Compliance of “Principles of transparency and best practice in scholarly publishing” in Korean academic society-published journals listed in Journal Citation Reports

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Abstract

Purpose: The “Principles of transparency and best practice in scholarly publishing” are of increasing importance in an open science environment as a way to increase the transparency and quality of academic society journals. However, little previous research has investigated the application of this new guideline in practice. The aim of this study was to investigate the degree to which this guideline is being applied by Korean academic society-published journals listed in Journal Citation Reports.

Methods: The researchers investigated the homepages of 59 Korean academic society-published journals to evaluate whether they had adopted the 33 items listed in the guideline. Based on the information available on the journals’ homepages, each item was classified as ‘yes’ or ‘no’ within the four categories of basic journal information, publication ethics, copyright and archiving information, and profit model.

Results: The basic journal information category was generally well-practiced, with the exceptions of the peer review process, readership, and author fees. The copyright and licensing information category was also well-practiced, with the exception of policies on posting accepted articles with third parties and archiving items. However, most items in the publication ethics category were not well practiced, with the exception of authorship and intellectual property. All items in the profit model category were infrequently implemented.

Conclusion: These findings serve as a good indicator for Korean journal editors of areas for improvement. It may be helpful to review journals’ publication policies and homepages to comply with international publishing standards.

Keywords

Best practice; Scholarly publishing; Academic society journals; Transparency; Publication ethics
Introduction

Many scientific communities, primarily in Europe and the United States, are attempting to facilitate cooperation and innovation by promoting open science, including requirements to digitize research findings supported by public funding and to disclose those findings to the scientific community, industry, and the general public. The open science movement involves both mandating that academic journals that publish scholarly articles follow the principles of open access, and requiring researchers to disclose their findings through multiple modalities, including audio or video recordings and raw data files. As the concept of open science is expanding from open access to open data, numerous publishers are establishing more open access journals, while supporting systematic open science initiatives, such as requiring that researchers make their raw data available [1].

However, despite the positive potential of open access policies, increasingly many predatory publishers abuse these policies. In light of these problems, academic publishers have announced various remedies, such as introducing stricter review standards when registering new journals in multiple databases. As a response to ensure transparency in academic publishing, four international organizations—the Open Access Scholarly Publishers Association, Directory of Open Access Journals, Committee on Publication Ethics, and World Association of Medical Editors—jointly “Principles of transparency and best practice in scholarly publishing.” These 16 principles include instructions on operating sustainable academic journals through ensuring compliance with publication ethics, proper archiving, and reasonable accessibility, as well as transparent disclosure of journal information, such as its ownership and management, editorial board, peer review, article processing charges, and other sources of revenue. The four international scholarly organizations have implemented these standards in the review process for any membership application as a way to screen fraudulent publishers, and require strict compliance with this code of conduct for existing members [2].

The International Association of Scientific, Technical, Medical Publishers (STM), an alliance of 120 major publishers that release more than 66% of scholarly journals worldwide, requires member publishers to comply with a code of conduct and principles of publication ethics. In August 2018, STM issued a statement addressing the increase in unethical and fraudulent scholarly journals [3].

Several indexing databases, such as Scopus and MEDLINE, will not consider a journal’s application to be listed beyond the initial review process unless the journal satisfies the 16 fundamental Principles of Transparency and Best Practice in Scholarly Publishing [4]. The journal review process for PubMed Central (PMC) recently implemented a stricter quality control process due to the emergence of commercial publishers that offer lower-quality open access journals. The following quality control criteria are reviewed during the application process. Since these five standards are already included in the “Principles of transparency and best practice in scholarly publishing,” it is imperative that journals meet and comply with these standards in order to be listed in MEDLINE and PMC [5].

1. Are the journal’s aims and scope clearly stated and adhered to? (2) Is the peer-review process explicit and sufficiently detailed? (3) Are the journal’s ethical policies clearly stated and adhered to? (4) Are commercial sponsorships clearly addressed (i.e., do not raise questions about the objectivity of published content)? (5) Do the authors consistently disclose financial conflicts of interest?

Even though the “Principles of transparency and best practice in scholarly publishing” were revised in January 2018, there has been little active research in Korea with the goal of ascertaining the degree to which Korean scholarly journals are complying with these principles. Therefore, it is necessary to evaluate Korean scholarly journals with respect to these principles and to identify directions for improvement [6]. No previous related research has been conducted on compliance with these principles, besides article on the ethics policy of Annals of Pediatric Endocrinology & Metabolism [7] and a study on 781 scholarly journals around the world [8], which were conducted by the authors of this article.

