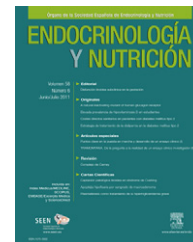




ENDOCRINOLOGÍA Y NUTRICIÓN

www.elsevier.es/endo



EDITORIAL

Present and future of the formation MIR of Endocrinology and Nutrition[☆]

Presente y futuro de la formación MIR de Endocrinología y Nutrición

Franco Sánchez Franco

Servicio de Endocrinología y Nutrición, Hospital Carlos III, Madrid, Spain

The latest assessment of the Spanish resident in training (*Médicos Internos Residentes*, MIR) program in Endocrinology and Nutrition has just been published.^{1,2} This evaluation of the training program, which since 1997 has been conducted on a regular basis, must be considered very positive, given the importance of training for the development of the specialty.^{1,3} This current assessment is particularly significant, because it analyzes the development of the latest official training program in the specialty which was proposed by the Spanish National Commission of Endocrinology and Nutrition in 2006.⁴

Examination of the results obtained from the survey allows us to draw highly significant conclusions. As regards external clinical training rotations, their obligatory nature appears to be questioned, and it is suggested that they should be established on a voluntary basis. Some characteristics of the specialty of Endocrinology and Nutrition would appear to support this approach. The obligation to undergo clinical rotations in specialties unrelated to Endocrinology would be limited or abolished, as would rotations in specialties such as Internal Medicine, or non-educational rotation periods in Primary Care or District Hospitals, which are not particularly popular. The limited rotations in certain specialties with activities related to areas in Endocrinology can be explained by the lack of prevalence of a philosophy placing emphasis on subspecialized knowledge, the acquisition of which could be regarded as positive for the future development of Endocrinology. A greater elasticity in the training program and the promotion of subspecialists would

determine selective rotation in the points most closely related to the subspecialty.

The low level of training in clinical-exploratory practices reported by those included in the survey should be regarded as very important. The introduction of clinical explorations would serve as a reinforcement of the specialty, improving the quality of healthcare, and would set the basis for healthcare options in the form of an Ambulatory Day Unit—promoting high-resolution consultations and offering economical or compensatory arguments in the setting of private practice. The study of the future of Endocrinology and Nutrition^{5,6} argues in favor of this consideration, and advocates the promotion of a number of techniques to be performed by the endocrinologist. In this context, consideration is made of at least 16 exploratory practice options that should be performed by the specialist, and to which other more recent procedures would be added—including the use of continuous subcutaneous insulin infusion systems (pumps), continuous glucose monitoring systems, arterial ultrasound in the early diagnosis of atherosclerosis in diabetes mellitus, retinography with non-mydriatic retinal camera, ambulatory blood pressure measurement and self-measurement of blood pressure, telemedicine applied to diabetes care, intelligent support systems in intensive insulin therapy, etc.

Of note in the analysis of the training areas is the improvement of clinical rotation in Nutrition, in both an in- and out-institutional setting. In contrast, no such improvement is observed in such important fields as scientific-research training and international training.

Mention must be made of the improvement in evaluation of the Departments implicated in training versus the data recorded on the occasion of the 2004 survey, where 40% of the residents disapproved of the training received in their

[☆] Please cite this article as: Sánchez Franco F. Presente y futuro de la formación MIR de Endocrinología y Nutrición. *Endocrinol Nutr.* 2011;58:507–9.

E-mail address: sanchezfr@terra.es

Department. In the present survey, 82.5% considered that their Department met the training objectives.

In order to interpret the present survey and make plans for the future development of resident training in Endocrinology and Nutrition, some aspects of this specialty and of its components during the training period must be taken into consideration. According to the analysis made of the data from 2001 to 2006 and also from the most recent data,^{3,4} Endocrinology and Nutrition is seen as a very attractive specialist option. While it is slightly less popular than the priority disciplines in clinical practice (i.e., Dermatology and Cardiology), it is clearly more attractive than Digestive Diseases, using as the criterion the median score or rank obtained in the resident in training access examination by those physicians who chose Endocrinology and Nutrition. These ranking parameters quantified in 2005–2006 were 237 for Dermatology, 296 for Cardiology, 704 for Endocrinology and 1554 for Digestive Diseases. It is also of note that the preference for Endocrinology and Nutrition increased between 2001–2002 and 2005–2006, with a rise in ranking from 862 to 704. The recently published data on the last 10 years of the MIR program confirm that Endocrinology and Nutrition ranks seventh among the 47 clinical specialties contained in the MIR program—Dermatology and Cardiology ranking first, with Digestive Diseases at number 16 on the list—thus confirming the above mentioned data.^{6,7}

There may be a number of explanations for this appeal of Endocrinology and Nutrition. Endocrinology and Nutrition encompasses a high number of diseases such as diabetes mellitus and obesity, thyroid disease, reproductive disorders, metabolic disorders including dyslipidemia, metabolic syndrome, etc., which, moreover, have characteristics that are reversible and/or can be improved or healed. In addition, Endocrinology and Nutrition offers an opportunity for further development in different diseases and conditions with a strong health impact, in relation to both scientific-research contributions and the development of new forms, programs and protocols in healthcare, as well as new drugs and therapeutic procedures that involve an increasing number of patients and the participation of other healthcare professionals in the specialty.

