

Age-Sex Differences in Suicide Patterns Across the Americas

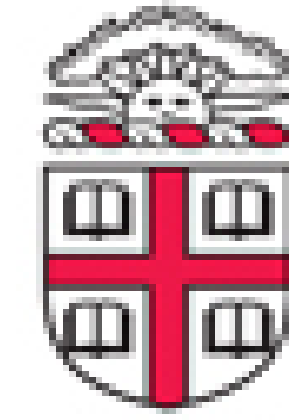


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Introduction

Globally, suicide is a leading cause of mortality. Epidemiologic studies of suicide in the Americas are lacking, particularly regarding how age-related patterns in suicide differ between males and females.

Objective: To describe patterns in suicide rates of males and females over the lifespan in four subregions of the Americas, along with the changes these patterns undergo over time.

Methods

Data consist of yearly mortality data reported to the Pan American Health Organization by individual member states from 1990-2009.

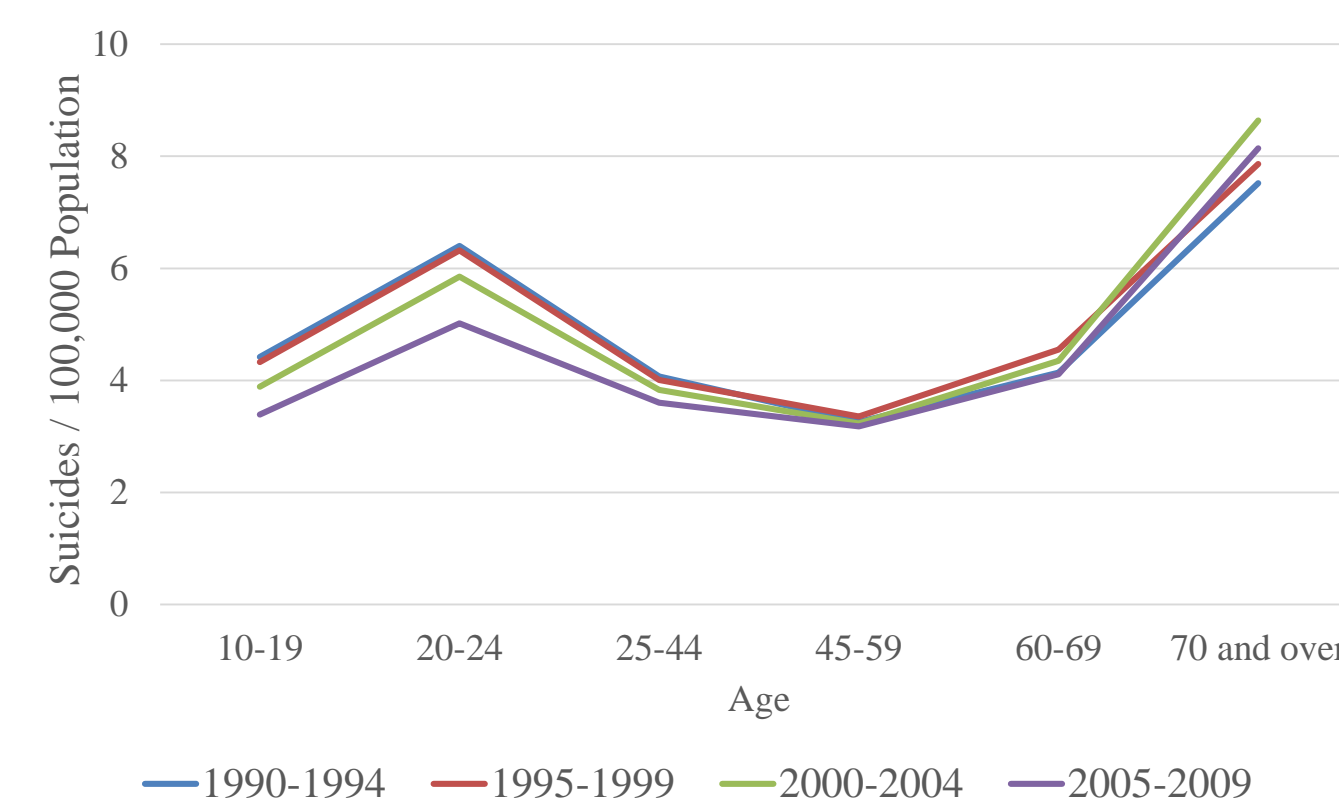
Suicide rate patterns were described using the following:

1. The countries of the Americas were divided into four subregions.
2. Populations were divided into summative age ranges: 10-19, 20-24, 25-44, 45-59, 60-69, and 70 and older.
3. Four 5-year periods between 1990-2009 were created to measure changes in suicide patterns over time.
4. The male/female ratio was used to compare male and female suicide rates.

