

ORIGINAL ARTICLE

Compliance with best practice guidelines on publication ethics: Where does *Pharmactuel* stand? A case study

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Abstract

Background: The Committee on Publication Ethics (COPE) and the International Committee of Medical Journal Editors (ICMJE) are two internationally recognised organisations in the field of publication ethics. Guidelines from these two organisations were updated in 2018.

Objectives: To assess the extent to which the journal *Pharmactuel* is compliant with the guidelines on publication ethics updated by ICMJE and COPE in 2018 and, where the journal is found wanting, to take the necessary steps to make it compliant.

Methods: A list of updated criteria – 56 by ICMJE and 22 by COPE – was compiled. In January 2020, compliance with each of these criteria was evaluated by the editor-in-chief and validated by all six associate editors. The evaluation was followed by an action plan to improve compliance, and the evaluation was repeated in November 2020.

Results: Of the 56 ICMJE criteria, *Pharmactuel* was fully compliant with 31 and partly compliant with 10 criteria (a compliance rate of 73%, taking the two together). The corresponding figures for the 22 COPE criteria were 17, 3, and 91%. By modifying its editorial policies, training its associate editors, and creating appropriate guidelines for its editorial board and editors, *Pharmactuel* achieved almost 100% compliance by the end of 2020.

Conclusions: *Pharmactuel* has been fully compliant with ICMJE and COPE recommendations since January 2021. Minor modifications to *Pharmactuel*'s publication process have enabled the editorial team to ensure that the journal continues to be almost totally compliant with COPE and ICMJE guidelines and to uphold its high ethical standards.

Keywords: Compliance, COPE, ICMJE, editorial policies, instructions to authors, *Pharmactuel*, publication ethics

Introduction

Scientific publishing has evolved rapidly since the new millennium with increased ethical awareness and technological advances.^{1,2} The ease of getting published online has dramatically increased the number of journals and published articles in the past decade.³ As of 2018, the total number of published scientific papers was estimated at more than 150 million.⁴

The ever-increasing number of manuscripts being submitted to journals for possible publication exerts a great deal of pressure on their editorial boards and adds significantly to the workload of publishers if they wish to maintain the quality of papers they publish.⁵ Open-access journals also made significant progress between 2005 and 2019, during which their number increased from 88 to 4233.⁶ Authors have raised several ethical questions about open-access journals related to rapid acceptance, the shift of publication costs to authors, and difficulties in differentiating legitimate journals from predatory journals.^{5,7,8} Ethical issues and peer review processes are therefore more important than ever, given that journals can be easily accessed by patients, the media, and caregivers.^{8,9}

Publication ethics too have evolved over the past decade. The Committee on Publication Ethics (COPE) and the International Committee of Medical Journal Editors (ICMJE), two well-recognised and respected international organisations in the field of publication ethics, updated their guidelines in 2018.^{10,11} The updating included additions to define the principles of transparency and best practice for publications, such as the guideline that the fees charged by a journal should be clearly stated.

Gasparyan *et al* have raised the issue of insufficient training in ethics for members of editorial boards.¹² Updating the knowledge and skills of authors, editors, and publishers; developing and endorsing recommendations of global editorial associations; and redrafting journals' instructions to authors can be viewed as potential tools for promoting ethical practices in academic journals and as steps towards ensuring the scientific integrity of journals and to protect their authors.

The first step towards maintaining high ethical standards is for a journal to rigorously follow the recommendations related to publication ethics made by such organisations as COPE and ICMJE—and the present case study describes our attempts to do so for *Pharmactuel*, a journal published four times a year and currently (2021) in its 54th volume.

Methods

Journal

Pharmactuel, a French-language pharmacy journal from Quebec, Canada, was started more than 50 years ago, in 1967.¹³ The journal evolved from a newsletter of the hospital pharmacist association of Quebec (Association des pharmaciens en établissements de santé du Québec, or A.P.E.S.) to an international peer reviewed journal in French.¹⁴ The journal is available online and is disseminated digitally to health-care professionals in French-speaking countries around the world. *Pharmactuel* is indexed in *International Pharmaceutical Abstracts* and Google scholar and adheres to the good publishing practices recommended by COPE.

