# NUTRITIONAL AND COMMUNITY HEALTH EPIDEMIOLOGY OF VARIOUS POPULATION GROUPS IN THE RURAL AND URBAN AREAS IN SARAWAK AND SABAH

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### Introduction

Data on the nutritional and health status of various populations groups in Sabah and Sarawak are limited. These two states comprise diverse cultural communities living in a wide spectrum of ecological environment. The influence of the environment (geographical, socio-economic and cultural) on their food supply system, utilisation of health care, and nutritional status of various age groups, especially children, women and the elderly, should be studied and documented. In this way, there would be a greater understanding of how these people cope in meeting household demands for food needs, nutritional and health care, especially in the face of challenging environmental changes.

### Materials and Methods

The study was based on epidemiological approaches coupled with specific methods for the assessment of nutritional and health status. A structured questionnaire was used for eliciting background data on the households, while anthropometric measurements, biochemical tests on blood and urine and dietary assessment were applied depending upon the group being studied.

## Results and Discussion

Results obtained so far are reported in five theses (B.S-Pemakanan & Kesihatan Komuniti), out of which one manuscript had been accepted for publication in Journal of Malaysian Studies. Three of the studies were undertaken in Sarawak while the other two studies were done in Sabah. In Sarawak, focus was given to the nutritional status of young

children namely, Bidayuh children aged 2-6 (n=60) in a rural community (Kg Mujat, Serian District) and urban children aged 7-12 in Bintulu town (n=120). The prevalence of underweight (45% boys & 59% girls) stunting (42% boys & 55% girls) are high among the Bidayuh children. One factor contributing to the low nutritional status is inadequate intake of energy and nutrients particularly calcium and vitamin A. Poverty is the underlying factor as about 44% of the households can be categorised as very poor. In comparison, the main nutritional problem among the urban children is overweight (30%). Most of these children eat out (away from home) at least once a week and they frequently eat fish, eggs and drink milk. Since poverty plays an important influence on the nutritional status of children, the third study in Sarawak addressed the coping mechanism by housewives (n=240) on economic and health care for the household members. Some of the ways they reported they would use to cope when necessary include eating out less often, cutting down food wastage, reducing purchase of vegetables and fruits, buying more on credit, and seeking medical treatment only when really essential. The nutritional status of young children from poor communities in Sabah appears to be as unsatisfactory as their counterparts in Sarawak. In assessing a group of Irranun children aged 4-6 (n=90) in Kota Belud, Sabah, it was found that 57% were underweight and 59% stunted. Their mean intake of energy and most nutrients were below the recommended levels. About 41% of the households live below the poverty income line. They reported ways of coping with economic difficulties that included rearing chickens, planting vegetables, purchasing food on credit from grocery shops, substituting cheaper foods and decrease expenditures. In 1999 -2000 a graduate student will be carrying his study in Sabah focussing on the problem of iron deficiency anaemia and other micro-nutrient deficiency in various age groups.

# Conclusions

In general, the majority of the studied population groups were living in the poverty category and the prevalence of underweight and stunting among the children are higher than those in rural communities in the peninsula. Dietary intake is generally below the recommended levels. Housewives reported various ways of being thrifty in coping with poverty and high costs of living.