Author: Augusto Cesar De Moraes

Co Author: Marcus Vinicius Ferreira-Nascimento (School of Medicine of the University of Sao Paulo - YCARE (Youth/Child and Cardiovascular Risk and Environmental) Research Group), Claudia Lucia Forjaz (School of Physical Education and Sport, University of Sao Paulo - Exercise Hemodynamic Laboratory), Laura Zapata-González, Juan Carlos Aristizabal (School of Nutrition and Dietetics, University of Antioquia), Florencia Tello (Universidad de Buenos Aires, Facultad de Medicina, Escuela de Nutrición), Carlos Delgado (Instituto Nacional de Salud del Niño, Lima-Perú.), Luis A Moreno (Faculty of Health Sciences, University of Zaragoza - Growth, Exercise, NUTrition and Development (GENUD) Research Group), Heraclito B Carvalho (School of Medicine of the University of Sao Paulo - YCARE (Youth/Child and Cardiovascular Risk and Environmental) Research Group)

Topic: Community health and nutrition programs

Title: Validity of a physical activity questionnaire for South American Children and Adolescents: Results from the SAYCARE multicenter study

Presentation Type: Oral

Introduction: To evaluate the reliability of the physical activity (PA) questionnaire by multilevel modeling from the South America Youth Cardiovascular and Environmental (SAYCARE) study.

Methods: Data collection took place in 2015 in seven cities from six South American countries: Argentina (Buenos Aires), Brazil (São Paulo and Teresina), Chile (Santiago), Colombia (Medellín), Peru (Lima) and Uruguay (Montevideo). The sample involving a school-based convenient sample of 2100 children and adolescents (300 subjects/center), at the moment, 918 children and adolescents (43.7% of the sample) were assessed in five countries: Brazil (194), Chile (213), Colombia (220), Peru (207) and Uruguay (84). Before the data collection, the questionnaire has passed through a transcultural adaptation protocol. The SAYCARE physical activity questionnaire (47 questions) comprises three domains: leisure, transport and school environment, evaluated in accordance with the frequency, duration and intensity of activity. The adolescents (11-17 years) and the children’s parents (until 10 years) answered the PA questionnaire. As reference method, PA was objectively measured by accelerometers during one week (at least 3 days), with a minimum of 8 hours recording/day used the week before applying the questionnaire.

Results: Using the questionnaire, children and adolescents spent 101 min/day doing PA. When measured with accelerometers, they spent 151.7 min/day doing PA. We
found The VC’s was 0.35 and explains 21% city level variance with 52.4 min/day PA limits of agreement between both tools with multilevel analysis.

Conclusions: Although the study assessments are still in progress, the SAYCARE physical activity questionnaire appears to have an acceptable validity.