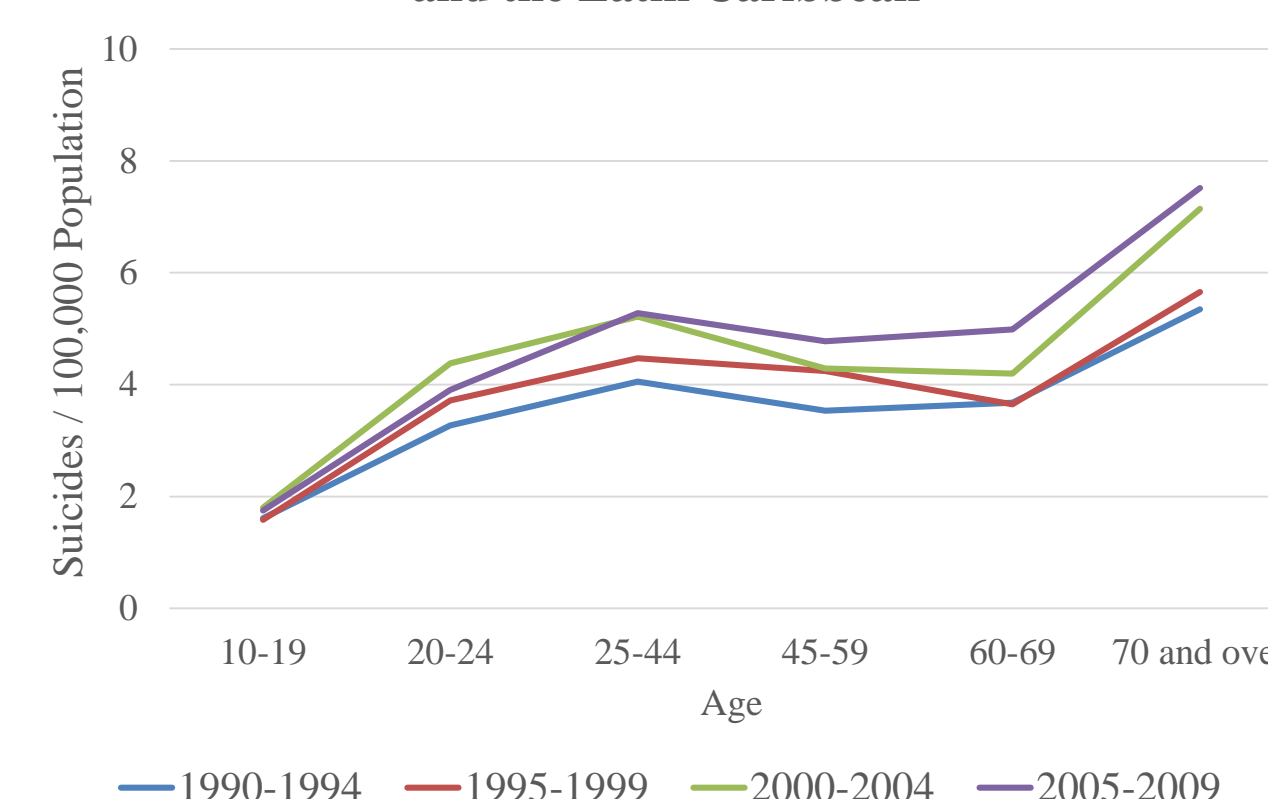
Male and female suicide rates were calculated for each age range within each subregion and 5-year period. Age-stratified male/female ratios were then calculated.