The journal's editorial board consists of health professionals (hospital pharmacists and nurses) who have a limited education in publication ethics. No plagiarism detection software is used. Ethical issues are evaluated during editing and peer review.

Procedure

In January 2020, the criteria related to publication ethics as stipulated by COPE and ICJME were evaluated by *Pharmactuel's* editor-in-chief and validated by all six associate editors of the journal. The editor-in-chief evaluated compliance with each criterion described in the latest (2018) ICMJE guidelines (a total of 56 criteria) and COPE guidelines (a total of 16 criteria).^{10,11} Some of these criteria cover several distinct aspects, and we redistributed them into 22 criteria to facilitate evaluation.

The journal earned a rating of 'fully compliant' on a given criterion if all the conditions for that criterion were met; 'partly compliant' if only some conditions were met; and 'non-compliant' if the recommendations were not met or did not apply (Table 1). The degree of compliance, expressed as a percentage, was calculated by dividing the number of criteria satisfied (full, in part, or no compliance) by the total number of criteria, and the overall compliance was calculated by adding both the levels of compliance (full and in part).

Following the assessment, an action plan to make the journal more compliant was developed and presented to the associate editors at the beginning of November 2020. To ensure that *Pharmactuel* was fully compliant with the COPE and ICMJE guidelines once the action plan had been implemented, the process of evaluation was repeated at the end of November 2020. This second round of evaluation was restricted to only those criteria on which the journal was found to be only partly compliant or non-compliant in the first round. The editor-in-chief determined the total amount of time invested on making the journal compliant by adding the time spent on all the related activities.

Results

Of the 56 ICMJE criteria, *Pharmactuel* was fully compliant with 31 and partly compliant with 10, with an overall compliance rate of 73%. The corresponding numbers for the 22 COPE criteria were 17, 3 and 91% (Table 1).

Table 1. Compliance rates with the publication ethics criteria

Compliance	COPE n (%)	ICMJE n (%)
Not compliant	2 (9)	15 (27)
Partly compliant	3 (14)	10 (18)
Fully compliant	17 (77)	31 (55)
Total	22 (100)	56 (100)

Although ten of the ICMJE criteria and one of the COPE criteria related to situations never encountered by *Pharmactuel*, they were nevertheless included in the assessment. The criteria for which *Pharmactuel* was found fully or partly compliant or non-compliant with respect to the COPE criteria are listed in Table 2 and those with respect to the ICMJE criteria are listed in Table 3. Both the tables also indicate the actions required to be taken to make the journal fully compliant and their status, namely whether they have already been carried out or are under way.

In our efforts to make the journal 100% compliant, updating our editorial policies and guidelines to members of the editorial board was the major step that made the journal compliant in most cases. Upgrades to the journal's automated online submission software in January 2021 included many new features (improvements to visual design, the search tool, and presentation of tasks

to be undertaken, etc), which helped in making the necessary corrections to the journal's website.

A total of 20 COPE and 38 ICMJE criteria were more general and were addressed in the journal's instructions to authors or in its editorial policies. The first update took about 10 hours, and the time needed to keep the instructions and editorial policies up to date with respect to the COPE and ICMJE guidelines in future was estimated at 30 minutes a month. On the other hand, two COPE criteria and 18 ICMJE criteria are related to individual manuscripts, and the time needed to ascertain that all applicable guidelines are met was estimated at 90–120 minutes per manuscript.

