Redundant Publication: Everyone Against

Whenever a group of authors publishes an article in a scientific journal, what they are doing, in effect, is submit the outcome of their research to the entire scientific community. For their results to be accepted as valid, other groups must be able to reproduce the same experiments and confirm their findings. In consequence, the publication of an article in a prestigious journal is not the goal of the research, furthermore is a means to make it visible in the eyes of the scientific community; what matters is for other authors to confirm that the arguments set out in the paper are useful for the advance of science. Nonetheless, when it comes to assessing the scientific merit of an author, reference is often made solely to the number of publications effected or the sum of the impact factors of the journals in question and, since personal promotion or access to funds to be able to continue investigating depends on such rankings, some authors fall into the temptation to publish a single paper in different journals, thus giving rise to redundant publication, also referred to in English, with slight nuances, as duplicate publication, repetitive publication, or parallel publication.^{1,2}

The existence of repeated publications is not at all a recent phenomenon. It can already be seen in the earliest medical journals from the 19th century. The reason for repeated publications at the time had to do with the lack of distribution of medical information between countries with different languages or cultural traditions, so some authors ended up submitting their papers to journals in countries with different languages. Thus, for instance, Ramón de la Sagra complained, in his "Historia física, económico-política, intelectual y moral de la isla de Cuba" ("Physical, Economic, Political, Intellectual, and Moral History of the Island of Cuba," Havana, 1861), that, after having published "what I believe to be the most noteworthy case in the history of (precocious) puberty" in a Havana journal entitled "Anales de ciencia, agricultura, comercio y artes" (Annals of Science, Agriculture, Trade, and Arts) in 1827; however, "it is little known in Europe, due to the inherent misfortune of publications in Spanish." This comment explains why this author published the same case almost 40 years later, in 1865, in "Comptes Rendus hebdomadaires des Séances de L'Académie de Sciences" (Weekly Acts of the Sessions of the Academy of Science), where he was subsequently required to announce that the case of young Isabella was the one he had published in 1827. This circumstance has led to some confusion in the literature on precocious puberty, as they are sometimes still referred to as different cases.

Returning to the 21st century, we can find the publication, on the web site of the International Committee of Medical Journal Editors (ICMJE; www.icmje.org), of the Uniform Requirements for Manuscripts Submitted to Medical

Journals, last updated in February 2006, which differentiate between the duplicate submission of an article from redundant or duplicate publication.

Duplicate submission is defined as the simultaneous presentation of the same manuscript to 2 different journals, something which in theory a researcher might do to gain time, but the vast majority of journals, in order to start the process for the article's peer review, require authors to certify that it has not been submitted to any other. And not without reason, since it might otherwise conflicts about which holds the rights to the article and, on the other hand, 2 editorial processes have to be carried out in parallel, implying an unnecessary burden on the personnel, resources, and time of both journals. That is not to say, however, that multiple journals or scientific societies might not agree to the simultaneous publication of particular articles of special interest to different groups of health-care specialists (for example, the publication in our country of a consensus document on the management of larvngeal cancer in journals dealing with otorhinolaryngology, radiotherapy, oncology,

That same document considers a publication to be redundant when its contents are very similar to those contained in another paper published in hard copy or electronically (except for conference abstracts). Although some authors have suggested that redundant publication may be useful, since the various journals appeal to different readerships and the information would therefore be disseminated better to the scientific community as a whole, the ICMJE maintains that readers of the primary medical journals (ie, those publishing original articles) are entitled to be confident that what they are reading is original work, unless it is clearly established that a paper is being republished by the author and the publisher for a specific reason. Scientific research has to be based on trust, fair play, and the good faith of all parties involved in the process and any breach of these principles endangers the entire process. Redundant publication indicates a lack of ethics on the part of authors seeking their personal advantage, thus bringing the system into disrepute and impairing trust. In addition, such an action may lead to undesirable economic consequences for the fraudster and the journal, if there is any breach of international copyright legislation. On the other hand, it causes an unnecessary drain on the resources of the title and its peer reviewers, as well as competing for space in the journal and blocking the publication of other interesting works. Finally, and this is very serious, it could happen that, when conducting a meta-analysis on a specific subject (eg, results of treatment with a new chemotherapeutic agent in laryngeal cancer), a single paper using data obtained from the same sample, but published in 2 different journals with small nuances, may inadvertently be registered as 2 separate papers, totally distorting the results of the meta-analysis, with potentially serious harm to patients. For all these reasons, journals nowadays require the inclusion of a statement by all the authors indicating that the paper submitted for consideration is original work and has not been published in other journals. In those cases where there has been a preliminary publication by the same group or part of it, this must be stipulated in the references. The concealment of such information implies ethical shortcomings.

