Translational research and its role in neurology☆,☆☆

Investigación traslacional: papel en neurología

Dear Editor:

Spain's First National Conference on the Specialty of Neurology included a round table event named 'Translational research: what role should it play in neurology?'.

The round table sparked a debate between different research groups, and as a resident participating in the event, I felt it would be appropriate to conduct a survey to record how residents in different parts of Spain feel about this topic. Sixty-four residents, representing each of the 4 years of residency in equal numbers, completed the survey.

Questions were as follows:

1. If they were familiar with the concept of translational research.
2. The role residents envisioned for translational research during residency.
3. The actual role of translational research in their residency.

The first question addressed the concept of translational research (the application of basic knowledge acquired in the laboratory to clinical practice in order to improve medical care). Responses indicated that only 22 of the 64 participating residents were familiar with the definition (34.3%).

Regarding the role respondents envisioned for translational research during residency, answers were grouped into 3 categories: necessary, unnecessary, or complementary. The most common response, given by 41 residents (64%), was that translational research should play only a complementary role (Fig. 1).

Lastly, responses as to the true role of translational research in residency were divided into 2 options: present or absent. Forty-eight residents (75%) stated that residencies should be based only on gaining care experience. They assigned no relevance to translational research (Fig. 2).

I believe translational research is a trending topic that is gaining impetus and relevance for the training of resident neurologists, whose voices regarding improvements to their academic programmes should be heard. Translational research becomes increasingly relevant over the course of a 4-year residency, which calls for a concerted effort to seek solutions that will improve the existing relationship between patient care and research.[1–6]

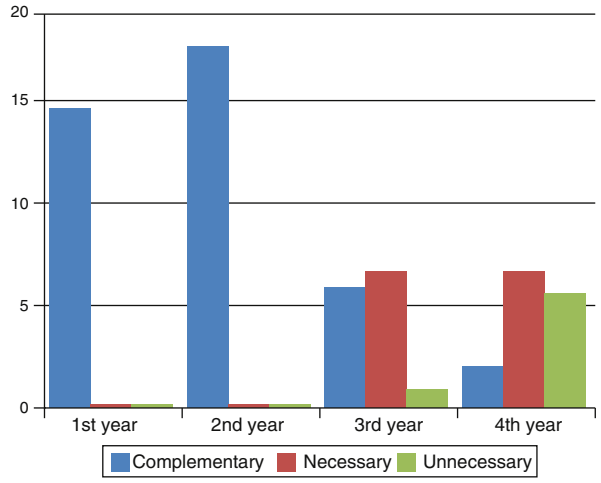

Figure 1 The role residents envisioned for translational research during residency.

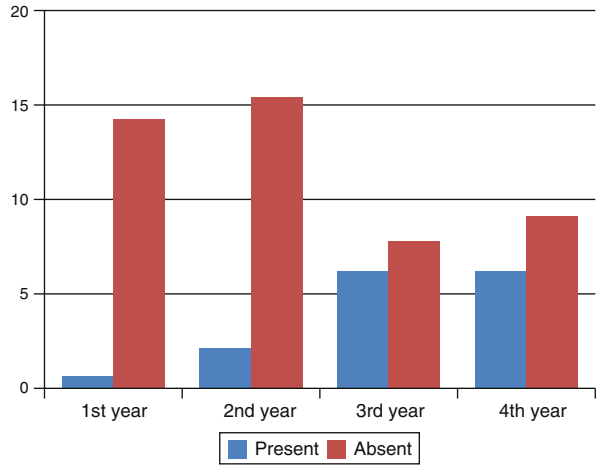

Figure 2 The actual role of translational research in their residency.

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☆☆ The data published here were presented at a round table event at the First National Conference of the Specialty of Neurology, Salamanca (Spain), 2013.

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'SARAgraph': a proposed graphic system for representing ataxia progression☆,☆☆

'SARAgrama': una propuesta de representación gráfica en la evolución de las ataxias

Dear Editor:

The Scale for the Assessment and Rating of Ataxias (SARA)[1] is often used to evaluate patients with different types of degenerative ataxias, both in clinical practice and in research projects.[2] Results from a SARA assessment are expressed as a single number, which overlooks the multidimensional nature of cerebellar impairment.[3] We propose a simple and standard method of expressing ataxia patients' impairment across multiple dimensions that will show all SARA item values at a single glance. This graphic display is useful for the initial assessment of the patient, and to document patient progress.

To this end, we designed a template that would be used to record values for each SARA item and automatically generate the SARAgraph (Microsoft® Excel 2004). For items that can affect either side, values from each side (left and right) were gathered independently. We used a polar graph to represent the normalised values of the 12 SARA items. Values were normalised using the following formula:

$$x'_{ijt} = x_{ijt} / \max(x_j)$$

where x_{ijt} is the value, in subject i, of item j at time t, and $\max(x_j)$ is the maximum theoretical value for item j.

The result obtained is what we term the 'SARAgraph' (Fig. 1), a visual model that provides a multidimensional representation of cerebellar disorders. The value of each item is normalised to a maximum of 1 and a minimum of 0. The SARAgraph allows researchers to compare the affectation pattern of different types of ataxias. It also facilitates studying a single patient's progression along multiple dimensions. This model is easy to implement in normal clinical practice, research, and in pre-existing databases.

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☆☆ This study was presented at the 64th Annual Meeting of the Spanish Society of Neurology as an oral communication.