Results

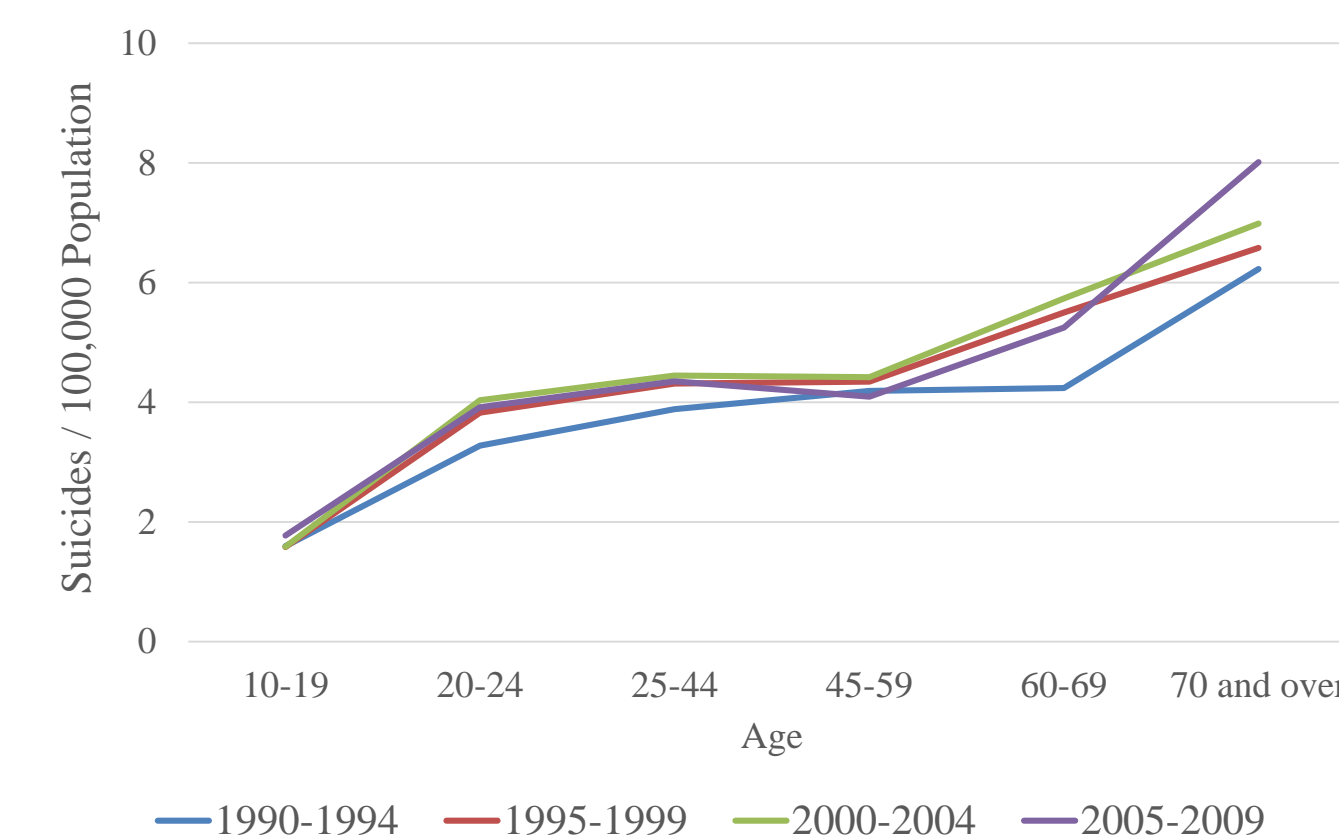
Male/Female Ratio in North America