Therefore, in this study, we analyzed the extent to which Korean scholarly journals have responded to the “2018 Principles of transparency and best practice in scholarly publishing.”

Methods

We analyzed journals published by Korean academic societies to determine the extent to which they apply the “Principles of transparency and best practice in scholarly publishing,” a global standard that has been established by several authoritative entities in scholarly publishing. These principles have been revised twice since they were first adopted in December 2013. For the second edition, released in August 2015, revisions were made by Open Access Scholarly Publishers Association, and the current edition was published in January 2018. The academic journals analyzed in this study were retrieved from the website of Clarivate Analytics by accessing the 2019 version of the Journal Citation Reports and searching with the filter criterion of South Korea for country code, and additional information about the journals was obtained from the Science Citation Index Expanded. In total, 116 journals were identified, and we downloaded a list of these journals. It was found that
**Korean Journal of Horticultural Science & Technology and Horticulture, Environment and Biotechnology** were the same journal; the former had changed its name to the latter, but both names remained registered in the list of journals. We chose to analyze only *Horticulture, Environment and Biotechnology*, yielding a list of 115 journals. For each of these 115 journals, we first accessed the journal website to identify the publisher. Since international commercial publishers are making reasonable efforts to be compliant with the given standards, we excluded journals that distributed print or online materials through a platform provided by a commercial publisher, even if they had an address corresponding to the respective academic society. Thus, we included 59 journals in the final analysis.

We concentrated on reviewing the author guidelines and publication ethics presented on the webpages of the 59 journals that we analyzed, in order to assess how the 16 principles stipulated by the “Principles of transparency and best practice in scholarly publishing” had been implemented to academic journals. The analysis was conducted from December 1, 2019, to December 31, 2019. We double-checked the items identified as “poor” during the preliminary analysis to verify whether journals were compliant with the corresponding criteria based on the information on their webpages.

Similarly to a previous article published by the same researchers [8], we classified the 16 principles into four subgroups: basic journal information, publication ethics information, copyright and archiving information, and profit model information. If compliance with a criterion was satisfactory, the item was marked as “yes”; otherwise, it was marked as “no.”

**Results**

Of these 115 journals, 59 were published by Korean publishing agencies: 20 through XMLink, 14 through Inforang, 12 through M2Community, and one through Kpubs. Twelve journals did not specify a publisher on the webpage, and were therefore indicated as having no information for this item. Fifty-six journals were published through international publishers: 32 through SpringerNature, 10 through TECHNO-PRESS, eight through Elsevier, two through Wiley, and one each through Taylor & Francis, OSA Publishing, and IEEE.

The distribution of the 115 journals’ 2019 impact factor was analyzed in this study. Two journals had an impact factor of 5 or higher; both were published by Korean publishing agencies. In contrast, there were four journals with an impact factor between 4.0 and 4.999, all of which were published by international publishers. Seven of the 10 journals with an impact factor between 3.0 and 3.999 were published by Korean publishing agencies. The 99 remaining journals with an impact factor of 2.999 or lower showed a similar distribution of Korean and international publishers.

The publication frequency of the 115 journals was also investigated. The plurality of journals (50) adopted a bi-monthly schedule, followed by a quarterly schedule, which was adopted by 37 journals. Next, 21 journals adopted monthly schedule. Each of the three journals adopted semi-monthly and Tri-annual. One journal adopted annual schedule.

**Basic journal information**

Table 1 indicates the results of the analysis of the 59 academic journals published by Korean publishing agency in terms of the availability of basic journal information.

Most of the journals analyzed in this study presented well the most of the basic journal information. However, nine of the 59 journals only presented broad statements regarding their aims and scope, but did not specify the main readership. Journals should provide detailed information of article processing charges and publishing costs, and if the author is not responsible for these costs, that information should be specified on the journal’s webpage. However, eight journals did not provide information on the costs related to submission and publishing on the webpage. The results for whether basic journal information was indicated (in terms of “yes” or “no”) are shown in Fig. 1. Journals should state on their webpage whether there is a peer review process before a submitted manuscript is published and should specify the detailed procedures involved in the peer review process. Eight journals provided specific information on the peer review process. Of the 59 journals, 51 did not describe the peer review process in detail on their webpage. Two journals indicated that they utilized single-blind reviewing, in which the reviewer knows who the author is, while the author is not given the reviewer’s information. Six journals indicated that they used a double-blind policy, in which neither the reviewers nor the authors are given each other’s information during the peer review process.

