

## **A10 Prevalence and factors associated with adherence to movement guidelines among preschoolers in Peninsular Malaysia**

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Adherence to the 24-hour movement guidelines (24-hMG) has been shown to confer health benefits to young children. WHO recommended that preschoolers aged 3-4 years should have  $\geq 180$  minutes of physical activity (PA) including 60 minutes of moderate-to-vigorous physical activity (MVPA), not be restrained for  $\geq 1$  hour,  $\leq 1$  hour of screen time (ST), and sleep for 10-13 hours while  $\geq 5$  years old should engage  $\geq 60$  minutes of MVPA,  $\leq 2$  hours of ST, and 9-11 hours of sleep. This cross-sectional study, which aimed to assess the 24-hour movement behaviours of Malaysian preschoolers aged 3-6 years and the factors associated with adherence to 24-hMG, is part of the South East Asian Nutrition Surveys II (SEANUTS II) Malaysia. A total of 208 preschoolers ( $5.0 \pm 1.0$  years old, 55.8% boys) from four regions of Peninsular Malaysia were included in this analysis. PA was assessed using GENEActiv accelerometer while information on socio-demography, socio-environmental factors, sedentary behaviours (SB), and sleep were parent-reported. A total of 24.5% of preschoolers achieved age-appropriate 24-hMG (30.2% boys, 17.4% girls). All preschoolers adhered to at least one recommendation, with the highest adherence being PA guidelines (84.1%), followed by SB (58.2%) and sleep (57.7%). Meeting 24-hMG was significantly associated with sex [boys were more likely to meet the 24-hMG than girls (OR=2.28, 95%CI=1.14, 4.55,  $p=0.020$ )] and availability of community facilities (OR=0.37, 95%CI=0.14, 0.92,  $p=0.033$ ). No significant associations were found between meeting 24-hMG with age, ethnicity, body weight status, household income, mother's education level, residential area, space to play actively at home, and support from parents, siblings, and friends to play actively. Overall, only a quarter of Malaysian preschoolers met the 24-hMG due to low adherence to SB and sleep guidelines. Future studies should explore the association of meeting 24-hMG with other potential factors and health indicators.