von Elm et al³ established an interesting classification of different types of redundant publication on the basis of an analysis of 78 main articles and 103 duplicates. For these authors, a type 1A redundant article would correspond to a simple copy, more or less disguised, and type 1B would be a publication in which an author, not necessarily linked with the primary investigation, is commissioned by a pharmaceutical company to compile various studies on a particular medication and the article is typically published as a supplement to a journal with the sponsorship of the contracting company. Redundant article type 2 corresponds to what is known as "salami slicing," "salami style of publishing," or "publishing of the least publishable unit," ie, an excessive, artificial fragmentation of data that could be contained in a single paper but end up appearing in 2 or 3 articles with a good deal of repeated content. This kind of publication usually occurs with investigators paid by public funds, as they attempt to extract the maximum benefit from their studies and so justify their research grants. This would generally be the realm of self-plagiary, the concealment of references to very similar previous works by the same authors and the almost simultaneous submission of the separate parts to different journals. Redundant publication type 3A would entail expanding a preliminary article, adding further data to produce a second article (aggregation of new data), whereas type 3B would be the opposite (data disaggregation); this latter case tends to occur in multi-centric clinical trials where the results are fragmented for publication at the same time in multiple papers in different journals, often coinciding with a major conference, thus greatly increasing the attention given to the trial. Redundant publication type 4 is the most chaotic and dangerous of all, in that various works are published on the basis of the same trial, but the samples and the goals seem to be different. This kind of publication is very difficult to identify without the co-operation of the authors and it is a source of serious distortion in knowledge, but, according to the survey by von Elm et al, it does exist.

In 2002, Bailey⁴ analyzed redundant publications in the field of otorhinolaryngology and confirmed that the most frequent type was sequential publication of data with very

similar conclusions (41% of cases). Repeated publications concealed references to previous papers by the same authors in 32% of the cases or only presented some of them in 11% of cases, although a majority did cite their previous articles. The artificial fragmentation of a single study represented 20% of the redundant publications.

Lastly, it is appropriate to clarify that everything stated here refers to primary publications, that is to say, those including original research material. The ICMJE considers that the secondary publication of an original work may be justified in several circumstances, either in the same or in another language, especially in other countries, providing that the following conditions are met:

- 1. The authors have obtained the approval of the publishers of both journals; the publisher of the secondary publication must be provided with a photocopy, off-print, or manuscript of the primary publication.
- 2. The priority of the primary publication must be respected by means of a publication interval of at least 1 week (unless otherwise agreed specifically between the publishers).
- 3. The work contained in the secondary publication targets a different readership; an abridged version might be sufficient.
- 4. The secondary publication faithfully reflects the data and interpretations of the primary one.
- 5. The foot of the title page on the secondary publication must inform readers, peers, and documentation agencies that the work in question has been published in its entirety or in part and it must provide the reference to the primary article.
- 6. The title of the secondary publication must indicate that it is a secondary publication of a previous primary publication and whether or not it is a complete or abridged version or a complete or abridged translation.

José A. Amado Señarís Servicio de Endocrinología y Nutrición, Hospital Universitario Marqués de Valdecilla, Universidad de Cantabria, Santander, Cantabria, Spain

REFERENCES

- Brochard L. Redundant publications, or piling up the medals. Getting published is not the Olympic Games. Intensive Care Med. 200;30:1857-8.
- Bornmann L, Daniel HD. Multiple publication of a single research study: does
 it pay? The influence of number of research articles on total citation counts
 in biomedicine. J Am Soc Inform Sci Tech. 2007;58:1100-7.
- von Elm E, Poglia G, Walter B, Tramèr MR. Different patterns of duplicate publication. An analysis of articles used in systematic reviews. JAMA. 2004:291:974-80.
- Bailey BJ. Duplicate publication in the field of otolaryngology-head and neck surgery. Otolaryngol Head Neck Surg. 2002;126:211-6.