**Copyright and archiving information**

Results for copyright and licensing information, method of access, and archiving conditions are presented in Table 2 and Fig. 2.

According to the “Principles of transparency and best practice in scholarly publishing,” journals should clearly indicate their policies regarding the use of third-party repository services such as preprint servers or affiliated universities or societies where authors can deposit their articles before submission. However, only six of the 59 journals specified information regarding this item. Furthermore, in light of the increasing number of academic journals that are only published online, it is necessary to indicate plans for electronic backup or archiving of past publications in case the academic journal is...
discontinued. However, only 47 of the 59 journals provided information on electronic backup plans and archiving. The most common repository for Korean journals was PMC, which 44 journals utilized. Six journals deposited publications in ScienceCentral, one in KoreaScience, and one in the National Library of Korea.

**Table 1. Basic journal information**

<table>
<thead>
<tr>
<th>Item</th>
<th>Sub-item</th>
<th>Count of ‘yes’</th>
<th>%</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website</td>
<td>Website</td>
<td>59</td>
<td>100</td>
<td>Statement of the purpose and scope of the academic journal</td>
</tr>
<tr>
<td>Website</td>
<td>Aims and scope</td>
<td>59</td>
<td>100</td>
<td>Statement of the purpose and scope of the academic journal</td>
</tr>
<tr>
<td>Website</td>
<td>Readership</td>
<td>50</td>
<td>84.7</td>
<td>Clear statement of the main target readers</td>
</tr>
<tr>
<td>Website</td>
<td>Authorship criteria</td>
<td>58</td>
<td>98.3</td>
<td>Determination of authorship, prohibition of duplicate submissions or publications</td>
</tr>
<tr>
<td>Name of journal</td>
<td>Print ISSN and electronic ISSN</td>
<td>59</td>
<td>100</td>
<td>Clear indication of the pISSN or eISSN</td>
</tr>
<tr>
<td>Name of journal</td>
<td>Uniqueness of name</td>
<td>59</td>
<td>100</td>
<td>A distinctive title of the journal, so that a reader would not be confused or misled regarding its association with other academic journals</td>
</tr>
<tr>
<td>Peer review process</td>
<td>Statement of review process</td>
<td>59</td>
<td>100</td>
<td>Statement indicating that a peer review process takes place before a submitted manuscript is published</td>
</tr>
<tr>
<td>Peer review process</td>
<td>Methods of peer review</td>
<td>8</td>
<td>13.5</td>
<td>Description of all policies and procedures related to the peer review process</td>
</tr>
<tr>
<td>Peer review process</td>
<td>No guarantee of manuscript acceptance</td>
<td>59</td>
<td>100</td>
<td>No guarantee of approval to publish or a highly expedited review process</td>
</tr>
<tr>
<td>Ownership and management</td>
<td>Ownership and management</td>
<td>59</td>
<td>100</td>
<td>Indication of ownership and management information</td>
</tr>
<tr>
<td>Governing body</td>
<td>The full names and affiliations of the journal’s editorial board</td>
<td>59</td>
<td>100</td>
<td>Editing or operating committees consisting of experts in topics commensurate with the scope of the academic journal, with disclosure of the names and affiliations of committee members</td>
</tr>
<tr>
<td>Editorial team/</td>
<td>Contact information</td>
<td>59</td>
<td>100</td>
<td>Contact information of all editorial staff, including name, affiliation, and address of editors’ office</td>
</tr>
<tr>
<td>Contact information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Author fees</td>
<td>Author fees</td>
<td>52</td>
<td>88.1</td>
<td>Clear statement of the cost of publishing: if the author is not responsible for the cost, this fact should also be indicated</td>
</tr>
<tr>
<td>Publishing schedule</td>
<td>Publishing schedule</td>
<td>59</td>
<td>100</td>
<td>Clear indication of the frequency or interval of publishing</td>
</tr>
</tbody>
</table>

ISSN, International Standard Serial Number; pISSN, print ISSN; eISSN, electronic ISSN.

