

SUNRISE International Study of Movement Behaviours in Young Children

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Topic: The 24-hour Movement Paradigm

Keywords: early years, physical activity, sedentary behaviour, screen time, sleep

Purpose:

This symposium will provide an overview of the SUNRISE study methods and pooled results from the countries that have completed the pilot data (n=1763). The presentations will include findings on the feasibility and prevalence rates, how the study has built country capacity, what the challenges have been, and how those challenges vary across countries with diverse characteristics.

Description:

SUNRISE is an international study that aims to determine the proportion of pre-school children (ages 3 and 4) who meet the WHO Global guidelines for physical activity, sedentary behaviour and sleep. It involves 38 countries, 24 of which are low- or middle-income countries (LMIC). Of particular interest is how these proportions differ between boys and girls, between children from urban and rural areas, and between children from LMIC and high-income countries (HIC). For many of the countries involved, this is the first time such data have been collected in this age group. As such, there is a focus on building local capacity and cross-country partnerships and ultimately an international network of researchers in the area of young children's movement behaviours.

Symposium overview:

1. Professor Anthony Okely (Chair, Australia): Symposium Introduction and overview of the SUNRISE International Study of Movement Behaviours in Young Children: process and preliminary results (12.5min+2.5min Q+A)
2. Alex Antonio Florindo (Brazil, senior researcher): the SUNRISE Brazil Pilot Study: Results and lessons learned (12.5min+2.5min Q+A)
3. Nyaradzai Munamba (Zimbabwe, early career researcher): Assessing 24-hour

movement behaviours in low-income countries using the activPAL accelerometer: the SUNRISE Zimbabwe pilot study (12.5min+2.5min Q+A)

4. Prasad Chathurangana (early career researcher) and Pujitha Wikramasinghe (senior researcher) (Sri Lanka): Findings and challenges of assessment of 24-hour movement behaviours: the SUNRISE Sri Lanka Pilot Study (12.5 min+2.5min Q+A)
5. Adang Suherman (senior researcher) and Kuston Sultoni (early career researcher) (Indonesia): Assessing 24-hr movement behaviours and lessons learnt during subsequent piloting of a refined protocol: The SUNRISE Indonesia Pilot Study (12.5min+2.5min Q+A)
6. Open Interactive Discussion with Speakers and Audience (Moderated by Chair) (15 min)

Results:

As of August, 2020, 18 countries (10 LMIC) have completed collection of pilot data. This is the initial task for each country and involves 100 children, 50 each from urban and rural areas. Collectively, these data show that only 22% of children meet all of the WHO Global guidelines for physical activity, sedentary behaviour and sleep. A higher proportion of children meet the guidelines for physical activity and sleep ($\approx 75\%$) with only half of the children meeting the screen time guideline. There are also emerging differences between children in LMIC and HIC and between urban and rural children. We will also share what we have learned in coordinating the study, especially our reflections on working with a diverse number of countries who have varying levels of resources.

Conclusion:

A general discussion involving country representatives and conference delegates will address the special focus of the Congress around improving our understanding of health disparities globally. The session will finish with a discussion on how these pilot data may be used to enhance the likelihood of securing funding for the main study, particularly for LMIC, for whom funding is a considerable barrier.