## The Implications of Name Variations Among Spanish Cardiologists

## To the Editor:

A recent study published in the Revista Española de Cardiología<sup>1</sup> showed important variation and lack of standardization in the names of Spanish cardiologists. This may have negative consequences for the diffusion of research results and the recognition of scientific authorship.<sup>2</sup> Several reasons account for this variation in the way an author signs; these include all those agents involved in the process of publication and diffusion of scientific studies: authors, publishers, and bibliographic databases.

The lack of uniformity in the way an author signs may begin with the authors themselves, as they do not always use a unique name. For instance, they may sometimes use just 1 of their 2 surnames and at other times use both surnames. Additionally, the publishers and the editorial committees of journals may introduce their own policies concerning naming, such as abbreviating names by using just the initial of the first names of the authors. However, most journals use no standardized measure and respect the signatures as sent by the authors. Finally, the bibliographic databases contribute to this variation, as they usually have their own norms for indexation. The 2 databases IME (Índice Médico Español - Spanish Medical Index) and MEDLINE respect the Spanish language system of names and use the first surname as the entry and keep the second surname if given. The SCI (Science Citation Index) database, on the other hand, has traditionally failed to respect our system, and imposed Anglo-Saxon language structures. This database uses our second surname as the only surname indexable, and this surname, therefore, appears as the first element in an entry, with all other names and surnames being reduced to initials.<sup>2</sup> Aware of this situation, some authors have

TABLE 1. Examples of Variations in the Way the Names of Some Spanish Cardiologists Appear

Name and Full Surnames of Some Authors	Variants Identified in Revista Española de Cardiología	Variants Identified in Science Citation Index
Manuel Pablo Anguita Sánchez	Anguita, Manuel	Anguita-Sánchez, M
	Anguita, Manuel P	Anguita, M
	Anguita Sánchez, Manuel	Anguita, MP
	Anguita-Sánchez, Manuel	Sánchez, MPA
Vicent Bodí Peris	Bodí, Vicent	Bodi, V
	Bodí, Vicente	Peris, VB
	Bodí Peris, Vicente	
Vicente E. Climent Payá	Climent, Vicent	Climent, V
	Climent, Vicente	Climent, VE
	Climent, Vicente E	Paya, VEC
	Climent Payá, Vicente	• /
	Climent Payá, Vicente E	
Francisco Javier Chorro Gascó	Chorro, Francisco J	Chorro, FJ
	Chorro Gascó, Francisco J	Gasco, FJC
Rosana Hernández Antolín	Hernández, Rosa A	Antolin, RAH
	Hernández, Rosana	Antolin, RH
	Hernández Antolín, Rosa A	Hernández, R
	Hernández-Antolín, Rosa Ana	Hernández, RA
	Hernández Antolín, Rosana	Hernández-Antolin, R
	Hernández-Antolín, Rosana	Hernández Antolin, RA
Juan Antonio Ruipérez Abizanda	Ruipérez, Juan A	Abizanda, JAR
	Ruipérez Abizanda, Juan A	Ruipérez, JA
	Ruipérez-Abizanda, Juan A	Ruipérez-Abizanda, JA
Mariano Valdés Chavarri	Valdés, Mariano	Chavarri, MV
	Valdés Chavarri, Mariano	Valdes-Chavarri, M
		Valdes, M
Federico Vallés Belsué	Vallés, Federico	Valles, F
	Vallés Belsué, Federico	Belsue, FV
José Luis Zamorano Gómez	Zamorano, José	Gómez, JLZ
	Zamorano, José L	Zamorano, J
	Zamorano, José Luis	Zamorano, JL
	Zamorano-Gómez, José L	Zamorano-Gómez, JL

chosen to hyphenate their 2 surnames, in order for both surnames to be indexed in the right order.

Concerning the study in question, the authors recovered a total of 3619 different authors who had had publications in the *Revista Española de Cardiología* between 2000 and 2005. These 3619 apparently different authors decreased to 2927 after carrying out a normalization by verifying the names of all these authors in the actual journal. Thus, 692 (19.1%) were in fact variants of an already considered author. Table 1 shows a few examples of these variants.

The consequences arising from this phenomenon are easy to see: failure to recover information according to author in bibliographic searches; waste of time checking out and including possible variants of the same authors; false attributions of scientific authorship, both too many and too few; and variations in scientific productivity and calculation of references and in the indicators derived from the references.3 Those performing bibliometric studies attempt to overcome or minimize this type of error by consulting different sources, including the index of authors that appears at the end of each volume, yearbook or directory of persons, 4,5 as well as comparing the possible variants in the names of the authors with the centers of origin. 1,6 Nevertheless, to avoid this duplication in names and the negative consequences thereof, it would be advisable for journal editors to suggest that their authors adopt a unique name and that the journals use the first names of their authors, not just for questions of normalization, but also in order to be able to undertake studies according to sex, as per the recommendations of the ETAN report. And finally, the databases should avoid converting names to the Anglo-Saxon model and respect the denominations of their native surnames. With respect to this last recommendation, special mention must be made of the effort being undertaken by the SCI which, since 2007, has begun to include first names in their bibliographic registries and respect the patronymic surnames of the authors.

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