Discussion

Pharmactuel is available online without restriction with worldwide open access.¹³ The journal's mission is to publish original and innovative articles in French that are intended for pharmaceutical practice in health-care institutions, and the journal caters to pharmacists, health-care professionals, and decision-makers in the French-speaking world who are interested in pharmaceutical practice in health-care establishments.¹³ Several organisations have underlined the importance of maintaining publications in languages other than English to reflect diversified practices, as journals are increasingly concentrated only in a few countries and published in English.^{15,16} In 2012, it was estimated that nearly 70% of all published journals were published in English and based only in four countries: the United States, the United Kingdom, the Netherlands, and Germany.¹⁷

Remaining up to date with evolving standards of ethics is a challenge for small or independent editorial boards. Members of the editorial board of *Pharmactuel* are mostly health professionals and because they are concerned with ethics, they decided that the journal shall be fully compliant with the guidelines issued by well-recognised and respected organisations active in the field of publication ethics. *Pharmactuel's* editorial policies were last revised in 2015; in 2016, we applied to Medline for having the journal indexed, but without success. Because we would like to reapply in the near future, we undertook the assessment of compliance discussed in this paper.

The main problem in implementing the action plan for greater compliance mentioned earlier was finding the time and to find the best way to meet some of the criteria. It is worth noting that the ICMJE criteria were updated again in 2019, and these revised criteria were included in our action plan. As the first step, we revised the journal's editorial policies significantly to bring them in line with the editorial policies recommended by Gasparyan *et al.*¹² Next – and as is strongly recommended by some authorities – we arranged for the editorial board members to undergo some training on publication ethics.^{12,18} DeTora *et al* also stress the fact that guidelines from organisations dealing with publishing ethics must be *adapted* to the local context and to specific editorial boards.¹⁸ Although this step takes a considerable amount of time, one approach proposed by these authors is to create a thorough publication plan.¹⁸ This is why we decided to create an exhaustive guide to help inform associate editors about the most recent ethical standards, and we plan to update this document annually.

Keeping up to date with higher standards of ethics benefits even small journals because it increases their visibility.¹² As highlighted by Gasparyan *et al*, ethics standards should be the same no matter the size of the journal or the size of its audience.¹²

Our evaluation also has a few limitations. For example, those involved in the evaluation were not experts in the field of ethics: they were primarily healthcare professionals but with some experience of scientific publishing. Also, the evaluation was confined to the criteria laid down by ICMJE and COPE; no exhaustive search was carried out to locate other internationally recognised guidelines.

However, a major strength of our assessment was that we took care to include the most recent ICMJE and COPE recommendations and studied them in detail to come up with a list of appropriate criteria. Our evaluation was also reviewed by an independent expert not involved in the initial assessment.

We noticed a clear improvement in the manuscripts submitted to the journal following the implementation of the action plan.³ The improvement significantly reduced the time spent by the editor-in-chief on preliminary examination of manuscripts for confirming their suitability to the journal and for deciding whether they should be sent out for peer review. A formal evaluation of all the impacts of being fully compliant with the COPE and ICMJE guidelines is yet to be performed but will be undertaken in the next few years.

In the first round, *Pharmactuel's* compliance rate was 73% for the ICMJE criteria and 91% for the COPE criteria. In the second round, after the action plan had been implemented, the compliance rate reached 100% for both sets of criteria. It is therefore possible for an independent journal not managed by a publishing house and not published in English to adhere to the highest standards of publication ethics.

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Competing interests

The authors declare that they have no competing interests.

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Table 2. Criteria related to publication ethics stipulated by COPE, the Committee of Publication Ethics, to comply with which the journal *Pharmactuel* needed to change some of its practices and policies

Criterion	Compliance	Action required or taken	
		First round of assessment	Second round of assessment
Publication fees must be clearly indicated (including mention if there are no fees)	Partly compliant (failed to mention in its editorial policy that the journal charged no fee)	Mention to be added	Added in the 'About the journal' section
COPE guidelines must be followed in case of scientific misconduct	Situation not yet encountered by <i>Pharmactuel</i>	To be added to the guidelines to editors and in the editorial policies	Added in both places
Detailed publication ethics to which the journal adheres must appear on the website (including authorship, scientific misconduct, sharing of data, and corrections or retractions)	Partly compliant	Text on editorial policies to be modified	Added to the editorial policies
The journal's plan for electronic backup and preservation of access to the journal content if the journal is no longer published shall be clearly indicated	Non-compliant	To be added	Plan under way with the <i>Association des établissements de santé du Québec</i> (owner of the journal)
Any direct marketing activities, including manuscript solicitations conducted on behalf of the journal shall be appropriate, well targeted, and unobtrusive. Information provided about the publisher or journal is expected to be truthful and not misleading for readers or authors	Partly compliant	To be added to the guidelines to editors	Added