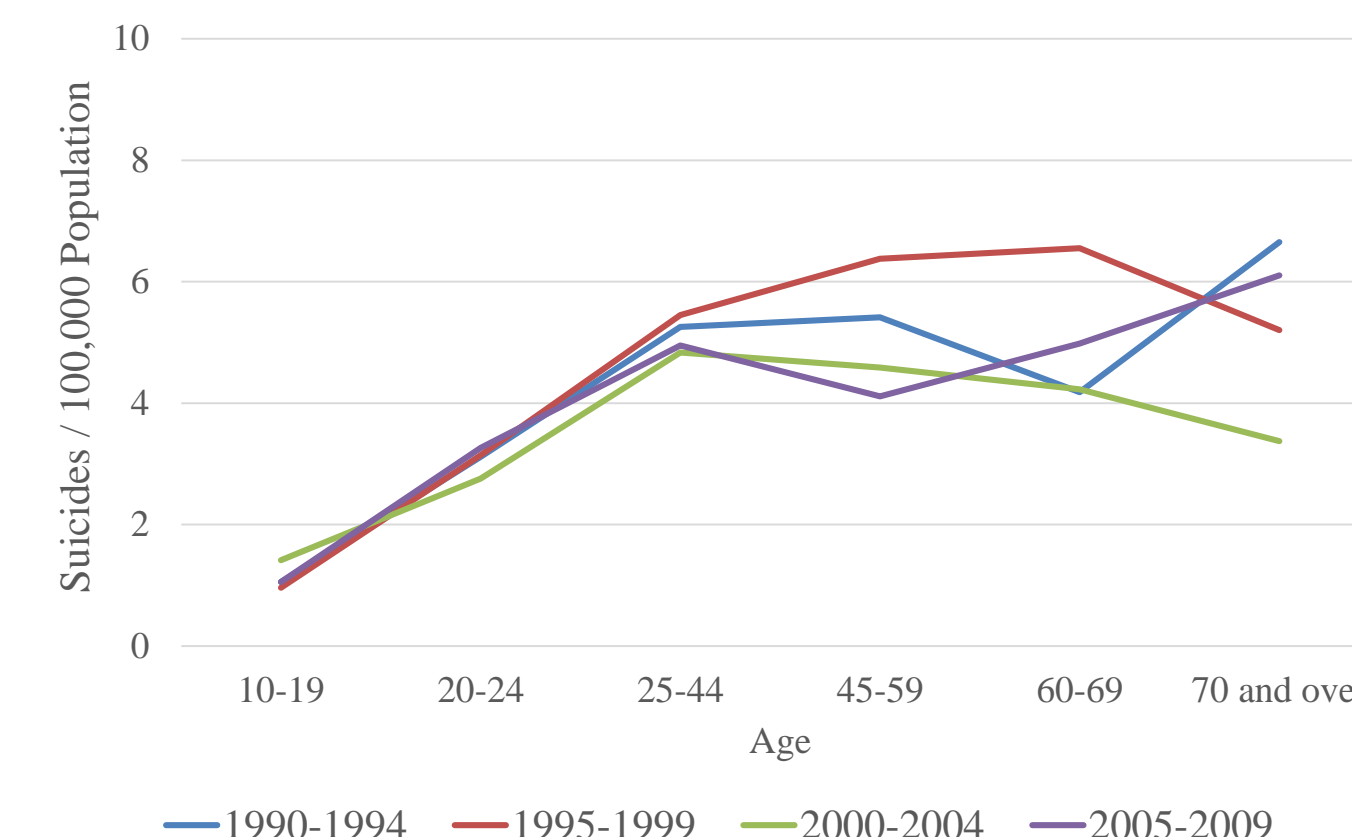
Male/Female Ratio in Mexico, Central America, and the Latin Caribbean



