Who, when and how much?  
Epidemiology of walking in a middle income country

Pedro C Hallal¹, Alexandre C. Marques², Mario R Azevedo Jr.¹, Felipe F. Reichert¹, Fernando V Siqueira¹,

¹. Programa de Pós-Graduação em Epidemiologia – Universidade Federal de Pelotas, Brasil.  

Introduction
Physical inactivity is one of the leading causes of morbidity and mortality worldwide. Walking, a cheap and feasible activity is protective against unhealthy outcomes. Few data on walking practice are available outside developed countries. This study estimated the prevalence and correlates of compliance with physical activity recommendations through leisure-time and all-domains (leisure time, commuting and occupation) walking in individuals aged ≥20 years.

Methods
Data from two population-based surveys carried out in a southern Brazilian city; the first in 2002 and the second in 2003 were compared. Multiple-stage sampling procedures were undertaken in both surveys. Compliance with physical activity recommendations was mainly defined as at least 150min.wk⁻¹ of walking, although other cut-off points were estimated. The International Physical Activity Questionnaire was used in both studies.

Results
Samples included 3182 and 3100 individuals. Non-response rates were 5.6% and 3.5%. Both prevalence and correlates of leisure-time and all-domains walking were markedly different. Compliance with physical activity guidelines (≥150min.wk⁻¹) through walking was 40.6% (all-domains) and 15.0% (leisure time). Poor and non-educated individuals presented a lower likelihood of walking than rich and highly educated people, particularly in leisure time. Walkers were also more likely to practice other vigorous and moderate-intensity activities.

Conclusions
Although the results arise from a single Brazilian city, they are likely to be relevant to other similar areas in middle-income countries, where the obesity epidemic is rising rapidly. Due to the low levels of walking detected, particularly in leisure time, health professionals are encouraged to recommend walking to their patients.