Since its origin 57 years ago, REVISTA ESPAÑOLA DE CARDIOLOGÍA (Spanish Journal of Cardiology) has undergone many changes in format, frequency of publication and scope as editorship has changed hands, reflecting the growth and maturation of Spanish cardiology over half a century. The format of the journal has evolved, with regard to the cover design and contents. The original Bulletin of the Spanish Society of Cardiology (SSC), published intermittently, has become the official scientific organ of the SSC, and is now published monthly. The breadth and quality of the articles have evolved, and the journal is now recognized internationally and included in the most important databases. It is from this perspective that the evolution of the journal up to the present should be contemplated.

During the last 6 years, the journal has implemented clearly defined editorial policies with the aim of opening its pages to all of cardiovascular medicine, its practitioners and researchers. The journal has been enhanced by stimulating the publication of original clinical scientific and basic research articles. Moreover, the channels of distribution and dissemination of the journal have been broadened, particularly in Latin American countries. The goal of these editorial policies has been to achieve higher scientific quality while at the same time publishing articles that will attract clinicians interested in cardiovascular disease. Our ultimate aim has been to produce a high-quality, internationally recognized clinical journal whose contents are attractive to all physicians interested in cardiovascular disease.

To achieve these aims, substantial changes have been made in the journal’s format and content, and a number of editorial improvements have been implemented. Moreover, the journal has become involved in several novel projects and new media.

Full English text available at: www.revespcardiol.org
for theme issues containing reviews on topics of particular interest, which fell within the journal’s editorial aims and scope. The Revista Española de Cardiología currently publishes an average of 6 supplements per year, under different titles.

Distribution

In 1999 we surveyed SSC members, nonmembers as well as institutional readers of the journal to identify and correct shortcomings. Distribution of the journal was later increased, especially among libraries and institutions. Since 2000, a special international edition was printed on lighter stock, with a print run of 1000.1 One hundred copies are distributed in Europe, and 900 are sent to Latin America, mainly to Argentina, Mexico, Chile and Brazil. Since 2000 the journal has been distributed free of charge during one year to all delegates at the annual congress of the SSC who are not members of the Society.

INTERNET EDITION

About 10 years ago we began distribution of the journal as a CD-ROM edition that compiles the full text of all articles published in recent years. The online edition of the journal appeared in 1997 on the web site of the SSC. Since then the online edition has been enhanced in many different ways, as online publication currently represents the best medium for the dissemination of scientific journals. In March 2000 the journal moved to its own website (www.revespcardiol.org), where the full text of all articles is published in both HTML and PDF formats. Since its first appearance on the Internet, the journal’s website has rapidly undergone a steady process of substantial improvement.3,4

Two little-known features of the online edition are of particular importance. Since its inception, online articles have complied with the technical requirements of PubMed, the organization responsible for the free, online database MEDLINE. This has enabled items published in the journal to be indexed promptly in the world’s largest bibliographic database for biomedical research. It is also worth noting that because of our conviction that scientific knowledge should not be constrained by economic barriers, we chose from the start, and with the full support of the SSC, to provide free access to the full contents of the journal.3 This has placed us ahead of more recent open access initiatives such as BioMed Central and PubMed Central.

As a result, MEDLINE references and abstracts for articles in the journal have usually gone online by the time subscribers receive their printed copy of the journal. Abstracts can be consulted simply by clicking on the link that appears next to the MEDLINE reference. Moreover, the full text is also accessible immediately to all MEDLINE users. Availability of the full article is indicated by the appearance of the link notice at the top of the PubMed abstract that reads Full free English text at Revista Española de Cardiología. As an added attraction, PubMed references to items published in the Revista Española de Cardiología now bear an icon link indicating the availability of a free full-text article.

These features have made the online edition of the journal much more visible to readers than the print edition. As a result, the electronic edition has become the most efficient medium for disseminating the information published in the journal.