The strong appeal of Endocrinology and Nutrition could also be affected by the special control of the number of proposed resident in training positions, calculated on the basis of human resource studies into this specialty conducted by the Spanish Society of Endocrinology and Nutrition, and adopted by the National Commission. In this sense, the aforementioned study confirms that the number of resident in training positions in Endocrinology and Nutrition between 2001 and 2006 only increased from 34 to 55, and that this number subsequently rose in a progressive and controlled manner to the maximum of 75 positions registered for the year 2009—a figure maintained in 2010 and 2011.⁷

The specialty of Endocrinology and Nutrition also entails properties which determine the practice of the specialty, and which should condition the training of its professionals. Endocrinology and Nutrition shares a number of boundaries with other medical specialties with which it exchanges knowledge and interacts in the everyday setting of professional practice. This should cause training to cover numerous and very diverse topics, referring to multiple glands and functions, with very diverse anatomical

locations. In addition, while hormone actions are ubiquitous, they are also very specific to concrete organs and tissues. These characteristics of Endocrinology and Nutrition could allow the training program to be more elastic, offering options for further training in certain areas or subspecialties. Thus, a preference for thyroid disease would prioritize clinical rotations in Nuclear Medicine, Endocrine Surgery, Ultrasound, etc. A preference for diabetes would include clinical rotations in Ophthalmology-retinal disease, Nephrology-dialysis-transplantation, Angiology, Cardiology, the Coronary Unit and cardiological recordings, Podology, etc. A preference for reproductive diseases in turn would include rotations in Gynecology, Urology-Andrology, assisted fertilization, Oncology-hormone dependent tumors, testicle diseases, etc. A preference for the treatment of obesity would imply rotations in Bariatric Surgery, the Sleep Unit, Rehabilitation, Rheumatology, etc. Lastly, priority interest in calcium-phosphorus metabolism would involve recommended rotations in Rheumatology, Densitometry, Urology-renal lithiasis, etc.

Another major conditioning factor in the MIR program and in Endocrinology and Nutrition, something that is shared with other specialties, is priority attention to post-residency professional orientation and practice. In this sense there are two well-defined options: academic-research-teaching and priority clinical practice. Therefore, the option of developing subspecialties with a high degree of flexibility, or a variation of the program, should be contemplated and even encouraged in the balance of resident training, and also subsequently in the professional practice of the specialty in both the clinical setting and in academic, research and teaching activities. A positive view should be taken of the introduction of increased flexibility in training rotations, in the duration and forms of clinical practice, in the timing and form of academic, teaching and research training, and in inter-institutional and international mobility. Thus, a preference for academic practice would imply greater theoretical training, greater preparation in clinical research (including even knowledge of certain techniques in basic research), and greater training in the presentation of theoretical content, both in seminars and in literature reviews. Likewise, increased emphasis would be placed on participation in congresses, with greater time spent on clinical activities in specific hospitalization areas, in the Metabolic Unit, in the drafting of review articles, and in intense participation in research projects, etc. On the other hand, a preference for clinical practice would place greater emphasis on clinical training (preferably on an outpatient basis), in all cases including a program of lectures, clinical sessions, the theoretical bases of clinical evaluation, increased training in exploratory techniques, knowledge of the significance and properties of hormone measurements, etc.

As regards subspecialization, the future of training in Endocrinology and Nutrition may also have to take other things into consideration. One important aspect is the reinforcement and entity of the specialty of Endocrinology and Nutrition. Three distinctly oriented vectors can be considered in the balance of forces that conditions medical care. Management conditions healthcare from a fundamentally economy-oriented perspective; the physician places priority on healthcare quality; and patients have a clear and dominant interest in being cared for by specialists in their

disease, and even identify care with a specialist who has particular expertise in the medical condition involved. This balance of tendencies establishes the need for specialists and at the same time tends to demand subspecialties—this implying the availability of physicians with maximum level expertise in certain areas or processes, even though management pressures attempt to transfer to the primary care level as many patient care processes as possible. To the above consideration must be added a fact almost too obvious to mention: training is for the young and for the future, not for the past or only for the present. Therefore, training must consider the future of the activity of the person receiving such training. In addition, training based on a criterion of experience and expertise will result in the occupying of leading positions for dealing with processes of maximum public health interest, such as obesity and diabetes mellitus. It also may facilitate entry to important emerging areas in our field, such as endocrine cancers.

