PD14: Pedometer-measured Physical Activity in Primary School Children in Kuala Lumpur, Malaysia

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ABSTRACT

Introduction: Physically inactive is widely considered as a contributing factor to the obesity epidemic especially among growing children. Accurate assessment of physical activity provides valuable information on daily activity pattern. The aim of this study was to objectively measure physical activity and its association with socio-demographic factors among Malaysian primary school aged children. Methods: Subjects were 111 primary school children in Kuala Lumpur selected through random sampling. Activity pattern was determined using pedometers on two weekdays and one weekend day and differences by sex, ethnicity and weight category (BMI) were analyzed. Results: Sample consisted of 3446 women (40%) and 5308 men (60%). Median age of patient was 58 years and median baseline creatinine was 83mmol/L. Baseline median eGFR was 84.8 and 86.6 mL/min/1.73 m2 for MDRD and CKD-EPI equations (p < 0.001), respectively. Of the 8754 measurements, MDRD classified 2169 (23%) patients as “normal function” (eGFR>90%) while CKD-EPI classified 2720 (31%) patients as “normal function”. 15% patients who were classified as “normal function” with CKD-EPI were classified as “mild reduced GFR” (GFR: 60-89 mL/min/1.73 m2) using MDRD. CKD-EPI classified fewer patients (63%) as eGFR < 60% as compared to MDRD (72%). Conclusion: The CKDEPI equation classified fewer individuals as having reduced kidney function than did the MDRD Study equation across a broad age range.

KEY WORDS:
Pedometer, physical activity, school children