Male/Female Ratio in South America

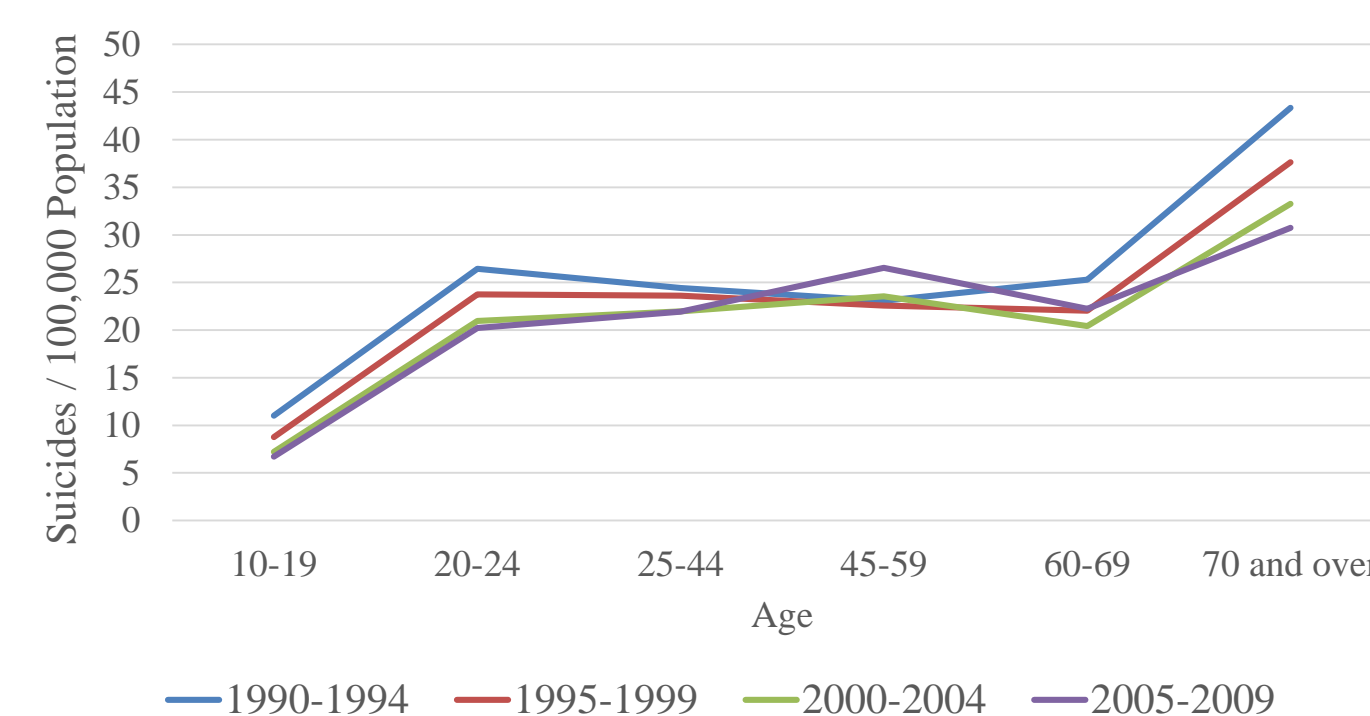


Male/Female Ratio in the Non-Latin Caribbean

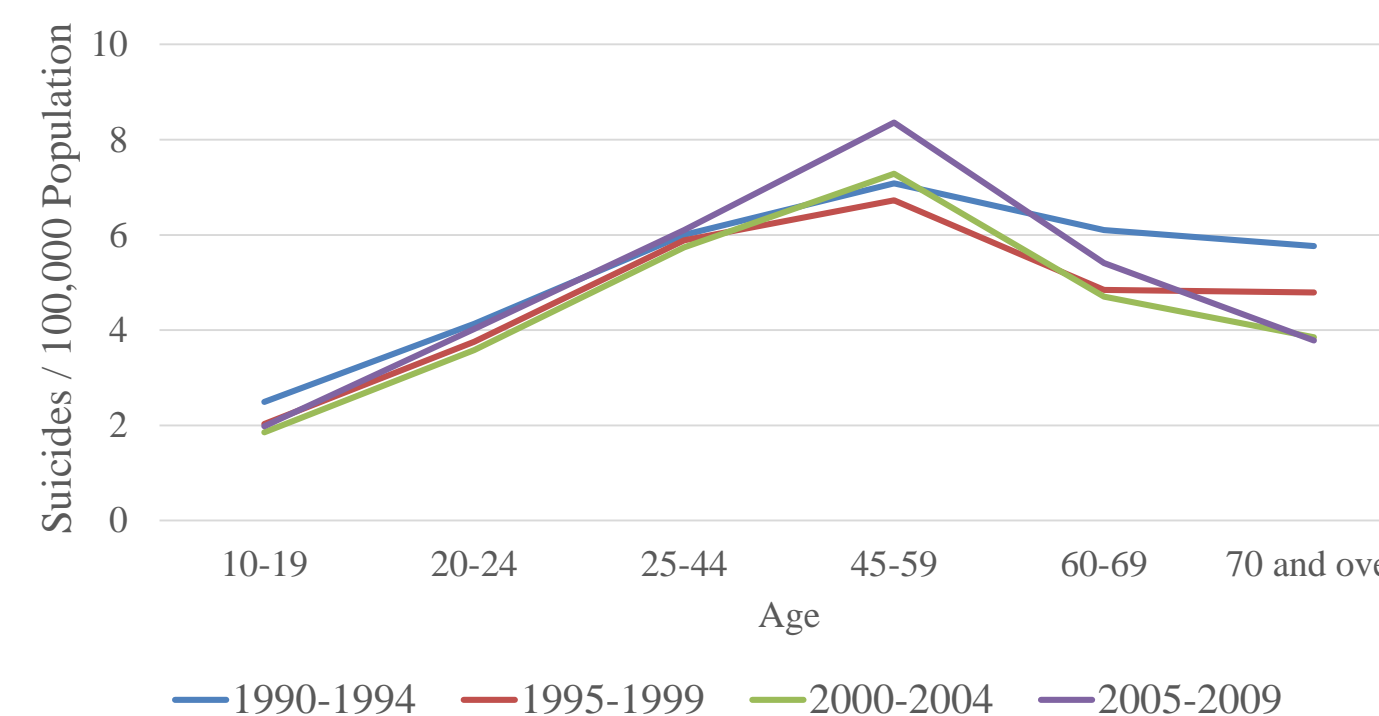


Male/female ratio of suicide, in particular for those over age 70, is greater in North America than in other subregions of the Americas.

Suicide Rate in North American Males



Suicide Rate in North American Females



Conclusions

- Male and female suicide patterns differ across geographic regions beyond just the well-established differences in rates. Rather, geography also influences age-related prevalence of suicide between males versus females.
- Age-related patterns of suicide appear to hold stable across time.
- Sex-specific age-stratified suicide patterns can elucidate changes in the male/female ratio.
- Further research is needed to explore the etiology of differences in age-sex-related suicide mortality between geographic regions.
- This analysis is limited by incomplete yearly reporting in some countries.

Future Directions

- We anticipate future data to include more specified age groups, allowing for more specific age-stratified analyses.
- Future work will analyze differences in suicide methods and their relationship with rates.

Acknowledgments

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