There are other considerations that must be taken into account regarding the future development of the MIR training program, and of human resource planning in Endocrinology and Nutrition. Healthcare activity in the hospital admission and outpatient settings has tended to undergo modification in favor of outpatient care. This has been confirmed in the study commented on above,⁴ where hospital stays in Endocrinology and their relation to the number of available beds has evolved towards a marked decrease in stays attributable to endocrine disorders—bearing in mind also the simultaneous changes observed in the number of hospital beds as reported by the National Statistics Institute. Another consideration is the increasing importance of clinical nutrition. In the same above-mentioned study,³ a significant increase was found in the number of hospitals with endocrinologist-supervised nutrition between 1990 and 2003. In effect, in the year 1990, 34% of the hospitals offered this activity, while by 2003 a total of 48.6% of the hospitals had endocrinologist-supervised nutrition services.

In the same document,³ additional proposals for the future of resident training are considered. Post-resident training programs have been proposed with the main aim of promoting subspecialization and international interaction among endocrinologists. As has already been mentioned, the promotion of subspecialized clinical care and knowledge in more concrete and reduced areas, topics and processes is recommended. A positive evaluation is also made of the development of consensus documents and guidelines for the reinforcement of endocrinology based on scientific evidence. A positive response has also been given to modifying the structure and concept of hospital admission units, to developing outpatient day units, to reducing the number of hospital admission beds, to defining patient care units integrated with other specialties, to having hospital metabolic units under endocrinologist supervision, to the creation of new and effective therapeutic programs in frequent endocrine problems such as obesity, metabolic syndrome,

type 2 diabetes mellitus, to the development and practice of educational and informative modalities in clinical processes, to the promotion and practice of Endocrinology designed to improve quality of life, and to the encouragement of clinical research to promote evidence-based Endocrinology. All these proposals to the Spanish Society of Endocrinology and Nutrition should be considered in establishing and developing the resident training program.

The impact of the new “truncal approach to the medical specialties” upon these training considerations for residents and Endocrinology and Nutrition remains to be established.⁸ The numerous declarations made in response to the draft could delay or even block truncal designing of the resident training programs. The endocrinologists of the Community of Madrid have expressed their unfavorable opinion, on the grounds that they regard the contemplated specific training period to be too short, as is reflected in a document from the health authorities of this Community, published in June 2011.

The development of professional internationalization in the European setting is another complex issue when planning the resident training program in Endocrinology and Nutrition. As a general concept, we should accept the possibility of training in other European Union countries or in countries belonging to the European Union of Medical Specialists—although how this will be managed remains to be established. An obstacle to achieving this objective is the great diversity of training programs in the specialty to be found in the different European Union member states. However, the legal consolidation of the principle of the “free circulation of physicians” among the countries of the European Union will favor its adoption.

References

1. Moreno-Fernández J, Gutiérrez-Alcántara C, Palomares-Ortega R. Programa de Formación MIR en Endocrinología y Nutrición: resultados de una encuesta nacional. *Endocrinol Nutr.* 2006;53:484–8.
2. Gutiérrez-Alcántara C, Moreno Fernández J, Palomares-Ortega R, García-Manzanares A, Benito-López P. Valoración del Programa de formación MIR en Endocrinología y Nutrición: Resultados de una encuesta dirigida a residentes. *Endocrinol Nutr.* 2011;58:516–20.
3. Palomares R, Tofé S, Lamas C. Programa de formación de los residentes de Endocrinología y Nutrición en España: resultados preliminares de una encuesta. Comunicación. In: Salamanca: 42°. Congreso de la SEEN. 2000.
4. BOE, 11 de octubre 2006, n° 243, p. 35286–93.
5. Sánchez Franco F. El futuro de la Endocrinología y Nutrición. In: Soriguer Escofet JC, editor. *El futuro de la Endocrinología.* Ed. Arguval; 2008. p. 57–75.
6. Sánchez Franco F. Forecasting the future of Endocrinology in Europe. *Eur J Endocrinol.* 1996;134:139–42.
7. Available in: <http://gangasmir.blogspot.com/>
8. Grupo de Troncalidad. La troncalidad en las especialidades médicas. In: Consejo Nacional de Especialidades en Ciencias de la Salud, June. 2008. p. 1–78.