Table 3. Criteria related to publication ethics stipulated by ICMJE, the International Committee of Medical Journal Editors, to comply with which the journal *Pharmactuel* needed to change some of its practices and policies criteria for which the journal had to make changes in order to be compliant

Criterion	Action required or taken	
	First round of assessment	Second round of assessment
Non compliant		
Any change in authorship must be accompanied by clear explanations and written consent by all manuscript authors	To be added to the editorial policies	Added
The contribution of every person appearing in the acknowledgement section must be indicated	To be added to the editorial policies	Added
Ask reviewers to destroy all material associated with the manuscript when the evaluation is completed	To be added to the guidelines to editors	Added
Delete all documents associated with the manuscripts that have been rejected	Delete all rejected manuscripts up to 2020 from the online submission system	Underway
Journal websites should post the date that non-article web pages, such as those listing journal staff, editorial board members, and instructions for authors, were last updated	To be added	Under way
Authors should avoid citing articles in predatory or pseudo-journals	To be added to the guidelines to editors and editor-in-chief (with a link to a list of predatory journals)	Added
Reviewers who seek assistance from a trainee or colleague to review a paper should acknowledge these individuals' contributions in the written comments submitted to the editor	To be added to the guidelines to editors	Added

Partly compliant		
All authors should receive correspondence regarding their manuscript (not only the corresponding author)	To be added to the guidelines to editors	Added
Systematically ask reviewers if they have conflict of interest regarding the manuscript to be reviewed	To be added to the guidelines to editors	Added
Journals should take extra precautions and have a stated policy for evaluating manuscripts submitted by individuals involved in editorial decisions ¹⁴	To be added to the guidelines to editors	Added
Reviewers must be notified that all material associated with the manuscript is strictly confidential	To be added to the guidelines to editors	Added
Make sure manuscripts are evaluated in a reasonable time frame. Notify authors quickly if papers are rejected	To be added to the guidelines to editors	Added
Notify reviewers about the final decision regarding the manuscript they evaluated	To be added to the guidelines to editors	Added
Systematically send a thank you email to reviewers	To be added in the guidelines to editors	Added
Make sure readers have the option to submit comments about published papers	To be added to the editorial policies	Added
Have a system of appeal in place	Create an appeal system and add to editorial policies	Underway
Articles must be permanently archived	To be added	Plan under way with <i>Association des établissements de santé du Québec</i> (owner of the journal)
Situation not yet encountered by Pharmactuel		
Add a specific note for studies sponsored by the pharmaceutical industry	To be added to the guidelines to editors	Added
Reveal the identity of reviewers to authors only with express consent	To be added to the guidelines to editors	Added
Publish any corrections or corrected versions of a paper as soon as possible	To be added to the guidelines to editors and editor-in-chief	Added
Make sure papers are retracted in the case of major mistakes or invalid results or conclusions	To be added to the guidelines to editors and editor-in-chief	Added
Follow COPE guidelines in the case of scientific misconduct	To be added to the guidelines to editors and to the editorial policies	Added
Make sure a paper is retracted in the case of scientific misconduct	To be added to the guidelines to editors and to the editorial policies	Added
Make sure a retracted paper is appropriately identified in all versions (PDF, HTML, etc)	To be added to the guidelines to editors	Added
Make sure a retracted paper is accompanied by an explanatory text and the complete citation of the original reference	To be added to the guidelines to editors and editor-in-chief	Added
Make sure a paper is retracted if a duplicate publication is discovered	To be added to the guidelines to editors and editor-in-chief	Added
If an article must be completely removed from the journal website for legal reasons, the URL for the removed article must contain a detailed reason for the removal, and the article must be retained in the journal's internal archive	To be added to the guidelines to editors and editor-in-chief	Added