

Time trends in colorectal cancer incidence and mortality in the Regional Health District (RHD) of Barretos, São Paulo, Brazil

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Conclusions:

In Barretos region, northeast of São Paulo State in Brazil, was observed a increase for colorectal cancer incidence, however, no changes in colorectal cancer mortality were observed over the years.

Background:

Colorectal cancer represent a significant cause of morbidity and mortality worldwide.

Objective:

The purpose of this study was to analyze the time trends colorectal cancer incidence and mortality in the Regional Health District (RHD – Figure 1) of Barretos, São Paulo, Brazil.

Methods:

From 2000 through 2015, we calculated the colorectal cancer incidence and from 2000 through 2014, we calculated the colorectal mortality rates per 100,000 inhabitants who were age-standardized to the world population. We obtained the time trends using the Joinpoint Regression software.

Results:

The age-standardized rates (ASR) for incidence of colorectal cancer increased annually, with an average annual percentage change (AAPC) of 4.1 (95% Confidence Interval (CI): 2.4 to 5.9), Figure 2. The mortality rates for invasive colorectal cancer stay stable AAPC of 0.0 (95% CI: -2,4 to 2.4).

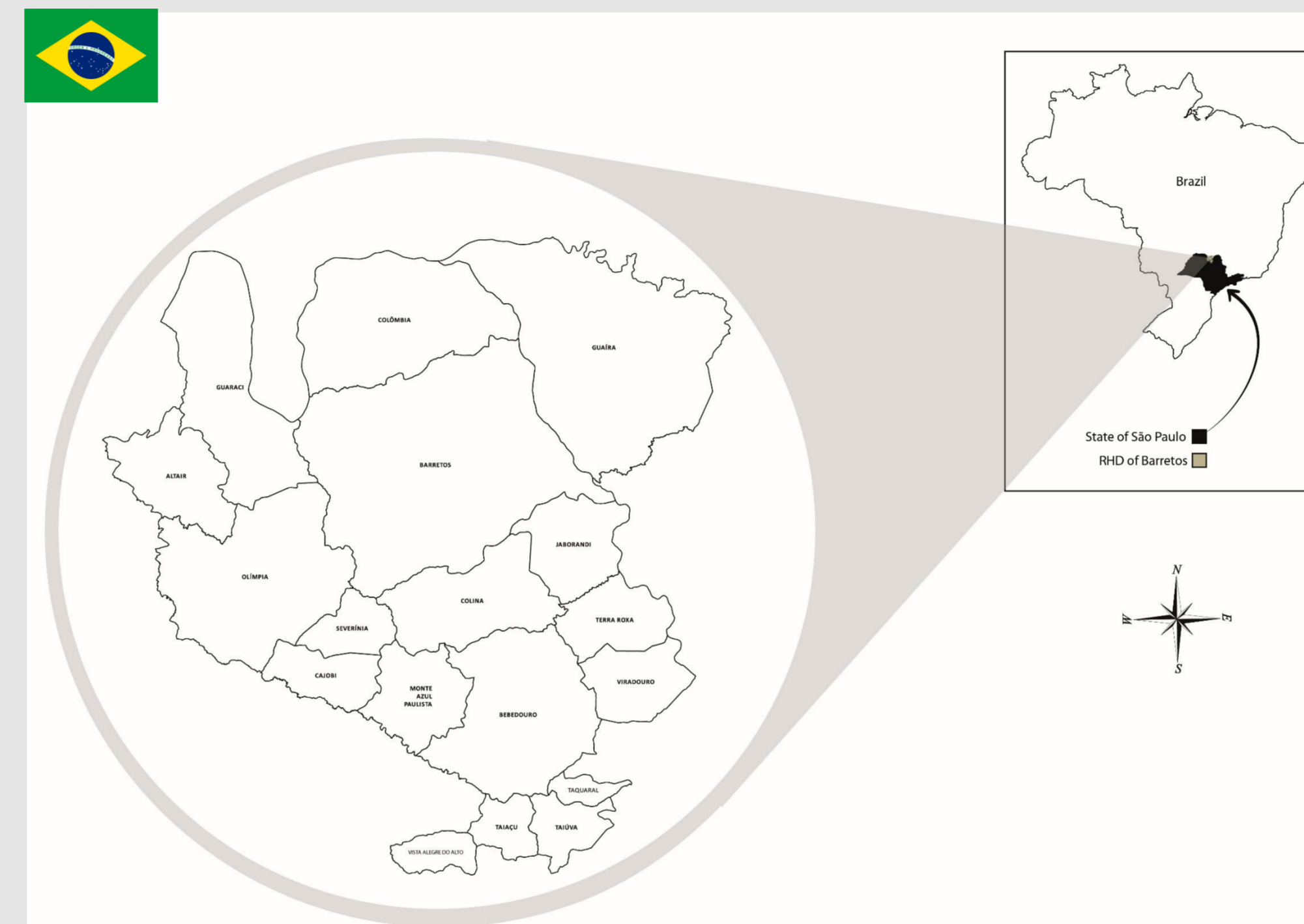


Figure 1. Area of coverage of the RHD of Barretos (RHD-V).

