P2-N7

Trends and inequalities in risk factors for non-communicable diseases in Brazil and the United States from 2007 to 2019

Fernanda Oliveira Meller[1], Antônio Augusto Schäfer[1], Bruna Martins Uarthe[2], Ludmila Corrêa Muniz[2], Micaela Rabelo Quadra[1], Leonardo Pozza Santos[2]
for the Research Group on Health Care and Epidemiology.
[1]University of Southern Santa Catarina, Criciúma, Santa Catarina state, Brazil; [2]Federal University of Pelotas, Pelotas, Rio Grande do Sul state, Brazil.

Body mass index, overweight, and obesity increased in Brazil and the USA from 2007 to 2019, with greater impact on socioeconomically disadvantaged groups.

BACKGROUND

Despite having different income and development levels, Brazil and the United States of America (USA) share significant similarities, including large populations and major economies. Both countries face challenges related to social, economic, and health inequalities, making certain populations more vulnerable to health problems. This study addresses the research problem of understanding trends and inequalities in risk factors for non-communicable diseases (NCD), which is significant for informing public health policies.

METHODS

This cross-sectional, population-based study used secondary data from the Surveillance System of Risk and Protective Factors for Chronic Diseases by Telephone Survey (Vigitel) in Brazil and the Behavioral Risk Factor Surveillance System (BRFSS) in the USA. Data were collected from 2007 to 2019. The study analyzed trends and inequalities in body mass index (BMI), overweight, obesity, and regular consumption of fruits and vegetables (5 or more per week). Statistical analyses included Prais-Winsten regression and measures of absolute and relative inequalities.

RESULTS

From 2007 to 2019, the average BMI in Brazil increased from 25.0 kg/m² to 26.3 kg/m², while in the USA, it rose from 27.3 kg/m² to 28.1 kg/m². The prevalence of overweight in Brazil increased from 43.4% to 55.4%, and obesity from 12.8% to 20.3%. In the USA, the prevalence of overweight increased from 62.7% to 66.6%, and obesity from 26.2% to 31.3%. The regular consumption of fruits and vegetables increased in Brazil from 30.2% to 34.3% but showed no significant trend in the USA. Inequalities in BMI, overweight, and obesity were more pronounced among less educated individuals and those living in less developed regions in both countries.

RESULTS CONTINUED

Figure 1. Temporal trends in the prevalence of overweight in Brazil and the United States of America between 2007 and 2019.

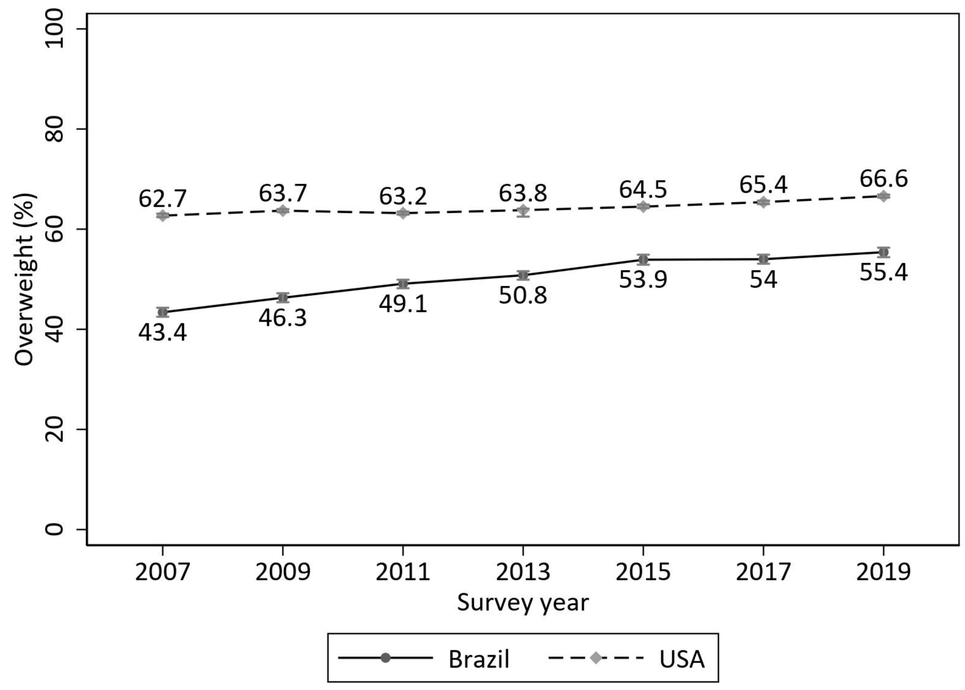
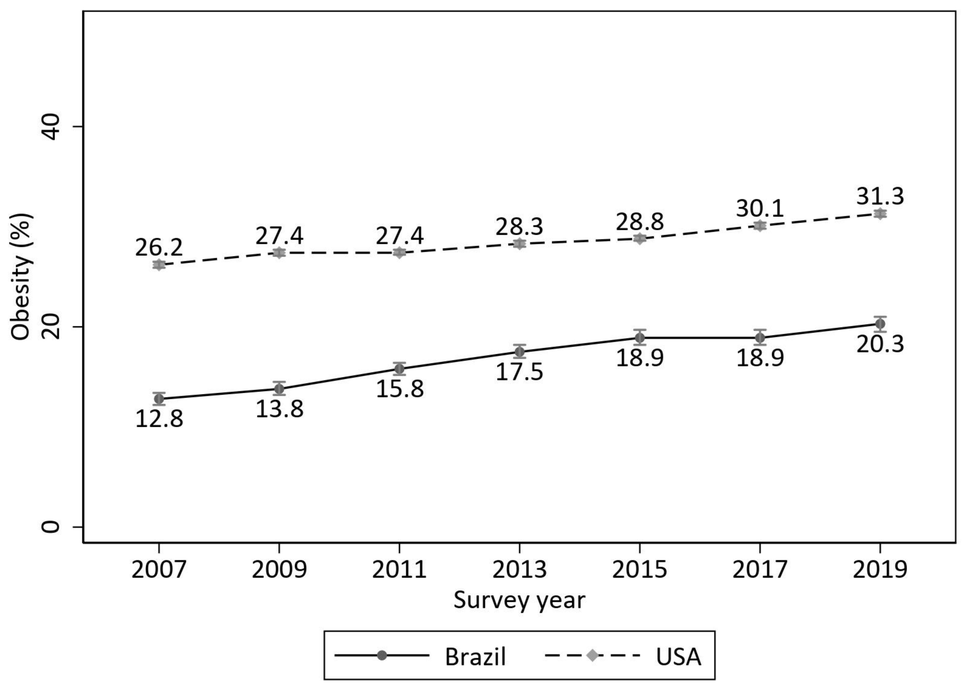


Figure 2. Temporal trends in the prevalence of obesity in Brazil and the United States of America between 2007 and 2019.



CONCLUSIONS

The findings highlight the need for targeted public health interventions to address the rising trends in BMI, overweight, and obesity, particularly among socioeconomically disadvantaged groups. Efforts to promote the consumption of fruits and vegetables should be intensified to counteract the increasing prevalence of NCD risk factors. This study underscores significant trends and inequalities in NCD risk factors in both countries, emphasizing the importance of addressing social determinants of health to reduce the burden of chronic diseases.

ADDITIONAL KEY INFORMATION

Author Contact Information: fernandameller@unesc.net

unesc A nossa universidade.
PPGSCol Programa de Pós-Graduação em Saúde Coletiva - UNESC
Grupo de pesquisa Atenção à Saúde e Epidemiologia
WCE World Congress of Epidemiology 2024