DISSEMINATION AND INCENTIVES TO PUBLISH

Since 2000, press releases covering articles of potential interest to the wider population of readers have been distributed to increase dissemination of the journal within Spain. Press conferences are held to announce the publication of articles of wider impact.5 In recent years advertisements have been published in Spanish journals in several different medical specialties, and the journal has been featured more prominently in the program of the annual congress of the SSC. It has also attracted increasing attention at the SSC stand in other International events such as the congresses of the American Heart Association, the American College of Cardiology and the European Society of Cardiology.4

To encourage the submission of high quality original research articles, a number of prizes have been established, and the prize money offered has increased. Of particular note are the SSC prizes for the best articles published in the journal6 and for the articles with the greatest long-term and medium-term international impact.6 Prizes are also awarded by different scientific sections within the SSC (hemodynamics and interventional cardiology, pediatric cardiology and congenital heart defects, nuclear cardiology, hypertension and heart failure). Table 1 lists the winners of the 2003 prizes for the best articles. Since their inception, the number of prizes awarded annually has increased from 3 in 1997 to 16 in 2003, and the total prize money disbursed has grown from 6000 euros to 53 000 euros.

ENGLISH-LANGUAGE EDITION

The most important new development, started in January 2002, is cover-to-cover translation into English and publication of the English-language edition on the Internet.7 The English-language edition online comprises the full text of each article in both HTML and PDF format. Online facilities are the same as for the Spanish language edition, and access is free.
TABLE 1. Prizes awarded in 2003 to articles published in Revista Española de Cardiología

1. Spanish Society of Cardiology prizes for articles published in Revista Española de Cardiología

   First Prize

   Honorable Mentions

2. Spanish Society of Cardiology prizes for articles published in Revista Española de Cardiología with the greatest international impact

   Article with the greatest long-term international impact

   Second Prize

   Honorable Mentions

   Article with the greatest medium-term international impact
   First Prize

   Second Prize

   Honorable Mention

3. Prize awarded by the Pediatric Cardiology and Congenital Heart Defects Section of the Spanish Society of Cardiology


4. IZASA Prizes for the best publications on interventional cardiology

   First Prize

   Second Prize

5. Amersham Health Prize for the best publication on nuclear cardiology


6. Roche Prize for the best article on heart failure


7. Prizes awarded by the Hypertension Section of the Spanish Society of Cardiology

   First Prize

   Honorable Mention
TABLE 2. List of reviewers for Revista Española de Cardiología during 2003


pioneering step in Spanish medical journal publishing enormously increases the potential dissemination of the journal in non-Spanish-speaking countries, and marks a turning point in the journal’s progress. English-language publication has involved a substantial increase in the workload of the journal’s staff and considerable expense for the SSP, which was defrayed in part by a Special Actions grant-in-aid from the Spanish National Institute of Health (Instituto de Salud Carlos III).

RESULTS

As a result of these, improvements and innovations, the journal has made important achievements in recent years. Some of these have been mentioned above, whereas others are easy to list but difficult to quantify. Although it is difficult to assess a journal’s quality and usefulness in an objective manner, we feel the most important aspect is the one that is the most difficult to quantify: readers’ acceptance and appreciation. It is in this area where those who have worked with Revista Española de Cardiología feel most proud of our accomplishments. Accordingly, it is fitting that we should acknowledge the substantial contributions of those experts who, while not members of the Editorial Committee, have helped with their well-reasoned reviews to improve the articles we publish (Table 2).

Some quantitative factors provide important information on the journal’s progress, the interest it attracts, and its quality and usefulness within and outside of Spain for readers and authors who submit their manuscripts for publication. For example, the number of Original Articles received in recent years has grown from 83 to 133 per year—an increase of 60%. In contrast, the number of Brief Reports submitted has remained stable in overall terms. The total number of manuscripts (all types) received has grown from 190 in 1997-1998 to 300 in 2002-2003. To these items must be added nearly 100 editorials and reviews. Of note is the considerable change in the number of manuscripts submitted from outside Spain, which has grown from 7 in 1997 to 65 in 2002-2003. The steady increase in the number of manuscripts received has led us to emphasize Original Articles and Editorials over Brief
Reports, and has obliged us to reduce our acceptance rate, which currently stands at 35% (45% for Original Articles). Moreover, during the last 6 years circulation has nearly tripled from 2750 copies in 1997 to 7500 in 2003.

