



EDITORIAL

The present and future of postgraduate training in Clinical Nutrition[☆]



Presente y futuro de la formación posgrado en Nutrición Clínica

Francisco Botella Romero

Servicio de Endocrinología y Nutrición, Complejo Hospitalario Universitario de Albacete, Albacete, Spain

Received 9 April 2019; accepted 15 April 2019

Many acute and chronic diseases and their treatments can affect patient nutritional status through different mechanisms involving appetite, nutrient absorption and assimilation, as well as different metabolic alterations. Good training in Clinical Nutrition can play a fundamental role in the prevention and treatment of many acute and chronic conditions, including the most prevalent disorders, such as cardiovascular disease, cancer, neurological diseases, various geriatric syndromes or obesity, with its associated comorbidities.¹

After the trek through the desert only a few decades ago of a number of endocrinologists that were the first to incorporate the knowledge and practice of Clinical Nutrition in our field,² the current paradox is that the growth of our specialty is largely conditioned by the care demands generated by hospital Clinical Nutrition.

The incorporation of endocrinologists dedicated to Clinical Nutrition is still insufficient in most hospitals,^{3,4} particularly in the context of the new care scenario, with multidisciplinary shared-disease units (gastrointestinal, ENT and maxillofacial tumors, non-neoplastic digestive tract disorders, morbid obesity, cardiovascular disease and rehabilitation, eating disorders, etc.). Meanwhile, we are

increasingly on the receiving end of consultations about how to preserve health, related to aspects of diet, healthy lifestyle and disease prevention, which will require endocrinologists in the future to position themselves as references in the promotion of nutrition and health both in and outside the hospital setting. Thus, we will have to lead training and dissemination initiatives in the form of courses, conferences, seminars and workshops, and collaborate with the communications media and social networks in all social strata. When future generations of endocrinologists complete their resident training period, they should be fully prepared to respond professionally in this field, where different scientific bodies compete for leadership, in a complex scenario characterized by a mix of professional corporate interests, commercial interests, pseudo-science and professional intrusion.

The future nutrition training of endocrinologists will need to be reinforced in a number of aspects. One aspect is obesity – an epidemic that continues to grow uncontrolled and with repeated health system failures at multiple levels – where, in addition to the traditional diagnostic and treatment areas, endocrinologists should be aware of the preventive, social and ecological dimensions of the problem.⁵ Moreover, malnutrition related to the disease continues to be an unresolved problem in our hospitals, despite the growing body of evidence regarding its clinical and economic consequences. This warrants efficient therapeutic intervention by the Clinical Nutrition Units of the Departments of Endocrinology and Nutrition in the different

[☆] Please cite this article as: Romero FB. Presente y futuro de la formación posgrado en Nutrición Clínica. Endocrinol Diabetes Nutr. 2019;66:343–345.

E-mail address: fbotellar@sescam.jccm.es

care settings (hospitals, socio-sanitary institutions, the community).⁶ Furthermore, something as important as the rational use of oral nutritional supplements makes it necessary to promote the rigorous scientific training of endocrinologists, given the heterogeneity and inequity of access to nutritional treatment caused by a series of administrative and management barriers.⁷ Finally, standardization arises as another issue in the management of complex nutritional diseases such as intestinal failure, with expensive and high technology procedures.⁸

The specialty of Endocrinology and Nutrition cannot be allowed to fail in facing the challenge of providing solid postgraduate training in this field of medicine, still under-represented in the training plans of our specialty.⁹ Endocrinologists should feel that they are fully prepared to care for patients with nutritional problems. This justifies the need to continue improving and evaluating the ability of residents in all aspects related to Clinical Nutrition which, although once considered a soft science, is currently supported by evidence-based medicine, controlled clinical trials, large observational studies and meta-analyses, to the same or an even greater degree than other disciplines considered to be in some sense "more scientific". The need for Endocrinology and Nutrition to supply physicians who are well trained in Clinical Nutrition is greater than ever before.

The original study by Ballesteros et al.,¹⁰ published in this same issue of the journal, evaluates the changes in training in Clinical Nutrition and Dietetics among residents in Endocrinology and Nutrition. The study shows the marked improvement in many training areas as compared to the situation only 10 years ago. Virtually all hospitals with accreditation for the training of endocrinologists in Spain now have Clinical Nutrition Units within Departments of Endocrinology and Nutrition. By comparison, in the past a significant number of residents in training had to undergo external rotations. The new situation is moreover associated with a marked increase in participation in protocols and publications (72.5% versus 27.9%). However, a proportion of residents (10.1–19%) still rate their overall training in nutrition as insufficient, and significant deficiencies are still often detected in specific areas such as training in dietetics (42%).

In this regard, the Clinical Nutrition courses of the SEEN for third year residents are an excellent training tool, though we must meet the challenge of maintaining and improving their level of excellence. Moreover, we consider the adaptation of their contents to emerging needs so that not only residents, but also endocrinologists of any age can benefit from the support of experts in different disciplines to represent a key responsibility.

