33rd Annual Conference of the International Society for Environmental Epidemiology

Promoting Environmental Health and Equity in a Shifting Climate

Abstracts’ E-Book
Identifying geographical profiles of nutrition-epidemiological transition in Argentina
Graciela Fabiana Scruzzi¹, Natalia Tumas², Sonia Alejandra Pou³
¹Escuela de Nutrición, Facultad de Ciencias Médicas, Universidad Nacional de Córdoba, Córdoba, Argentina; Nutrición, Facultad de Ciencias de la Salud, Universidad Católica de Córdoba, Córdoba, Argentina.
²Centro de Investigaciones y Estudios sobre Cultura y Sociedad (CIECS), Universidad Nacional de Córdoba, CONICET, Córdoba, Argentina
³Instituto de Investigaciones en Ciencias de la Salud (INICSA), Universidad Nacional de Córdoba, CONICET, Facultad de Ciencias Médicas, Córdoba, Argentina

BACKGROUND AND AIM: Latin America has experienced major shifts over the last decades in its demographic, nutritional, and epidemiological profiles. While the global trends and patterns have been widely described, the differences in the process of nutrition-epidemiological transition among and within low- and middle-income countries have been scarcely explained. This work aimed to identify different geographical profiles of nutrition-epidemiological transition within Argentina in the 2005-2019 period.

METHODS: A nationwide ecological study in Argentina was performed, using health statistics and demographic information from official data sources about its 24 geographical units (provinces). Percentages of change (2005-2019) of selected nutritional, epidemiological, and demographic indicators were estimated by geographic unit. Using a Principal Component Analysis coupled with a Hierarchical Cluster Analysis, it was identified geographic clusters representing profiles of nutrition-epidemiological transition (NET) across the Argentinean territory.

RESULTS: Three NET profiles (clusters) were identified: 1) "Reemergence of infectious diseases", mainly characterized by a rising burden of infectious diseases (such as congenital syphilis among others), with a decrease in the years of potential life lost (YPLL) due to cancer and external causes; 2) "Persistence of cardiovascular diseases with improvements in health and lifestyles", with rising arterial hypertension prevalence and decreasing YPLL due to infectious diseases, infant mortality and physical inactivity prevalence; 3) "Consolidation of the obesity-physical inactivity-cardiometabolic diseases triad", characterized by increases in the YPLL due to cardiovascular diseases, in the prevalence of type 2 diabetes and adult obesity, and the proportion of people with a low level of physical activity. These clusters (NET profiles) accounted for 25%, 50%, and 25% of Argentina’s provinces, respectively.

CONCLUSIONS: The identification of different epidemiological-nutritional profiles indicates that Argentina is facing different transitional processes. Macro-contextual factors may play a major role in shaping these profiles.

Keywords: Obesity and metabolic disorders, Cardiovascular diseases, Infectious diseases, Environmental disparities, Mortality, Epidemiology