### Proceedings of the 3<sup>rd</sup> Expert Consultation and Planning Meeting on Infant and Young Child Nutrition-(Part 2)

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#### ABSTRACT

Introduction: The Infant and Early Childhood Nutrition Task Force, International Life Sciences Institute Southeast Asia (ILSI SEA) Region, organised the 1<sup>st</sup> and 2<sup>nd</sup> Expert Consultation and Planning Meeting on Infant and Early Childhood Nutrition in 2009 and 2011, respectively. The goal of the consultations was "to generate and promote relevant science-based information that will help improve nutritional status, growth and development of infants and young children in Southeast Asia." Methods: An Expert Panel Core Group was created whose role is to provide advice and recommendations through a review of current scientific knowledge regarding issues related to early childhood growth and nutrition. The Panel is composed of experts representing 7 countries (China, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam). In July 2012, the Panel convened the 3rd Expert Consultation and Planning Meeting on Infant and Young Child Nutrition in Singapore. This report presents the highlights of the meeting and recommendations made by the Panel on ways to improve infant and young child nutrition in Southeast Asia. Results and Conclusion: The effective use of WHO indicators for assessing infant and young child feeding practices, mitigating the effects of maternal employment on breastfeeding, using behaviour change communication, updating the education of health personnel, and improving maternal health were considered important actions to be taken. Since current feeding practices in Southeast Asia fall short of WHO recommendations, studies are needed to develop strategies which take into consideration the diverse cultural settings that characterise the region.

Key words: Southeast Asia, infant, nutrition, feeding, nutritional status, children

### BACKGROUND

The goal of the ILSI SEA Expert Consultations on Infant and Young Child Nutrition is "to generate and promote relevant science-based information that will help improve nutritional status, growth and development of infants and young children in Southeast Asia." The framework for the consultations is the United Nations' Millenium Development Goals, specifically the goal to reduce child mortality, and the *Lancet*'s recommendations to prevent undernutrition from conception through 24 months of age, as a way of reducing child mortality.

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In July 2012, representatives from Malaysia, Thailand, Philippines, Indonesia, Vietnam, and China attended ILSI SEA's 3<sup>rd</sup> Expert Consultation and Planning Meeting on Infant and Young Child Nutrition held in Singapore. The objectives of the meeting were to:

- Discuss the influence of maternal nutrition on offspring health and its implications for programme planning and intervention;
- Examine current knowledge and issues in Southeast Asia regarding infant and young child feeding (IYCF) practices;
- Identify knowledge gaps and priority topics for future knowledge dissemination to help improve IYCF practices in the region.

The Expert Panel identified several issues which were ranked in terms of importance to the region. Issues were classified as (a) those which were considered high priority for Southeast Asia and (b) those which were considered less urgent but nonetheless important issues to be addressed.

### I. ISSUES RANKED AS HIGH PRIORITY FOR SOUTHEAST ASIA

### Use of WHO indicators for assessing infant and young child feeding practices

The Panel agreed that the new WHO indicators for assessing infant and young child feeding practices should be regarded as the minimum required data for assessing the situation on infant and child feeding in the region, and that their use should be adopted in national surveys. However, ways to improve the use of the indicators should be studied. The following points need to be considered, among others:

• Operationalising the denominators of some indicators by specifying the type of populations to include in the calculations, e.g., whether or not deceased children should be counted

when computing the proportion of breastfed children;

- Undertaking country-specific validation of indicators against measured dietary intakes and nutritional status of infants and children, and refining the indicators based on the results;
- Documenting cultural variations/ differences that may influence the context in which the indicators are used in different countries in Southeast Asia;
- The need to consider how better harmonisation regarding the use of WHO indicators in both the DHS and MICS can be achieved, to allow comparability of the situation across countries and to provide a clearer situation analysis. Currently, the indicators used are not consistent between the two surveys. For example, the MICS does not include information on minimum dietary diversity, minimum acceptable diet, and consumption of iron-rich and iron fortified foods, while in the DHS, consumption of iron-rich and iron-fortified foods is not differentiated for breastfed and nonbreastfed children;
- The WHO infant and child feeding guidelines can be adapted for use in Southeast Asia by translating these into locally applicable portion sizes. This will allow easier use and understanding among users, which should facilitate behaviour change

### Maternal employment and breastfeeding

An increasing number of women in Southeast Asia are joining the workforce. Studies indicate that maternal employment reduces the prevalence and duration of breastfeeding. In order to increase breastfeeding rates, the needs of breastfeeding mothers in the context of their work environment have to be identified. This would include examination of existing work environments and asking the following

questions: Do workplaces provide breastfeeding stations? If so, are these stations being utilised? What are the specific needs of working mothers in different types of occupations and how can these be supported? What are the nutritional requirements of lactating women in different work categories? The Panel also suggested the development and distribution of readerfriendly communication materials explaining the importance of continued breastfeeding among working mothers, to help change attitudes of employers and the general public.

