

Editorial

Epidemiology in clinical nutrition

Mark L. Wahlqvist
Akira Okada
Vichai Tanphaichitr

Clinical activity is not often seen to have an epidemiological connection. Diagnosis and patient care can be preoccupying, and the disease pattern context in which they occur inapparent. What we usually mean by the field of clinical nutrition is disease of 'nutrient deficiency', such as wasting, or 'nutrient excess', or combinations of these, for reasons primarily of intake, or, secondarily, due to increased need for nutrients or their loss. The nexus between malnutrition and communicable disease is the most appreciated *epidemiological context*, while there is increasing interest in the links between the major non-communicable disease set (ie cardio-vascular disease) and energy-dense diets. An epidemiological approach could encompass a review of the potential importance of food intake patterns in a range of other clinical areas, including for example gastroenterology,¹ disorders of the menopause,² and neurological disease.³ The epidemiology which allows a reappraisal of dietary factors in the pathogenesis of disease is that which documents food intake, namely 'nutritional epidemiology'.

A knowledge of the prevalence of nutritionally-related disease, within the community one serves as a health care professional, allows more correct probability analysis to apply to *nutritional diagnosis*⁴ and also the avoidance of inappropriate nutritional diagnosis^{5,6}. Clinical nutrition falls into disrepute if undue emphasis is placed on nutritional as opposed to other pathogenetic factors.

Again, *nutritional care* is assisted by a knowledge of the food cultures, systems and supply routes which are available in the community in which one practises. Where the food supply is deficient, alternatives should be sought in a cost-effective fashion. For example, the changing patterns of HIV (human immunodeficiency virus) positivity in communities require safe formula feeds for the infants of nursing mothers who are HIV positive, and access to formula feeds for many who are symptomatic.

New opportunities for *preventive nutrition* arise when clinicians are aware of the nutritional basis for the medical problems they see and where their origins in the community are understood.

The measurement of the outcomes of clinical nutritional

practice also require an epidemiological approach. It is increasingly required of clinical nutritionists that the level of nutritional disability that they address is quantified, in prevalence and severity. Such outcome measures include those related to wasting disorders, fracture arising from osteoporosis, obesity-related morbidity and the complications of diabetes, to mention a few. The changing patterns of nutritionally-related disease not only signal possible important changes in the food supply, but reflect the activities of those in health care practice.

The *planning and justification of health services* requires all of those in health care practice to adopt an epidemiological view of their clinical activities. There are sound humanistic reasons for the epidemiological context, to say nothing of the growing health economic imperative. Given these considerations, Asia-Pacific Journal of Clinical Nutrition hopes to contribute to the epidemiological framework of clinical nutrition practice by encouraging through its editorial policy the publication of epidemiological studies from populations within the region.

References

- 1 Lin SK, Lambert JR, Wahlqvist, ML. Nutrition and gastrointestinal disorders. APJCN 1992; 137-41
- 2 Wilcox G, Wahlqvist, ML, Burger, HG, Medley, G. Oestrogenic effects of plant-derived foods in postmenopausal women. British Medical Journal 1990; 301:905-6.
- 3 Kempster PA, Bogetic Z, Seacombe JW, Martin HD, Balazs NHD, Wahlqvist ML. Motor effects of broad beans (*Vicia faba*) in Parkinson's disease: Single Dose Studies. (In press)
- 4 Balla JI. Teaching clinical decision analysis: implications for nutritional assessment management. Med J Aust 1989; 151:S32-6.
- 5 Wahlqvist ML, Strauss, B. Clinical nutrition in primary health care. Part I. Australian Family Physician 1992; 21(10):1485-92.
- 6 Wahlqvist ML, Strauss B. Clinical nutrition in primary health care. Part II: Assessment diagnosis presentation and management. Australian Family Physician 1992; 21(11): 1633-40.