Editorial

Editing Croatian scholarly journals: achievements and challenges

Journals published from small and emerging professional communities face difficulties that often negatively affect the research performance and hinder the scientific progress at a national level. However, there are a few good examples of how changes in the education system and research management with limited financial resources translate into advanced research and better visibility of locally produced knowledge. The Croatian experience, with its benefits to authors, researchers, journal editors, and educators over the past two decades, is exemplary. This is one reason Croatia is hosting this year’s conference of the European Association of Science Editors (EASE) on the theme of the conference – the complexity of editing – some of the presentations will reflect on the Croatian experience. For our part, we will provide space in this and forthcoming issues of European Science Editing for items about editorial policies and peer review in Croatian journals, both in archiving in the Hrcak platform, and editing national journals. Croatia has well established traditions of publishing, particularly in the natural sciences and biomedicine. Its oldest periodicals, Lijekoviti Vjesnik and Periodicum Biologorum, were launched in 1877 and 1886, respectively.1 This is perhaps one of the reasons why so many Croatian journals are currently listed in the ScImago Journal & Country Rank (SJR) database. There are currently 54 Croatian journals tracked by the SJR, with their outstanding impact indicator levels. Based on repetitive and comprehensive bibliometric and bibliographic evaluations2 the Croatian Medical Journal is the flagship European periodical. Remarkably, this journal remains one of the few general medical journals covered by Thomson Reuters Current Contents Connect database. To better understand what Croatia has gained within a short period of time, we also discuss the small societal impact into a modern European nation (1991–2013), we should refer to the outstanding profile of the country in the Web of Science database. There are currently 54 Croatian journals tracked by this highly selective hub of “elite” periodicals. For a non-English country with a population of 4.28 million, this is a great achievement. Two of the indexed journals have relatively high two-year impact factors: Biochimica Et Biophysica Acta – Molecular and Cellular Biology – 1.282 (2015) and Biochimica Et Biophysica Acta – General Subjects – 1.23 (2015 [Thomson Reuters Journal Citation Report science edition 2013]). Both journals are archived in PubMed Central.

A turning point for improving the visibility of Croatian journals was the launching of the Hrcak digital platform in 2005, which has expanded its archive from the initial three to the current 356 periodicals.2 More than half of the archive covers science, technology and medicine are published in English only, and the majority of journals (76%) have international editorial boards.3 Despite all these achievements, the transparency of peer review remains a challenge.4 The national journal editors can improve transparency and make their journals more attractive for the global scientific community by publicising the employed models and quantitative indicators of the peer review.

Croatia, as many other emerging scientific powers, faces the challenges of plagiarism and other forms of misconduct in research papers. An analysis of 754 items, submitted to the Croatian Medical Journal in 2009 and 2010, revealed that 85 (11%) of these submissions, mostly from China, Croatia and Turkey, contained plagiarized text. This can, at least partly, be explained by the difficulties of writing in English, which force the authors to recycle chunks of texts from published sources. The temptation to inappropriate writings can be overcome by learning lessons from others’ mistakes and by referring authors to proper writing and editing services. Plagiarism, along with duplicate publication, is the main reason for retractions of Croatian papers. Although the number of the retractions is not high (7 in PubMed), it may not be representative, requiring more efforts of editors and reviewers at pre- and post-publication review to detect the misconduct and ‘clean up’ the language of unethical papers. Improbably, of the seven retractions in PubMed, three were issued by the Croatian Medical Journal and one by the Archives of Industrial Hygiene and Toxicology, the top-tier national periodicals with established policies of ethical publishing. Obviously, these and many other challenges faced by Croatian editors are not unique, and can be overcome by discussing them with colleagues from EASE and other learned associations at educational meetings focused on selected topics, such as plagiarism, pre- and post-publication review, and open access.


c

Keywords Peer review; editorial boards; Croatia

References


Armén Yuri Gasparyan
Chief Editor, European Science Editing
agasparyan@gmail.com

Original articles

Composition of editorial boards and peer review policies of Croatian journals indexed in Web of Science and Scopus

Ana Utrobičić
Central Medical Library, University of Split School of Medicine, Split, Croatia

Josip Šimić
Central Medical Library, University of Mostar School of Health Studies, Mostar, Bosnia and Herzegovina

Mario Malčić, Matko Marušić, Ana Marušić
Department of Research in Biomedicine and Health, University of Split School of Medicine, Split, Croatia
malovic.mario@msk.hr

Abstract

Croatia, when compared to its neighbouring countries, has the largest number of journals per scientist and per Gross Domestic Product. The aim of our study was to evaluate the composition of editorial structures and transparency of peer review policies of Croatian journals indexed in Web of Science (WoS) and Scopus. Our study showed a lack of transparency of peer review processes in Croatian scientific journals as described in publicly available information for authors. More research is needed to determine the impact of the editorial structures and work on the international recognition of journals from small scientific communities, such as Croatia.