Ongoing training courses, with updates on monographic topics in different areas of nutrition and imparted by senior endocrinologists, with a special bearing on Clinical Nutrition, constitute an immersion strategy for recently formed endocrinologists that has been endorsed at international level.¹¹ These courses allow for initiating and maintaining professional contacts and collaborative work – as already occurs in the Nutrition Area of the SEEN – and should be recognized in any evaluation of physicians specializing in Endocrinology and Nutrition. In addition, the two reference scientific bodies in nutrition and metabolism at international level (ASPEN and ESPEN) offer highly recommendable

training and accreditation opportunities for all interested endocrinologists.^{12,13}

Finally, it should be taken into account that although the medical specialty of Clinical Nutrition, on an isolated basis, is not recognized in any country similar to ours,¹¹ training references are available that can prove very useful in facilitating self-learning¹⁴ and in providing content guides and specific teaching objectives^{15,16}. Similarly, there is a great need for certifications that can serve as a support for the endocrinologist in a discipline that more than any other is plagued by pseudo-experts who present themselves as experts in nutrition after years of so-called self-learning and discovery; and who are rewarded with quite unmerited social recognition and success.¹¹

References

1. Marples O, Baldwin C, Weekes CE. The effect of nutrition training for health care staff on learner and patient outcomes in adults: a systematic review and meta-analysis. *Am J Clin Nutr.* 2017;106:284–310.
2. Soto A, Tofé S, León M, García-Luna PP. Originales Estudio sobre la situación organizativa y asistencial de la nutrición clínica hospitalaria en España: de 1995 a 2001. *Endocrinol Nutr.* 2003;50(1):8–13.
3. Martín-Folgueras T, Ballesteros-Pomar M, Burgos Peláez R, et al. Organization and management of clinical nutrition in Spain. How do we assess the quality of our activities? *Nutr Hosp.* 2017;34(4):989–96.
4. Botella Romero F, Elola Somoza FJ, Navarro González E, Fernández Pérez C, Bernal Sobrino JL, Bretón Lesmes I. Endocrinología, Diabetes y Nutrición RECALSEEN. La atención al paciente del Sistema Nacional de Salud. *Endocrinol Diabetes Nutr.* 2018, <http://dx.doi.org/10.1016/j.endinu.2018.10.002>, in press.
5. Whitmee S, Haines A, Beyrer C, et al. The Rockefeller Foundation–Lancet Commission on planetary health. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. *Lancet.* 2015;386:1973–2028, [http://dx.doi.org/10.1016/S0140-6736\(15\)60901-1](http://dx.doi.org/10.1016/S0140-6736(15)60901-1).
6. Freijer K, Bours MJL, Nuijten MJC, et al. The economic value of enteral medical nutrition in the management of disease-related malnutrition: a systematic review. *J Am Med Dir Assoc.* 2014;15(1):17–29, <http://dx.doi.org/10.1016/j.jamda.2013.09.005>.
7. Elia M, Normand C, Laviano A, Norman K. A systematic review of the cost and cost effectiveness of using standard oral nutritional supplements in community and care home settings. *Clin Nutr.* 2016;35(1):125–37, <http://dx.doi.org/10.1016/j.clnu.2015.07.012>.
8. Pironi L, Arends J, Baxter J, et al. ESPEN endorsed recommendations. Definition and classification of intestinal failure in adults. *Clin Nutr.* 2015;34:171–80, <http://dx.doi.org/10.1016/j.clnu.2014.08.017>.
9. MINISTERIO DE SANIDAD Y CONSUMO 17806 ORDEN SCO/3122/2006. de 20 de septiembre, por la que se aprueba y publica el programa formativo de la especialidad de Endocrinología y Nutrición; 2006.
10. Kiraly LN, McClave SA, Neel D, Evans DC, Martindale RG, Hurt RT. Physician nutrition education. *Nutr Clin Pract.* 2014;29(3):332–7, <http://dx.doi.org/10.1177/0884533614525212>.
11. Mueller C. The ASPEN adult nutrition support core curriculum. 3rd edition American Society of Parenteral and Enteral Nutrition; 2017.

12. Laviano A. <http://llnutrition.com/mod/resource/>, 2018.
13. Curriculum Committee of the Nutrition Academic Award Program. http://www.nhlbi.nih.gov/research/training/naa/products/curr_gde.pdf, 2002.
14. Dang TM, Maggio LA. Supporting the call to action: a review of nutritional educational interventions in the health professions literature and MedEdPORTAL. *Acad Med.* 2017;92(3):403–16, <http://dx.doi.org/10.1097/ACM.0000000000001532>.
15. Schueren MD Van Der, Elia M, Gramlich L, et al. Clinical and economic outcomes of nutrition interventions across the continuum of care. *Ann NY Acad Sci.* 2014;1321:20–40, <http://dx.doi.org/10.1111/nyas.12498>.