Time Trends of Physical Activity Among Brazilian Adolescents Over a 7-Year Period

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Abstract

Purpose
To evaluate time trends in physical activity among adolescents aged 10 to 19 years living in southern Brazil over a 7-year period.

Methods
Two population-based cross-sectional surveys with similar methodologies were carried out in the city of Pelotas, Brazil, in 2005 and 2012. Leisure-time and transport-related physical activity were measured using a validated questionnaire. A cut-off point of 300 minutes per week was used to classify adolescents as active or not. We also analyzed the two domains of physical activity (leisure time and transportation) separately.

Results
The prevalence of physical inactivity was 69.6% (95% CI 66.5–73.2) in 2005 and 69.9% (95% CI 66.5–72.7) in 2012. The percentage of active adolescents in leisure time also remained stable in the period (26.3% in 2005 [95% CI 23.3–29.2] vs. 28.1% in 2012 [95% CI 24.9–31.4]). Among boys, we observed an increase in the practice of some leisure-time activities—weight lifting (87%) and running (78%)—and a decline in others—volleyball (61%) and basketball (56%). Among girls, the only significant difference was an increase in the practice of weight lifting (27%). The prevalence of active commuting to and from school declined from 69% (95% CI 65.6–72.4) in 2005 to 56.5% (95% CI 52.5–60.2) in 2012.

Conclusions
There was a significant decline in active commuting to school among adolescents. Interventions promoting active commuting modes to school are urgently needed in Brazil.

Keywords: Surveillance, Trends, Physical activity, Active commuting, Adolescents