Keywords Peer review; composition of editorial boards; Croatia

Introduction

The number of scientific publications has been exponentially increasing in the 21st century, with no indications of a decline.1 The establishment of large bibliographic databases, specialized search engines, wide visibility and accessibility of scientific publications2 have led to the increase of journal memberships in organizations such as the Committee on Publication Ethics (COPE) and indexing in the Directory of Open Access Journals (DOAJ), Web of Science (WoS), and Scopus.3 In the last decade, a large number of regional journals have been launched and indexed in various indexing databases (Table 1).

In Croatia, the first scientific periodical was published in 1851,4 the first medical journal in 1860,5 and the first electronic journal in 1994,6 only a year after the World Wide Web went public. Despite its relatively small size (4.28 million inhabitants)7 and semi-peripheral scientific status,8 Croatia has the largest number of journals per scientist, per Gross Domestic Product (GDP), and per WoS-indexed and Scopus-indexed journals.9 The 2012 Impact Factor of WoS-indexed journals ranged from 0 to 1.87. The 2012 Source Normalized Impact Per Paper (SNIP) of Scopus-indexed journals ranged from 0 to 1.8. There were no statistical differences in SNIP values between WoS- and Scopus-only indexed journals (P=0.95 see Table 1). Most journals (n=122, 94%) had one editor-in-chief of Croatian descent (95%); the majority of the editors (66%) were males. There were no differences in IF and SNIP based on the gender of the editor-in-chief (t-test, P=0.836 and U-test, P=0.71, respectively). The number of editorial board members for all journals ranged from 2 to 50, with no statistical difference between WoS- and Scopus-only indexed journals. However, there were substantially more WoS-indexed journals, with at least one member with a non-Croatian affiliation (70% vs 48%; P=0.0255). The overall percentage of non-Croatian board members did not differ between WoS- and Scopus-only indexed journals (53% vs. 50%; P=0.63). Gender distribution of editorial board members was unequal: 6 journals had only male members and 2, only females, while the rest of the journals had, on average, more male than female members (75% vs 25%; P < 0.0001). Almost half of the journals were open access (58%, 45%), with no difference between WoS- and Scopus-only indexed journals (n=65). These results refer to the differences in IFs between open (n=12) and subscription journals (n=29) (P=0.38). However, SNIP values of open-access journals (n=57) were greater than those of subscription journals (n=45) (U-test, P=0.0032).

Results

There were 54 Croatian journals indexed in WoS and 127 in Scopus, with a 94% overlap (all but 3 WoS-indexed journals were also listed in Scopus). The 2012 Impact Factor of WoS-indexed journals ranged from 0 to 1.87. The 2012 Source Normalized Impact Per Paper (SNIP) of Scopus-indexed journals ranged from 0 to 1.8. There were no statistical differences in SNIP values between WoS- and Scopus-only indexed journals (P=0.95 see Table 1). Most journals (n=122, 94%) had one editor-in-chief of Croatian descent (95%); the majority of the editors (66%) were males. There were no differences in IF and SNIP based on the gender of the editor-in-chief (t-test, P=0.836 and U-test, P=0.71, respectively). The number of editorial board members for all journals ranged from 2 to 50, with no statistical difference between WoS- and Scopus-only indexed journals. However, there were substantially more WoS-indexed journals, with at least one member with a non-Croatian affiliation (70% vs 48%; P=0.0255). The overall percentage of non-Croatian board members did not differ between WoS- and Scopus-only indexed journals (53% vs. 50%; P=0.63). Gender distribution of editorial board members was unequal: 6 journals had only male members and 2, only females, while the rest of the journals had, on average, more male than female members (75% vs 25%; P < 0.0001). Almost half of the journals were open access (58%, 45%), with no difference between WoS- and Scopus-only indexed journals (n=65). These results refer to the differences in IFs between open (n=12) and subscription journals (n=29) (P=0.38). However, SNIP values of open-access journals (n=57) were greater than those of subscription journals (n=45) (U-test, P=0.0032).

