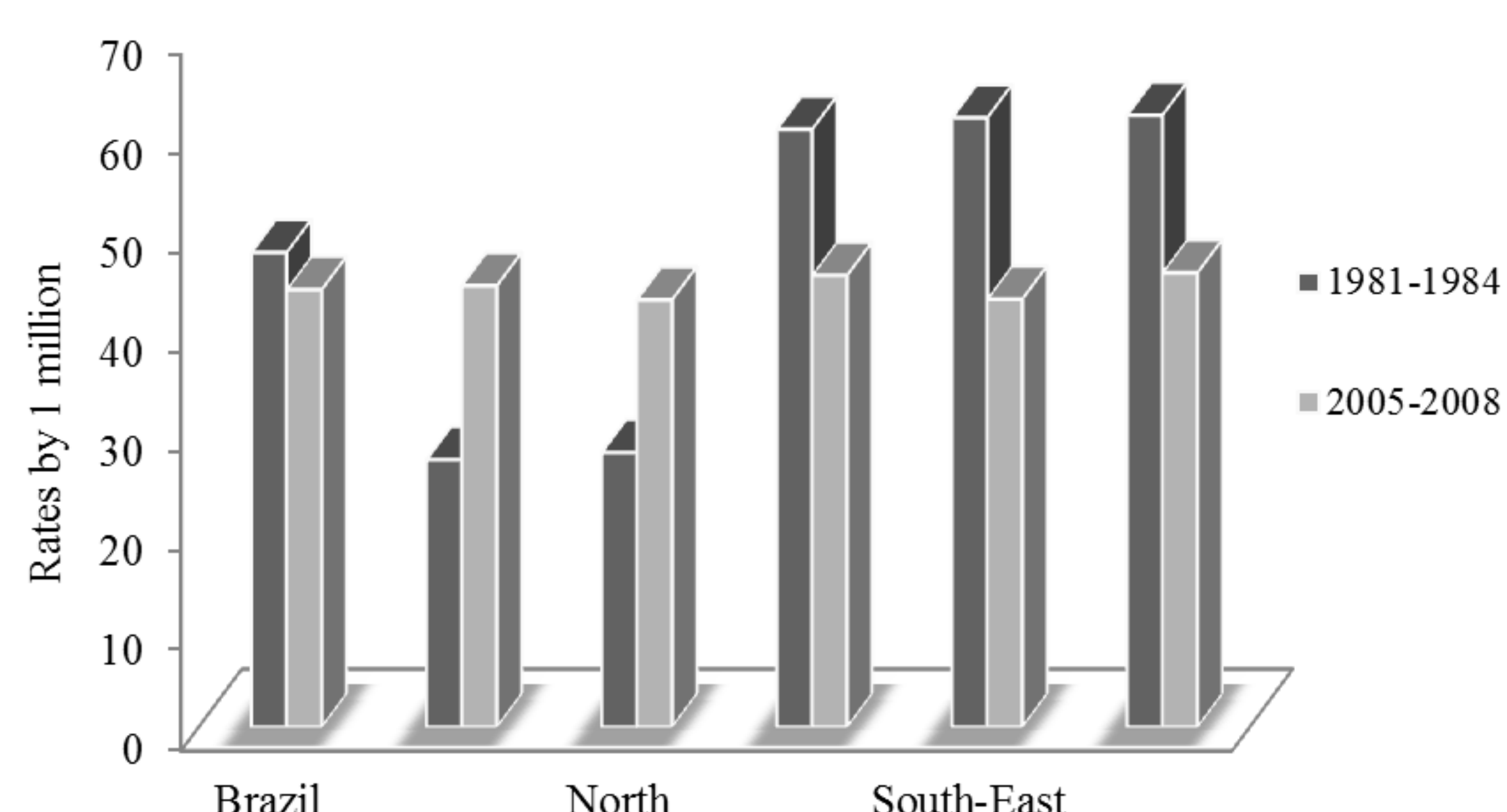
## METHOD

Data was utilized and acquired from the Mortality Information System (SIM) for cancer mortality in people under 20 years old, according to their sex and age. Cases with the causes, coded C149-C239 of CID 9, from 1981–1995, and C00-D48 of CID 10 from 1996–2008 were considered cancer deaths. The study period was stratified into seven four-year periods, and rates of general and standardized cancer mortality were calculated in Brazil and each of its regions. For trend analysis, models of polynomial regression were chosen, by considering 5% of level significance.