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**Fig. 1.** Twelve items in the category of basic journal information (X-axis) were investigated on 59 journals’ websites. If an item was clearly indicated, it was marked as ‘yes.’ If not, it was marked as ‘no.’ ISSN, International Standard Serial Number.
Of the 59 journals, 55 adopted a Creative Commons License. Most of these journals (53) adopted a CC BY-NC license (This license lets others remix, tweak, and build upon your work non-commercially, and although their new works must also acknowledge you and be non-commercial, they do not have to license their derivative works on the same terms.), which allows usage for non-commercial purposes after acknowledging the holder of the intellectual rights. One journal adopted a CC-BY-ND policy (This license lets others reuse the work for any purpose, including commercially; however, it cannot be shared with others in adapted form, and credit must be provided to you.), and the remaining one adopted CC BY-SA (This license lets others remix, tweak, and build upon your work even for commercial purposes, as long as they credit you and license their new creations under the identical terms.).

**Publication ethics information**

The results for publication ethics are presented in Table 3 and Fig. 3. Twenty-four journals specified provisions regarding complaints and appeals, 12 journals indicated policies regarding data sharing, and only six journals presented details on post-publication discussion policies. These three items had the poorest levels of compliance among the items dealing with publication ethics.

**Profit model information**

The results for publication models are shown in Table 4 and Fig. 4. Only three journals presented details on the revenue structure of the journal. Compliance with providing information on the profit model was weaker than in other areas.
Status of compliance with best practice of Korean society journals

Discussion

We found that the 59 Korean academic journals analyzed in this study showed poor compliance with similar aspects of the “Principles of transparency and best practice in scholarly publishing” as we identified in 781 journals worldwide in our study in 2019 [8]. Korean journals showed relatively good compliance in the areas of readership, author fees, Committee on Publication Ethics’ guideline, and archiving. However, weak areas included data sharing and reproducibility (20.3%),
policies on posting accepted articles with third parties (10.2%), and the profit model (5.1%) as shown in Table 5. Therefore, in this section, we review how international journals are complying with the “Principles of transparency and best practice in scholarly publishing” in these areas, and then suggest strategies for improvement for Korean journals.

### Data sharing and reproducibility
It can be difficult for readers to identify missing data or data entry errors if raw data are not made available. Conversely, if the raw data are available, it may enable other researchers to rectify any errors at a later date, or to conduct more in-depth research using the existing raw data. When we reviewed an article that analyzed the effects of data sharing policies after classifying them into four categories by strength [9], the availability and accessibility of the data were up to 25 times higher for academic journals with a sharing policy compared to journals without a data sharing policy. Compared to journals with no sharing policy, the accessibility of the data was 17 times higher for journals with a mandatory data sharing policy with no requirement for a data accessibility statement and 974 times higher for those with a mandatory sharing policy with a requirement to include a data accessibility statement. Therefore, we can conclude that codifying a data sharing policy in the submission guidelines is tremendously effective for facilitating data sharing.

The British Ecological Society fully implemented a data sharing policy in 2014. Before adopting the policy, the society made efforts to elicit consensus among researchers for the new policy through prior promotion beginning in 2012, and a pilot implementation in 2013. The society provided diverse archiving options to alleviate the burdens placed upon researchers, and minimized complaints from the researchers by employing a flexible embargo period. It was observed that 42% of archived data were stored in Dryad, sponsored by the British Ecological Society, followed by Wiley Online Library, which retained 28% of the data; 24% of the data were archived.

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**Table 4. Profit model information**

<table>
<thead>
<tr>
<th>Item</th>
<th>Sub-item</th>
<th>Count of ‘yes’</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit model information</td>
<td>Revenue sources</td>
<td>3</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Advertising</td>
<td>3</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Direct marketing</td>
<td>3</td>
<td>5.1</td>
</tr>
</tbody>
</table>

**Table 5. Comparison of poorly practiced items by Korean society journals and international society journals**

<table>
<thead>
<tr>
<th>Item</th>
<th>Sub-item</th>
<th>International (%)</th>
<th>Korea (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic journal information</td>
<td>Readership</td>
<td>32.1</td>
<td>84.7</td>
</tr>
<tr>
<td></td>
<td>Author fees</td>
<td>44.5</td>
<td>88.1</td>
</tr>
<tr>
<td>Copyright and archiving</td>
<td>Policies on posting accepted articles with</td>
<td>40.6</td>
<td>10.2</td>
</tr>
<tr>
<td>information</td>
<td>third parties</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Archiving</td>
<td>34.0</td>
<td>79.7</td>
</tr>
<tr>
<td>Publication ethics</td>
<td>COPE’s guideline</td>
<td>38.3</td>
<td>76.3</td>
</tr>
<tr>
<td>information</td>
<td>Data sharing and reproducibility</td>
<td>28.7</td>
<td>20.3</td>
</tr>
<tr>
<td></td>
<td>Post-publication discussion</td>
<td>42.9</td>
<td>10.2</td>
</tr>
<tr>
<td>Profit model information</td>
<td>Revenue sources</td>
<td>20.0</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Advertising</td>
<td>35.9</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Direct marketing</td>
<td>25.3</td>
<td>5.1</td>
</tr>
</tbody>
</table>

COPE, Committee on Publication Ethics.
in other repositories, including public repositories [10].

