Socio-environmental risk factors associated with obesity in the capital, the Solomon Islands

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ABSTRACT
Objective: Obesity is a public health concern in the Solomon Islands. This study aimed to evaluate the characteristics and to assess the socio-environmental and behavioural factors that contribute to obesity, in the capital city of the Solomon Islands, to indicate the best approach for effective health promotion. Methods: A cross-sectional study of adults aged 20 to 80 years was conducted with 200 subjects in a clinic between June and July 2016 in Honiara. Anthropometric measurements, surveys of socio-economic status (SES) and behavioural status were conducted. Pearson's correlation analysis was used to identify the correlation between BMI and systolic blood pressure, stratifying by age, gender and income. Multiple linear regression analysis was used to identify factors significantly associated with higher BMI. Result: Four fifth of subjects were overweight or obese (33.5% overweight and 49.5% obese) though the subjects comprised hospital patients. Obese prevalence was greater among females than males. A significant positive correlation was found between income and BMI among males aged over 60 years and females aged 40-59 years. A significant positive correlation was found between systolic blood pressure and BMI among higher income male and females aged 40-59 years. Multiple linear regression analysis found that sex and income were significantly associated with higher BMI. Conclusion: The present study indicated that higher systolic blood pressure, female, and higher income were associated with higher BMI. Interventions should be implemented for high-risk populations to reduce obesity.

Socioeconomic determinants of malnutrition among children under the age of five in eastern Indonesia

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ABSTRACT
Malnutrition among children under-five is a major public health problem in eastern Indonesia. Based on a report released by Ministry of Health Republic of Indonesia in 2013, there were five provinces with the highest malnutrition prevalence and most of them were located in eastern Indonesia including East Nusa Tenggara, West Papua, Maluku, West Sulawesi and South Kalimantan. High prevalence of child malnutrition in eastern Indonesia could be impacted by low socioeconomic backgrounds. Indonesia Central Bureau of Statistics (BPS) data 2015 showed the high poverty rate in Indonesia was still dominated by provinces in eastern Indonesia. The objective of this paper is to assess impact of socioeconomic factors to malnutrition among children age group 0-59 month old in eastern Indonesia. This study used cross-section data obtained from Indonesian Family Life Survey (IFLS) East 2012. The number of samples were 1095 children and Child nutritional status was categorized into two groups-malnourished and adequate based on standard deviation score (z-score) according to WHO Child Growth Standards 2006. Ordinary Least Square (OLS) and probit models were used to determine socioeconomic determinants of malnutrition among children under-five. The result of study found that total malnutrition cases were 551 with a prevalence 50.32%, furthermore 30.14% children were moderately malnourished and 20.18% children were severely malnourished. Both of OLS and probit regressions showed that probability of malnutrition was higher among children in age group 12 to 47 months old. Wide range of the age group indicated that nutritional condition of children under-five in eastern Indonesia was very critical. Malnutrition was also associated to children who were born in forth of his/her birth order or live in bigger household size. On the other hand, household food expenditure, skilled birth attendant and parent with university education were factors which statistically significant to reduce child malnutrition probability.