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## LETTER TO THE EDITOR

Dear editor,

In the article “Trends and predictions for gastric cancer mortality in Brazil”<sup>1</sup> originally published in *World Journal of Gastroenterology*, the authors analyze mortality rates of gastric cancer according to region, sex, age-period and birth cohort. This report identified important differences between Brazilian geographical regions. Trends for South, Southeast and Midwest regions pointed to a sustained decrease in gastric cancer mortality for both sexes, with similar predictions for the next 20 years. On the other hand, trends for North and Northeast regions revealed conflicting results: decreasing mortality rates until the 1990’s followed by increasing mortality rates since then and until 2020’s, according to the projections. The authors highlighted possible explanations for these discrepancies, among them, the remarkable socioeconomic differences among Brazilian regions, since the North and Northeast regions have the lowest human development indices and gastric cancer incidence might be associated with poor economic conditions. It was also pointed out that improvements in cancer registry notification in the North and Northeast regions since the 2000’s might have contributed to the increasing mortality rates in the period, as well as to the projections.

Gastric cancer incidence has declined over the years in several countries, as well as in Brazil<sup>2,3</sup>. In most countries, however, the mean 5-year overall survival and age-standardized survival rates have not changed much and remained between 25-30% in the period 1995-99 to 2005-09, but with significant increases in South Korea and China, as well as slight increases, around 10% in several other countries. However, a reduction around 6-17% was observed in Brazil, in a study that included data from 80,133 gastric cancer patients from the Population Base Cancer Registry, mainly from the Midwest region, including the Federal District, Cuiabá and Goiânia, as well as from Aracaju, one of the nine states of the Northeast region,

indicating that the 5-year survival rate was 33.1; 28.2 and 24.9% in the periods 1995-99; 2000-04 and 2005-09, respectively<sup>4</sup>. Therefore, in our country, overall 5-year survival has tended to decrease gradually over the last five years.

These studies present a first-hand view of Brazilian mortality and survival rates for gastric cancer, as well as their trends for the next decades, as national public data is not easily available. Nevertheless, it fails to present an age-specific analysis. Globally, studies presenting age-specific mortality rates, rather than only age-standardized data, demonstrated that gastric cancer mortality trends might show a differential behavior among people under 40 years old, possibly failing to decrease<sup>3,5</sup>. Additionally, an increase in gastric cancer incidence in this age group has been reported, despite a decrease in the general population<sup>6,7</sup>. A more accurate view would be of great importance in face of the social, economic and psychological burden presented by young adults with cancer. Specifically for gastric cancer, such information might help to understand the conflicting data of survival and prognosis of young adults with the disease.

Overall, Giusti et al.<sup>1</sup> and Allemani et al.<sup>4</sup> both presented important data regarding gastric cancer mortality and survival, especially considering the lack of up-to-date national information on this disease. However, a more comprehensive study might include an age-specific analysis to improve our understanding of stomach neoplasm in young adults. We believe that future research should be undertaken to explore this disease’s behavior, with focus on minimizing its burden in young people.

Best regards,

Marina Candido Visontai Cormedi<sup>1</sup>  
Maria Aparecida Azevedo Koike Folgueira<sup>2</sup>

The Awards of XXXV COMU 2016 - Oswaldo Cruz Award, Clinical.

1. Academic of Medicine, Faculty of Medicine at University of São Paulo. E-mail: [marina.cormedi@fm.usp.br](mailto:marina.cormedi@fm.usp.br).

2. Academic advisor - Faculty of Medicine at University of São Paulo. E-mail: [makoikefolgueira@gmail.com](mailto:makoikefolgueira@gmail.com).

**Correspondency author:** Maria Aparecida Koike Folgueira. FMUSP. Av. Dr. Arnaldo, 455. 4º andar, sala 4112. Cerqueira César, São Paulo, SP. CEP: 01246-903.

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