

A17 Factors associated with stunting among children aged 4 to 12 years in Peninsular Malaysia

Ika Aida Aprilini M¹, Razinah S¹, Lim SM¹, Lee ST¹, Geurts JMW² and Poh BK¹ on behalf of the SEANUTS II Malaysia Study Group

¹Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Kuala Lumpur

²FrieslandCampina, Amersfoort, The Netherlands

Childhood stunting has been linked to poor health, lower educational performance and developmental delays. However, large-scale studies reporting on the factors associated with childhood stunting among Malaysian children are scarce. Hence, a cross-sectional study was conducted to determine the factors associated with stunting among children aged 4 to 12 years in Peninsular Malaysia. This study is part of the South East Asian Nutrition Survey II (SEANUTS II). A total of 542 children (48.0% boys, 52.0% girls) with mean age of 8.2±2.4 years from four different regions (Central, East Coast, Northern, Southern) in Peninsular Malaysia were included in the analysis. Children's height were measured, while data regarding socioeconomic status, sanitation facility and personal hygiene were collected using parent-reported questionnaires. Venous blood samples were drawn and haemoglobin levels were determined using flow cytometry. Some 6.1% of children had stunting, with higher proportions in boys (54.5%), pre-schoolers (51.5%), urban areas (63.6%), and household sizes of 5 people or more (66.7%). Only 6.1% of children with stunting appeared to also have anaemia. Majority of children and their mothers applied good hygiene practices (84.4-90.9%) with proper sanitation facilities at home (100%). Factors including birth weight (OR 3.12, 95%CI 1.20, 8.17, $p=0.020$) and maternal height (OR 2.93, 95%CI 1.03, 8.35, $p=0.044$) are significantly associated with stunting. No significant associations were found with gender, age group, residential areas, maternal education, household income and expenses, anaemia status, and sanitation and good hygiene practices. In conclusion, birth weight and maternal height are the two main factors identified as being associated with stunting among Malaysian children. Strategies to address childhood stunting should aim to ensure good nutritional status among girls and healthy pregnancies with good gestational weight gain.