Editorial

Specialist Training in Endocrinology for Sri Lanka: a pragmatic approach

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The medical specialty of endocrinology embraces an evidence-based, rational and cost-effective approach to the diagnosis and long-term management of a wide variety of hormonal disorders of deficiency or excess. Early diagnosis and optimal treatment of these diseases are guided by biochemical tests to a far greater extent than in most specialties. Many endocrine abnormalities are confirmed by dynamic testing that involves chemical stimulation or inhibition that often involves drug injection and a series of biochemical tests. Blood, urine and/or saliva requires multiple sampling to assess the changes of the target hormone or metabolite, based on a thorough understanding of the normal physiological processes that is controlled by the negative feedback homeostasis. An endocrinologist therefore requires being confident in knowledge and skill on the biochemical basis of hormonal imbalance, with a proper understanding of the uses and limitations of each of these classic investigations. In parallel, diagnostic imaging of the endocrine "glands" helps to localize the causative pathology, which has now advanced considerably to involve ultrasound, high resolution CT scanning and MRI that can also be coupled with isotopes and dynamic chemical tests. Another dimension of clinical endocrinology is to differentiate subclinical disease from biologic variation of growth, development and physiological changes. Atypical pattern of physical growth, development and sexual maturation requires an astute clinical approach with biochemical and other relevant testing in order to determine between the fine line of disease or normal variation.

Hence, an endocrinologist is in an excellent position to care for the person as well as the disease that often requires a life course approach, and also needs to address the genetic basis of disease along with environmental influences. Most endocrine disorders are chronic and need lifelong care. Chief amongst them are diabetes and pre-diabetes, which can be detected in their subclinical stage and be pre-empted by appropriate non pharmacologic and pharmacologic interventions. Additionally these conditions require an emphasis on self-care through proper patient education and empowerment. This therefore requires dedication to a holistic outlook to care through a multi-disciplinary approach, with an emphasis on behavioral change communication; where the patient and family require appropriate psycho-social inputs. Therefore the practice of clinical endocrinology personifies the need to connect a sound understanding of the cellular and molecular basis of disease with an excellent doctor-patient relationship that have an important bearing on the disease outcomes.

Sri Lanka has a rapidly ageing population and an exponential rise in non communicable diseases that includes diabetes mellitus, cardiovascular disease, cancers, thyroid disease and musculoskeletal disease along with osteoporosis. These transitions therefore require an assessment of the human resource and technical inputs required within the context of a state health system that is committed to a free service with equity. Whilst a strong and capable primary health care system is a priority in coping with these emerging health needs of chronic disease, the availability of capable specialists in the relevant subject areas would ensure quality standards of care with reduced complications, disability and premature mortality. No doubt endocrinology is a very relevant sub-specialty.

Since the turn of the millennium, the Board of Study in Medicine of the Postgraduate Institute of Medicine, Sri Lanka has been committed to the development of Endocrinology as a sub-specialty, for candidates who obtained the MD in Internal Medicine degree. The specialty training curriculum, from its infancy, encouraged and emphasized a clinical training rotation with differing trainers, sub-topics and settings; recognized research and publications and included a pre-board certification viva voce examination. In the ensuing years, the specialty board was encouraged to re-visit the evaluation process with a greater emphasis on objectivity. This resulted in a review of the UK, USA and Australian based specialty training and evaluation of Endocrinology and much discussion among trainers and trainees. A structured training schedule was developed that incorporates a continuous assessment of knowledge, skills and attitudes by a panel of trainers; each session followed by feedback to the trainee on the quality of his/her performance and suggestions for improvement. Additionally, OSCEs, MCQs with case book and log book based viva voce are conducted pre-board certification. Regular CME programmes are also conducted by the Endocrine Society and Ceylon College of Physicians.

The trainer-trainee workload is quite considerable, with regular evaluation and feedback required amidst a high clinical workload, limited resources, staff shortage

with trainers often required to multi-task. Sub-optimal laboratory and radiology services often fail to fulfill standard endocrine testing with similar setbacks in cost effective pharmaceutical needs. It is noteworthy that several procedures, chemical tests, imaging techniques and treatment supports are lacking even in the tertiary referral teaching centres. Such setbacks in the already overstrained state health system often remain unrecognized as an important training need. Hence exposure to a state of the art training setting is still required through overseas postgraduate training prior to board certification – the arrangement which, once again, falls under the responsibilities of the trainer-trainee groups.

We therefore need to take a pragmatic approach to higher specialist training, the required supports and evaluation methods in the sub-specialty of Endocrinology, with realistic projections to ensure that state sector board certified endocrinologists will be located country-wide; initially at least on a district basis. No doubt an enabling environment must be ensured for quality training and clinical care. Continuing medical education, clinical audit, research and development, quality and safety, and appraisal of recent advances in the subject must be ensured. Multi-professional approach to diagnosis and treatment is another basic obligation that would encourage the attainment of high standards and safety of clinical care and training.

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