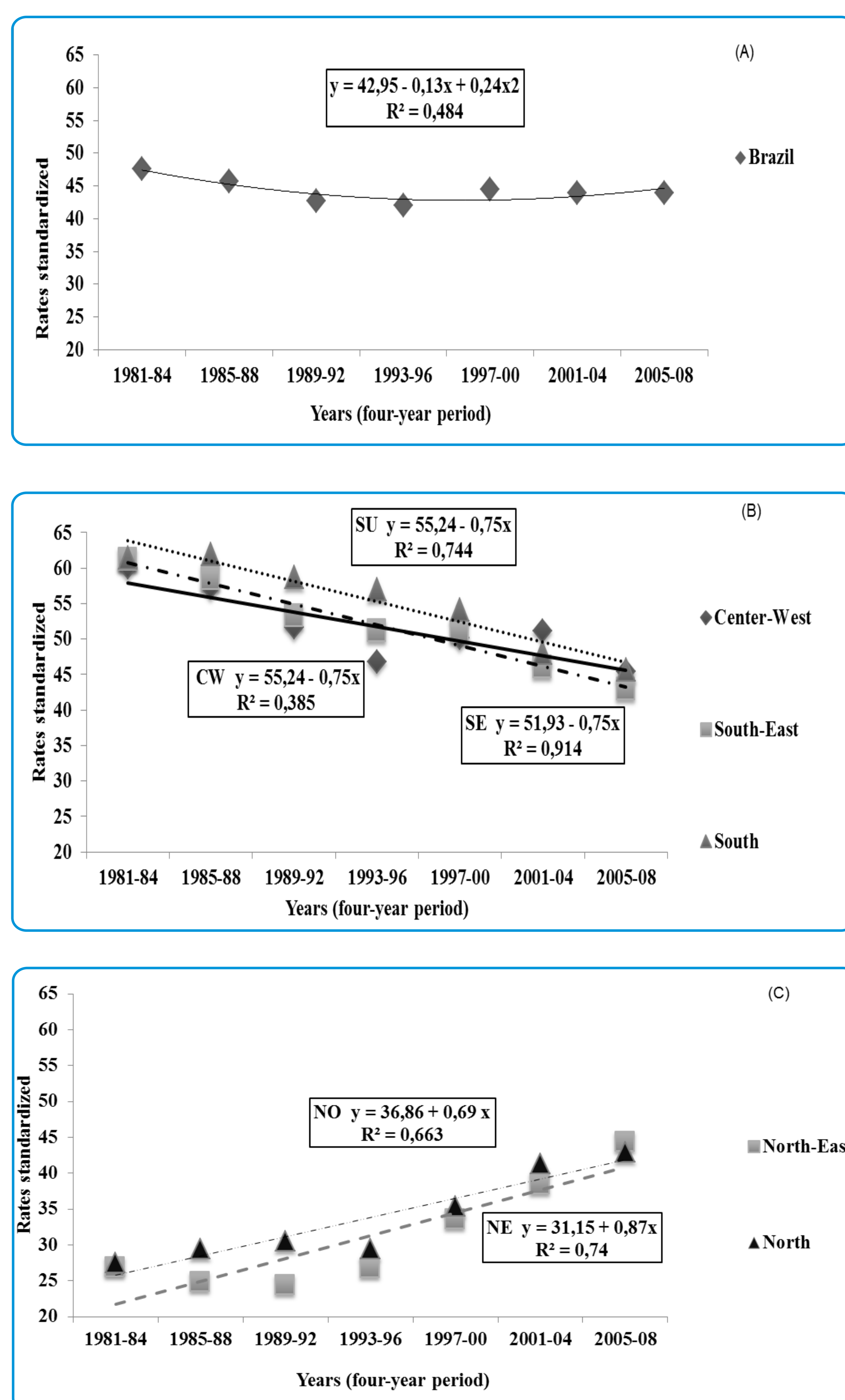
## RESULTS

A trend of inconsistent decline in mortality rates was observed in the whole country. The age groups under 1 and 1 to 4 presented constant and decreasing trends of cancer mortality during the whole study period. Higher mortality rates were observed in males in general. The South and South-East Brazilian regions presented the highest mortality rates. In the North and North-East regions increasing rates were observed. In the Center-West region there was a significant trend decline in cancer mortality.

**Figure 1-** General cancer mortality rates, standardized by ages under 20, both sexes, in Brazil and its regions – first and last four-year periods, 1981–1984 and 2005–2008.



**Figure 2 –** Trend analysis of general mortality rates by cancer, standardized by ages under 20, both sexes. Brazil and its regions, 1981 to 2008. Figure 1 (A) Brazil; Figure 1(B) Center-West region, South and South-East regions; Figure 1(C) North and North-East regions.



## SUMMARY

Regional differences in mortality may highlight different ways of access to cancer diagnosis and treatment in the country.