Hence, the webpages of Korean academic journals must express the importance of depositing research data and provide detailed information on the procedures through which researchers can deposit their data. It is also vital to minimize authors’ discontent by allowing a sufficient phase-in period to promote awareness of the new policy, adopting a flexible embargo policy, and utilizing an extensive selection of repositories so that authors can freely choose their preferred repository.

Policies on posting accepted articles with third parties

If a CC-BY license is adopted, users can reproduce, distribute, and modify content (e.g., by producing a secondary adaptation), even for commercial purposes, without explicit consent as long as they comply with the condition of explicitly specifying the holder of the intellectual property rights. This means that a CC-BY licensing policy allows free reuse of a scholarly article under the condition of crediting the original author, which is the closest policy to the concept of open access. Complete open access journals permit authors to archive all forms of articles, regardless of the format, on all repositories and websites without delay. It is a common practice for international academic journals to employ procedures to automatically deposit articles to PMC if the research was supported by public funding. It is common to outline the process through which publishers deposit articles to a public repository after a certain embargo period lapses or upon request. Such automatic deposit procedures enable more effective and immediate public access to articles based on public research funding.

International publishers of academic journals publish information on intellectual property rights and open access policies regarding the journals they print through SHERPA/RoMEO, a platform sponsored by JISC for open archives. SHERPA/RoMEO breaks down recommendations according to whether an entity holds intellectual property rights based on four categories of archiving (preprints only, postprints only, both preprints and postprints, and the publisher’s version [PDF]), five locations of archiving (public e-print server, non-profit server, author’s or employer’s website only, author’s or institutional server only, or author’s personal website), and six types of archiving conditions (publisher’s copyright and source must be acknowledged, published source must be acknowledged, must link to publisher version, publisher’s version/PDF cannot be used, publisher’s version/PDF may be used and in compliance with any embargoes) [11].

Renowned open access journals such as *PLoS One* are registered as green journals in SHERPA/RoMEO, as they allow archiving of preprints, postprints, and publisher’s versions/PDFs. The author holds the intellectual property rights and adopts a CC-BY license. A source must be cited when it is referenced. A preprint version by the author can be archived on the preprint server, and when the article is posted, the final PDF version is automatically deposited in PMC [11].

The *Journal of the American Chemical Society*, a premier academic journal published by the American Chemical Society, is classified as a white journal in SHERPA/RoMEO. To archive a preprint version of an article, written approval from the journal’s editor is required, and it must not violate the ethics rules of the American Chemical Society. If the postprint version is required to be archived due to the policies of funding institutions or affiliated institutions, archiving may be performed after a 12-month embargo. Under no circumstances is the publisher’s version or PDF file is allowed to be archived. A preprint version of an article may be archived on a preprint server, institutional website, institutional repository, or subject repository, and it must be linked to the publisher’s version [11].

As each academic journal has unique operational or managerial circumstances reflecting its respective scholarly society, it is imperative for academic journals to clearly stipulate their policies regarding archiving of preprint articles and post-deposit of postprint articles using various international precedents that can be retrieved from SHERPA/RoMEO. Moreover, it is important to register a deposit policy on the webpage of SHERPA/RoMEO after establishing self-archiving or post-deposit policies, so that they are readily available for international authors to access.

Revenue sources, advertising, and direct marketing

Publishing is an integral activity of academic societies, and the revenue from publishing is generally used to support other society activities [12]. The sources of revenue of an academic society (e.g., subscription fees, advertisement fees, advertisements on the webpage or in printed journals, reprints, and support from institutions or organizations) should be clearly stated on the journal’s webpage. Authors should receive a clarification that the sources of revenue and publishing processes are completely independent, and that revenue sources do not affect editorial decisions. Additionally, authors should be informed that the review process is not affected by whether authors are required to pay publishing fees or such requirements are waived.