May 2014; 40(2)

European Science Editing
Table 1. Composition of editorial structures and impact indicators of Croatian journals indexed in Web of Science and Scopus

<table>
<thead>
<tr>
<th>Journals indexed in</th>
<th>Web of Science (n=54)</th>
<th>Scopus only (n=76)</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editors in chief (Md, IQR)</td>
<td>1 (1-1)</td>
<td>1 (1-1)</td>
<td>0.257</td>
</tr>
<tr>
<td>Editors in chief's sex (n, %)</td>
<td>Male 36 (66)</td>
<td>48 (63)</td>
<td></td>
</tr>
<tr>
<td>Female 15 (28)</td>
<td>28 (37)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two or more editors of different sex</td>
<td>2 (4)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Missing (only name and initial listed)</td>
<td>1 (2)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Editorial board members (Md, IQR)</td>
<td>16 (11-21)</td>
<td>13 (8-19)</td>
<td>0.155</td>
</tr>
<tr>
<td>Impact Factor 2012 (M, SD)</td>
<td>0.42 (0.1-0.87)</td>
<td>0.42 (0.1-0.87)</td>
<td></td>
</tr>
<tr>
<td>Source Normalized Impact per Paper (Md, IQR)</td>
<td>0.27 (0.1-0.42)</td>
<td>0.26 (0.05-0.51)</td>
<td>0.952</td>
</tr>
<tr>
<td>SCImago Journal Rank (Md, IQR)</td>
<td>0.14 (0.11-0.22)</td>
<td>0.14 (0.1-0.2)</td>
<td>0.286</td>
</tr>
</tbody>
</table>

*Mann-Whitney U test
†x²-test

Nine journals did not have instructions to authors posted on their websites (7 of these were indexed in WoS). Of the journals with posted instructions, 45 (37%) did not have information about type of peer review, with no difference between WoS- or Scopus-only indexed journals (χ²=0.0, P=0.99). Of the 76 journals that presented the type of peer review, only 12 (15%) described if the peer reviewers were independent (n=9, 75%), affiliated with the journal (n=1, 8%), or mixed (2, 17%). Furthermore, 33 (43%) mentioned who made the final decision regarding the manuscripts acceptation: most often the editorial board (48%), followed by the editor-in-chief (40%), and editorial office (12%). There were no differences in IF and SNIP values between the journals that did or did not have a peer review process, as described on their websites (n=0.221, P=0.8261 and Mann Whitney U test, P=0.8094, respectively).

No journal had a description of the roles within its organizational structure on the website. We found a large number of different structures and staff titles (Table 2).

Discussion

Our study showed no differences between Croatian journals indexed in WoS and Scopus with regards to their impact, number of editorial board members, open-access status, and details of peer review policies in the instructions to authors. We found a low proportion of women editors that were not associated with the journals’ impact indicators. We also found a wide variation in the journal editorial bodies and roles, which may reflect specifics of the respective scholarly communities.

It is difficult to draw any conclusion about the role of the journals’ editorial bodies since no details were available in print and digital versions of the instructions to authors. Future studies, including those employing qualitative methodological approaches, may explore this issue and reflect on its influence on the journal visibility, quality, and impact indicators.

Croatia is a good model for analyzing editorial policies of science journals, because it belongs to the scientific semi-periphery.9 The country has a large number of publicly supported journals with a wide visibility.10 It is, however, not clear whether this success is related to the editorial structure of the journals or their policies. Our study showed a lack of transparency in this aspect of the work: only 63% of the journals described the peer review process in their guidelines for authors. These findings are in line with those of an older study, which showed that of the 278 medical and scientific journals analyzed in 2000, 187 (67%) described the peer review process, with just 53 (19%) in sufficient detail.11 Similarly, a 2013 survey of 1,340 biomedical academics from high-ranking universities showed that only 25% believe that the peer review is sufficiently transparent.12 This lack of transparency makes it difficult to conclude whether the inclusion of Croatian journals in selective international databases influences the journals’ editorial structures and functioning.

The recorded higher SNIP value of open-access journals suggests that an open-access strategy improves visibility of publications from semi-peripheral scientific communities. However, a recent study of biomedical journals from Slovenia proved that open access, as sole factor, is insufficient for widening the journal visibility.13 It is therefore likely that the adherence to the international standards, transparency, quality peer review, and open access are all drivers of the competitiveness of the newly launched open-access journals.14 Transparency of the editorial and organizational work at the journals seems to be a driver of the international recognition and greater scientific impact. More research is warranted to determine the influence of different aspects of the editorial work on the international recognition of journals from small scientific communities such as Croatia.