The State of São Paulo (Brazil) is administratively divided into 17 Regional Health Districts (RHDs). The RHD is responsible for coordinating activities at the regional level and promoting inter-sectorial articulation, with municipalities and civil society organizations. RHD-V comprises 18 cities located in the Northeast of State of São Paulo State (Altair, Barretos, Bebedouro, Cajobi, Colina, Colômbia, Guaira, Guaraci, Jaborandi, Monte Azul Paulista, Olímpia, Severinia, Taiaçu, Taiúva, Taquaral, Terra Roxa, Viradouro, and Vista Alegre do Alto), including both rural and urban populations, with 434,939 inhabitants (2017). According to the medium human development index (HDI), which comprises gross national income, education attainment, and life expectancy at birth, Brazil is high in the ranks. The Barretos Cancer Hospital is responsible for the activities of the Population-Based Cancer Registry covering RHD-V, suitably called the "Population-Based Cancer Registry of Barretos Cancer Hospital."

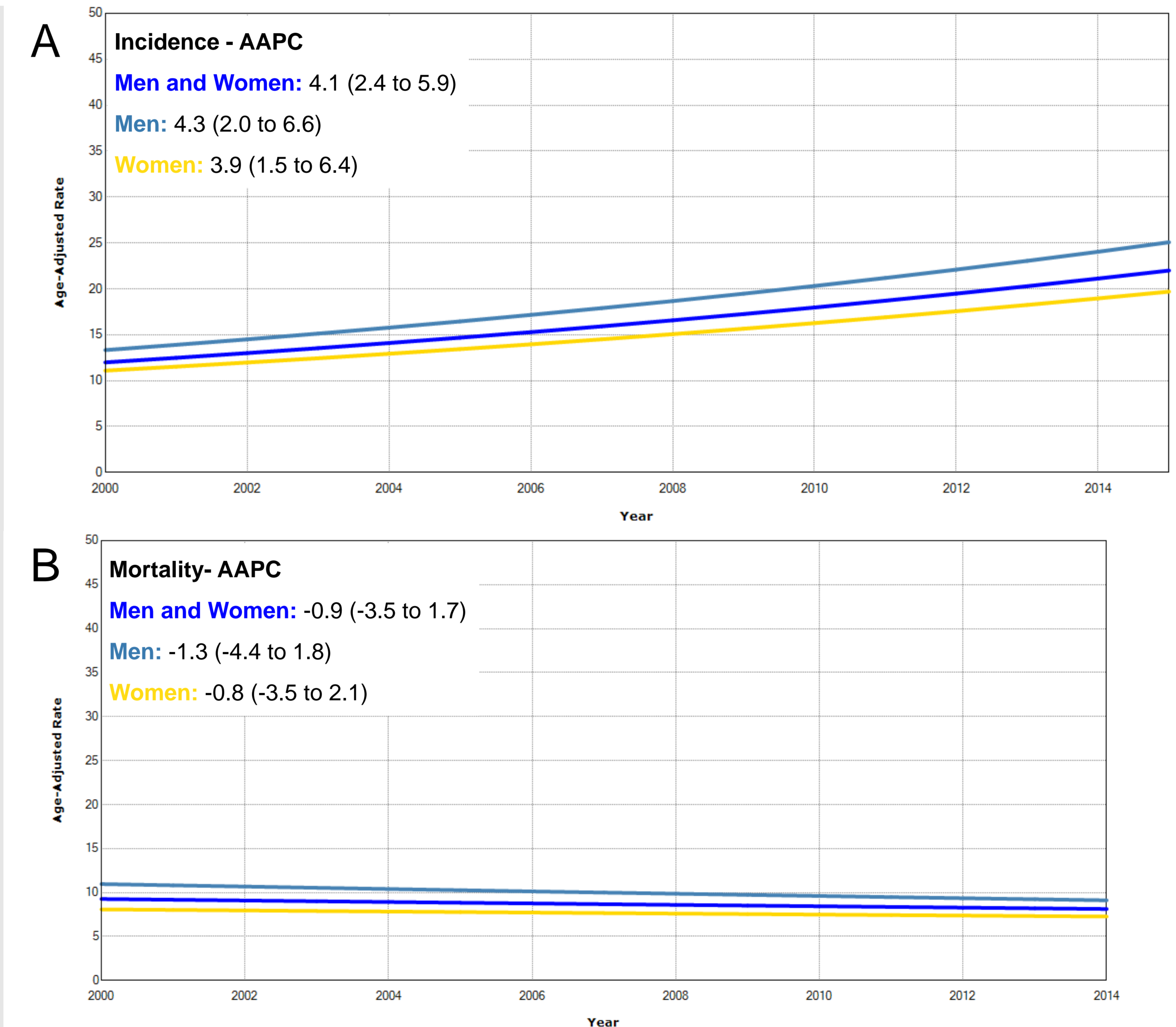


Figure 2 - Incidence (A) and Mortality (B) of colorectal cancer over the time. Barretos region, São Paulo, Brazil, 2000-2015.