### Behaviour change communication

Changing infant and child feeding behaviours in the context of cultural background was seen as an important issue that needs to be addressed in the region. In particular, there is not enough data on "responsive feeding", how this applies to Asian families and its effects on child health. Examples of communication to achieve behaviour change include the translation of WHO guidelines for complementary feeding into locally applicable portion sizes and developing messages on how to deal with picky eaters and temperamental children, using different messages to suit specific groups (e.g., parents, surrogate caregivers).

### Education of health workers, medical personnel, caregivers

Current feeding recommendations are not reflected in the curriculum in many schools in the region. The Panel agreed that developing up-to-date learning materials for health workers, doctors and nurses based on WHO and UNICEF recommendations, revising outdated school curricula, and retraining medical personnel in essential newborn care should be considered a priority in order to promote appropriate breastfeeding and complementary feeding practices in the healthcare setting. For caregivers, food safety education (e.g., frequent hand-washing and using clean water in infant food preparation) is important.

## Effects of maternal nutrition on offspring health

With regard to the effects of maternal nutrition on offspring health, the Panel agreed that the following issues need to be examined in Southeast Asia:

- Country-specific recommendations on the type of supplements that optimise fetal outcomes (e.g., multiple micronutrients vs. iron folate tablets vs. single nutrients). For instance, in the Philippines, a study on pregnant women showed improved birth outcomes using multiple micronutrients compared with iron folate tablets.
- Recommendations for teen pregnancies should be generated for countries in the region.
- Effects of emerging nutrient deficiencies and excess (e.g., vitamin D, vitamin K, iodine, nutrient content of breastmilk) on birth outcomes and infant development should be examined.

### Infant and child feeding during emergencies

Nutrition of infants and children during calamities such as typhoons and floods (frequent in Asia) needs to be studied.

### II. ISSUES RANKED AS LESS IMMEDIATE BUT EQUALLY IMPORTANT

### Tools for dietary assessment

The ProPAN and Opti-food linear programming tool were considered feasible tools for use in the region to assess levels of food intake, identify culturally-acceptable complementary foods and specify portion sizes. The tool is currently being tested in Thailand and the Panel agreed that recommending its use in the region can be postponed until results are available. Limitations are the need for user training, availability of updated food composition data, and determination of portion sizes that are relevant to each country.

# Safety monitoring of use of vitamin-mineral supplements, fortified foods and fortificants

The safety of chemical fortificants and level of consumption of fortified foods and vitamin-mineral supplements by infants and young children were identified as future (rather than immediate) priorities. There are certain segments of the population such as the middle class, that provide infants and young children with self-prescribed vitamin and mineral supplements, as well as fortified food products. The Panel emphasised the need to monitor this group regarding risk of excess vitamin/mineral consumption, and whether national levels of fortification, together with supplement use, pose a risk for excess micronutrient consumption or fortificant toxicity in infants and young children.

The Panel acknowledged that a more indepth assessment of fortification strategies in different countries was needed and can be discussed in another venue. Areas that can be examined include: appropriate food vehicles, dosage needed, established safety levels of fortificants, effects of biofortification on consumption of fortificants, effectiveness of fortification versus micronutrient supplementation.

#### CONCLUSION

The Expert Panel discussed current regional issues in infant and young child nutrition that need to be examined. Issues that were considered as urgent priorities were the adaptation of WHO indicators for assessing infant and young child feeding practices in Asian settings, study of the effects of maternal employment on breastfeeding practices and identification of corresponding strategies to address detrimental effects, developing communications to promote behaviour change, educating health care providers regarding current WHO recommendations for infant and young child feeding, examining the effects of maternal nutrition particularly of teenage mothers on birth outcomes and providing nutritional guidelines for teenage pregnancy, and developing guidelines for infant and child feeding during disasters and emergencies.

Less urgent but equally important issues to be examined were dietary assessment tools that are of practical use in the region, micronutrient intake levels of infants and children resulting from the use of vitaminmineral supplements and fortified foods, and safety assessment of fortificants used in foods for infants and young children.

#### ACKNOWLEDGEMENTS

Acknowledgement is given to the following members of the ILSI SEA Region Expert Panel on Infant and Young Child Nutrition for providing feedback to the manuscript: Prof. Corazon Barba (Philippines), Prof. Khor Geok Lin (Malaysia), Dr. Endang Dewi Lestari (Indonesia), Prof. Le Bach Mai (Vietnam), Prof. Jossie Rogacion (Philippines), Prof. Umaporn Suthutvoravut (Thailand), Prof. Pattanee Winichagoon (Thailand), and Prof. Yin Shi-an (China).