Electronic edition

The electronic edition of the journal receives ever-increasing numbers of visits, especially from users in Latin American countries. In the last few years the number of visitors has increased from 750 per month in 1997 to 10 000 per month, when the online edition moved to its own website in 2001. Since then the number of visitors continues to rise, and now stands at 27 000 per month (Figure 1). It should be noted that only 32% of the visitors are from users within Spain, with the rest coming mainly from Argentina, Mexico, Chile, and Uruguay. Of particular significance is the fact that a mean number of 1500 visits per month are from users who click through from the PubMed reference.

Visits to the web page for the English-language edition of the journal have been increasing steadily as the contents expand. Two-thirds of the visits are received via the PubMed site, and the greatest proportion of visits from any single country (20%) is from the USA.

Impact factor

The impact factor (IF) measures the mean percentage of citations over a 1-year period to articles published in the journal during the preceding two years. It is therefore an indicator of the influence or impact its articles have on the scientific community. In addition, it serves as an indirect indicator of the trust researchers place in the journal, as reflected by their citation behavior. Over the years the IF has thus become an indicator of quality, prestige and international recognition of research by different authors and institutions. In certain countries including Spain, the IF is the most important criterion used by the Ministry of Education and Science to measure research quality.

In September 2000, the Institute for Scientific Information (ISI) reported an IF of 0.46 for REVISTA ESPAÑOLA DE CARDIOLOGÍA. This was an historic accomplishment for the journal and the SSC, as it placed the journal third in the ranking of Spanish-language medical (both basic research and clinical) journals.
journals, and first among the subgroup of cardiovascular medical journals published in Spanish. In 2000 the IF rose to 0.7,\textsuperscript{4} and in 2002 (the last year for which data are available) our IF was calculated as 0.94 (Figure 2), a figure that places the journal squarely within the mainstream of all journals ranked according to IF.

Moreover, this latest increase places the journal at the top of the ranking of Spanish medical journals published in a language other than English (Table 3), and at the top of the list of all cardiovascular journals published in non-English-speaking countries, ahead of comparable journals published in Italy, Japan, France or Germany.

Thanks to these results, REVISTA ESPAÑOLA DE CARDIOLOGÍA has consolidated its position in recent years as the fastest-growing Spanish science journal in terms of quality and international recognition. Within its specialty, it has become a major reference for medicine in Spain and Latin America, has attained widespread dissemination, and has fulfilled its goal of becoming a high-quality international science journal devoted to cardiovascular disease.

As noted 3 years ago, the success of the journal must be ascribed, firstly, to the authors of the research articles that the journal chooses to publish, and secondly, to those who—in the editorial office, on the Editorial Committee and on the Board of Directors of the SSC—have helped the journal to develop from its inception. A key source of support has been the readers of the journal, who have encouraged us with their feedback.

TABLE 3. Latin American and Spanish medical journals ranked by 2002 impact factor

