

EDITORIAL

Landmark National Surveys on Nutritional Status and Consumption - The Third NHMS and MANS: Sharing Some Key Findings

As Malaysia celebrates its 50th year of Independence in 2007, nutritionists may justifiably feel proud of the momentous progress that the country has achieved in improving the nutrition and health of the population. Prior to Independence, there were reports of young children suffering from marasmus and kwashiorkor amidst high infant and maternal mortality rates. Since then, rapid socio-economic development as well as the implementation of public health measures, including nutrition improvement interventions, has contributed to the vast reduction in the severity and extent of under-nutrition, especially in children and pregnant women.

The year of 2007 is also propitious to nutritionists in Malaysia with the presentations of results from two landmark nutrition surveys, which were conducted on nationally representative sample populations. The first is the Third National Health and Morbidity Survey, 2006 (or NHMS III), which shared its findings in a Scientific Conference on 8-10 August 2007 in Putrajaya. Meanwhile, a Seminar on key findings from the Malaysian Adult Nutrition Survey (or MANS) was held on 15 May 2007 in Putrajaya.

Third NHMS

The Institute of Public Health of the Ministry of Health conducted the First NHMS in 1986, and since then, this flagship survey on public health issues has been undertaken once every 10 years - hence, the Second and Third NHMS were held in 1996 and 2006 respectively. The Third NHMS is special to nutritionists because it incorporated assessment of nutritional status of all age groups for the first time in the history of the NHMS series. Also, the infant feeding component that was initiated in the Second NHMS, was maintained in the Third NHMS. In this respect, the leadership of the Institute of Public Health deserves to be congratulated for their far-sightedness.

A total of 32,985 adults aged 18 and above were assessed. Arguably, the most thought-provoking nutrition finding of the Third NHMS is the remarkable increase in the prevalence of overweight and obesity in the adult population, as compared to the Second NHMS. The adult prevalence of overweight has grown 1.7 times from 16.6% to 28.6% over the past decade. More alarming is the three-fold "jump" of the prevalence of obesity, from 4.4% to 14.2%. More women were obese (17.4%) than men (10.0%), with housewives showing the highest prevalence (20.3%) among the various employment groups. Indians and Malays showed higher prevalence of obesity than the other ethnic groups. These are disturbing findings pointing to an apparent lack of success of health and nutrition promotion interventions.

Meanwhile, over 21,000 children aged below 18 years were assessed and one of the heartening findings is that the majority showed satisfactory weight for age (81.4%) and height for age status (80.5%). The prevalence of underweight and stunting were 13.2% and 15.8% respectively. In this context, the differences among the states are significant. Sabah, Kelantan and Terengganu need to address the presence of relatively higher prevalence of under-nourished children, compared to Kuala Lumpur and Pulau Pinang.

However, the latter, together with Melaka, Negri Sembilan and Selangor need to intervene in order to arrest the rise in overweight prevalence (ranging from 6-9% in these states).

The Malaysian Adult Nutrition Survey (MANS)

The MANS also broke historic ground for nutrition in Malaysia as it is the first national food consumption survey to be undertaken. The survey was carried out in 2003 and interviewed 7,349 adults. The questionnaire elicited information on 24-hour intake, eating patterns, habitual eating habits, intake of dietary supplements and habitual physical activity. Anthropometric measurements were also taken.

Interestingly, the MANS found high prevalence levels of overweight (26.7%) and obesity (12.2%) among the adults, comparable to the figures reported in the Third NHMS. Physical inactivity is reflected in this population, whereby only 15.6% reported having exercise at least three times a week at 15 minutes per session. Much has been said in the public and scientific domains on this subject. It is clear that more efforts are needed to move the physically inactive Malaysians.

Based on 24-hour recall, intake of energy and several nutrients including calcium, iron and vitamin C were found below the recommended levels for Malaysians. Questions have been raised with the likelihood of under-reporting in this survey. Under-reporting of intake of macronutrients is a common challenge universally. Perhaps lessons may be learnt from others who have found ways to reduce or minimise the margin of error arising from under-reporting.

The influence of the dietary supplement industry is evidently omnipresent and reflected in the MANS findings. While nearly 24% reported taking multivitamin/mineral supplements, almost 25% were taking other types of dietary supplements. It appears to be an uphill battle in educating the general public to rely more on foods for health, rather than supplements. In this respect, nutritionists need to keep pace with the flood of information and health claims that deluge the dietary supplements market.

In conclusion, the results from the Third NHMS and MANS have filled the gaps in our knowledge base on nutritional status and consumption of Malaysians, to a considerable extent. As these surveys are expensive to conduct, costing millions of ringgit, shortcomings should be identified and rectified for the benefit of the next round of these surveys. In terms of building capacity, nutritionists from as many agencies should be involved, from planning to implementation and data management.

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