Abstract

Background: Child obesity, a major risk factor of noncommunicable diseases such as hypertension or heart diseases, has become a major health issue in Indonesia, especially in the wake of economic growth. Nevertheless, child obesity prevention programs and relevant information is limited.

Purpose: This study aimed to investigate child obesity status, healthy weight development lifestyle behaviors and their predictors, and their structures, in order to develop a model to suggest a collaborative healthy weight development program for schoolchildren in urban Indonesia.

Objectives: There were two objectives: (1) investigate schoolchildren's obesity status, lifestyle behaviors, and their predictors (predisposing, reinforcing, enabling, and environmental factors) and (2) examine relationships among schoolchildren's obesity status, lifestyle behaviors, and their predictors in urban Indonesia.

Methods: The design was a cross-sectional study using physical measurement tools and a 82 item self-developed questionnaire based on interviews for elementary schoolchildren aged 9 to 11. Sampling included five schools resulting in 594 eligible students with 579 (97.5%) responding. Collected data was analyzed by descriptive statistics and a structural equation modeling. The Research Ethics Committee of St. Luke's International University (No. 15-036) approved the study. The Islamic State University of Jakarta and the Agency for National Unity, Politics, and Community Protection of Indonesia approved this study.

Results: Of those 594 schoolchildren responding, physical measurement classified 40% as obese or overweight and 35% as thinness. Descriptive statistics revealed limited practices in access to snacks, physical activity (PA), monitoring of own weight, and limited obesity education and support environment. The models by type of schools and by gender (CFI = .88-.91) indicated; trouble sleeping for boys (β = -.18), junk food frequency and foods from outside (β = -.18 and -.19) of private schoolchildren predicted BMI. Self-efficacy (β = .25-.71) predicted most of the lifestyle behaviors. PA safety environment (β = .17-.48) and family support (β =.36-.59) predicted PA lifestyle behaviors. For girls, PA peer presence predicted PA lifestyle behaviors (β = .88).

Conclusion: These findings suggest that the development of a healthy dietary environment, PA safety environment, PA peer-group support especially for girls, school health systems and programs such as dietary-PA combined interventions involving family might be the basis of effective programs for healthy weight development for schoolchildren in urban Indonesia.

Acknowledgments