Advertisement policies should also be stated on the webpage. Advertisement policies include which advertisement formats are considered, who accepts advertisements, and how advertisements are shown (either presented to users based on their usage patterns or randomly). Advertisements must not be related to the decision-making process of the editorial committees under any circumstances or in any way. They also
Advertising Policies for print and web publications

WJM accepts advertisements on the following basis:

1. Eligibility of the advertised products or services
   All products or services should be safe and reliable, and not cause any harm to the health and welfare of humans. Advertisements may promote information and technologies relevant for authors, editors, reviewers, and readers. Pharmaceutical products may also be considered.

2. Orders
   Any individuals or organizations who are interested in advertising their products or services in the print copies of the journal or on the website are encouraged to contact the editorial office. The acceptance of advertisement will be discussed by the editorial board and will be ultimately approved by the publisher.

3. Advertisement fee
   For one print copy issue, the advertisement price for one whole page will be priced from USD 700 to USD 2000 depending on the location of the page. If the advertisement is half a page, the price is reduced by half. For a quarter of the page, this price is reduced by one quarter. For banner advertisements on the website, the price is negotiable according to the duration of its exposure on the journal homepage.

4. Disclaimer
   Liability: Neither the publisher nor the editors will be legally liable for advertisements presented in the journal. In addition, they cannot guarantee the accuracy, completeness, or usefulness of the information provided.
   Endorsement: The publisher and the editors do not endorse any products or services that are advertised.

   Disclaimer: Neither the publisher nor the authors will be legally liable for any of the content of advertisements, so readers must keep this in mind when reading or seeing advertisements.

5. Advertising complaints policy
   Please send any complaints about advertising to: edit@andrology.or.kr

Direct Marketing

Journal propagation has been done through the journal website and distribution of an introduction pamphlet. Invitations to submit a manuscript are usually focused on the presenters at conferences, seminars, or workshops if the topic is related to the journal's aims and scope. As a responsible publisher, we are very aware of the various anti-spam laws worldwide.

Revenue sources

There is no submission fee or article processing charge on the author side. All costs of publication are covered by the publisher and advertising revenue.

(http://www.kofst.or.kr/main.biz/sys_type=0000).

Fig. 5. Statement of the profit model of World Journal of Men’s Health [13].

must not be related to the content of the articles. All direct marketing efforts, such as manuscript solicitation, must be appropriate, well-targeted, and unobtrusive. Information on the publisher and journal must be presented clearly and truthfully, in a way that does not mislead readers and authors.

Among the 59 journals analyzed in this study, only three—Clinical and Experimental Otorhinolaryngology, Diabetes & Metabolism Journal, and World Journal of Men’s Health—clearly included such provisions. However, we believe that other academic journals may easily add similar clarifications to their policies based on the following information section about the revenue structure of World Journal of Men’s Health (Fig. 5) [13].

Limitations

The major limitation of this study stems from the fact that it was conducted only through an analysis of journals’ webpages. If a journal’s webpage, including the instructions for authors, did not include certain information, we determined that the journal did not employ best practice. We could not distinguish journals that did in fact comply with the “Principles of transparency and best practice in scholarly publishing,” but had not updated their policies on their webpage. Hence, a sensible next step would be to derive more accurate findings through a questionnaire survey administered to journal editors or through in-depth interviews with journal editors on the barriers that prevent journals from following the “Principles of transparency and best practice in scholarly publishing.”
Conclusion
In this study, we analyzed compliance with the newly revised “Principles of transparency and best practice in scholarly publishing” for 59 Korean academic society–published journals listed in the Science Citation Index Expanded with Korean publishing agents. The aspects that require the most urgent improvements in Korean academic journals are publishing ethics, self-archiving, content preservation policies for electronic journals, and notification of the journal’s revenue structure. The editors of Korean academic society–published journals may be able to adapt to the fast-changing publishing environment by improving aspects of their practice that are non-compliant with the “Principles of transparency and best practice in scholarly publishing.” Moreover, it may be necessary for associations such as the Korean Council of Science Editors to offer regular educational programs for the editors of Korean academic journals on a more frequent basis, as well as to embark upon more activities to raise awareness of these changes in guidelines.

Conflict of Interest
No potential conflict of interest relevant to this article was reported.

Data Availability
Dataset is available from the Harvard Dataverse at: https://doi.org/10.7910/DVN/MSSJD0.


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11. SHERPA/RoMEO. Publisher copyright policies & self-archiving [Internet]. [place unknown]: SHERPA/RoMEO [cited 2019 Dec 30]. Available from: http://www.sherpa.ac.uk/romeo