

Under-Reporting of Energy and Nutrient Intake from 24-Hours Diet Recalls in The Malaysian Adult Nutrition Surveys (MANS 2014 & MANS 2003)

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ABSTRACT

INTRODUCTION: Under-reporting of energy intake is a common cause of bias in nutritional studies. This study was aimed at examining the extent of under-reporting of energy intake and its related characteristics among respondents in MANS 2003 and MANS 2014. **METHODS:** The present study analysed energy intakes of 9,624 adults aged 18-59 years old from the Malaysian Adult Nutrition survey in year 2014 (2,890 respondents) and 2003 (6,734 respondents) using a single 24-hour diet recall. Basal metabolic rates were calculated from the age- and gender-specific equations of Schofield. Under-reporting was defined as an energy intake: BMR ratio <1.2 as proposed by Goldberg. **RESULTS:** Under-reporting has increased significantly ($p < 0.001$) from 53% in 2003 to 61% in 2014. In both surveys, under-reporting increased with higher BMI and older age-group. It was higher among women than men, lowest among those with primary schooling or below, and those living in Peninsular Malaysia. It was higher among rural respondents in 2014 but higher among urban respondents in 2003. Intake of energy and micronutrients increased when under reporters were excluded. **CONCLUSION:** Under-reporting was prevalent in both the nationwide MANS, and is associated with BMI, age, gender, education level, strata and location. It is important to take this into account when assessing dietary intake in population-based studies.

KEYWORDS: Energy intake, 24-hours diet recall, under-reporting, nutrition survey, adults

Urban Heart: A Structured Tool for Framing Health Equity in Cities and Districts

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ABSTRACT

INTRODUCTION: The Urban Health Equity Assessment Response Tool (Urban HEART) supports statistical evidence of a population and their varied living conditions and involve the participating local community to draw linkages between socioeconomic factors and health impact. The aim of this paper is to describe the process of adopting Urban HEART in Malaysia cities. **METHODS:** In this paper we explore systematically the Urban HEART concepts and processes, and how this tool influenced the development of a collaborative process in finding the differences across urban populations. We also examined the efforts of introducing Urban HEART to public health practitioners in Malaysia including the capacity building. **RESULTS:** The three main approaches to reduce health inequities are to target the disadvantage population groups, narrow health gap and reduce inequities. The speculated causes of health inequalities in different cities were viewed for socioeconomic factors (including demographic, SES and living condition), and health outcomes (including morbidity, mortality and healthcare services). Urban HEART training was conducted in two sessions in 2013, involving numerous participants from six different states. Differences in health across the population are to be observed in the cities and to report the inequalities in social determinants as the underlying cause of health inequalities. Local indicators to be identified and established criteria to prioritize a conclusive planning. **CONCLUSION:** The Urban HEART is designed by WHO as a user-friendly guide for policy- and decision-makers at national and local levels; to help in identify and analyse urban health inequities and facilitate viable decisions of health inequities.

KEYWORDS: urban health, health equity, health impact