<table>
<thead>
<tr>
<th>No.</th>
<th>Journal</th>
<th>Impact factor</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Histology and Histopathology</td>
<td>1.88</td>
<td>Spain</td>
</tr>
<tr>
<td>2.</td>
<td>REVISTA ESPAÑOLA DE CARDIOLOGÍA</td>
<td>0.94</td>
<td>Spain</td>
</tr>
<tr>
<td>3.</td>
<td>Medicina Clínica</td>
<td>0.85</td>
<td>Spain</td>
</tr>
<tr>
<td>4.</td>
<td>Journal of Physiology and Biochemistry</td>
<td>0.70</td>
<td>Spain</td>
</tr>
<tr>
<td>5.</td>
<td>Revista Española de Enfermedades Digestivas</td>
<td>0.59</td>
<td>Spain</td>
</tr>
<tr>
<td>6.</td>
<td>Drug News &amp; Perspectives</td>
<td>0.52</td>
<td>Spain</td>
</tr>
<tr>
<td>7.</td>
<td>Nefrología</td>
<td>0.51</td>
<td>Spain</td>
</tr>
<tr>
<td>8.</td>
<td>Methods and Findings in Experimental and Clinical Pharmacology</td>
<td>0.49</td>
<td>Spain</td>
</tr>
<tr>
<td>9.</td>
<td>Drug Future</td>
<td>0.39</td>
<td>Spain</td>
</tr>
<tr>
<td>10.</td>
<td>Revista Clínica Española</td>
<td>0.34</td>
<td>Spain</td>
</tr>
<tr>
<td>11.</td>
<td>Revista de Investigación Clínica</td>
<td>0.32</td>
<td>Mexico</td>
</tr>
<tr>
<td>12.</td>
<td>Revista Médica de Chile</td>
<td>0.29</td>
<td>Chile</td>
</tr>
<tr>
<td>13.</td>
<td>Revista de Neurología</td>
<td>0.29</td>
<td>Spain</td>
</tr>
<tr>
<td>14.</td>
<td>Drugs of Today</td>
<td>0.26</td>
<td>Spain</td>
</tr>
<tr>
<td>15.</td>
<td>Actas Españolas de Psiquiatría</td>
<td>0.26</td>
<td>Spain</td>
</tr>
<tr>
<td>16.</td>
<td>Medicina</td>
<td>0.25</td>
<td>Argentina</td>
</tr>
<tr>
<td>17.</td>
<td>Neurocirugía</td>
<td>0.24</td>
<td>Spain</td>
</tr>
<tr>
<td>18.</td>
<td>Archivos Latinoamericanos de Nutrición</td>
<td>0.24</td>
<td>Venezuela</td>
</tr>
<tr>
<td>19.</td>
<td>Revista Ecuatoriana de Neurología</td>
<td>0.15</td>
<td>Ecuador</td>
</tr>
<tr>
<td>20.</td>
<td>Acta Bioquímica Clínica Latinoamericana</td>
<td>0.11</td>
<td>Argentina</td>
</tr>
</tbody>
</table>

Fig. 3. “Torre de vart, a human tower built by the Castellers of Vilafranca (photograph courtesy of Pau Asensio). Traditional Catalan «castellers» are an apt symbol for the teamwork and dedication that bring together, for a common purpose, large groups of people of different ages and backgrounds.
and helped us to persevere during the last several years. Finally, credit is due to the entire SSC (Figure 3).

ADDENDUM

This issue of REVISTA ESPAÑOLA DE CARDIOLOGÍA brings to a close my term as Editor-in-Chief of the journal. On a personal level, it has been a deeply enriching and enormously satisfying experience. I would like to express my appreciation for the continued support and trust of the executive committee and the board of directors of the SSC, represented by its presidents, Dr Alfonso Castro Beiras, Dr Federico Vallés Belsué, and most recently, Dr José M. Cruz Fernández. Their faith in our efforts was unfailing, and they jealously safeguarded our editorial independence. Our work would have been impossible without the full support and cooperation of the members of the Editorial Committee and Editorial Council, the peer reviewers and their well-reasoned reports, and our methodological and statistical consultants. I would also like to offer my express thanks to Dr Valentin Fuster for his openness and advice, to my Associate Editors, Dr Joaquín Alonso, Dr Julián Villacastín, Dr Fernando Alfonso, and Dr Javier Bermejo, for their unstinting work, to Ediciones Doyma for their unflagging cooperation, and to the secretarial staff of the SSC, particularly Charo Martín, África, and Eva for their warmth, hard work and professional handling of all matters connected to the journal.

Although one phase now draws to a close, a new and better phase is about to ensue. Stepping in as Editor-in-Chief is Dr Fernando Alfonso, a physician with a well established professional reputation, and with broad experience in scientific and editorial affairs. With him, the REVISTA ESPAÑOLA DE CARDIOLOGÍA will continue to progress and improve, as it has throughout its existence.

Xavier Bosch Genover

REFERENCES