

Quality of Publication Ethics in the Instructions to the Authors of Iranian Journals of Medical Sciences

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Abstract

Providing a perfect instruction to authors can prevent most potential publication ethics errors. This study was conducted to determine the quality of ethical considerations in the instructions to the authors of Iranian research scientific journals of medical sciences (accredited by the Commission for Accreditation and Improvement of Iranian Medical Journals) in October 2011. Checklist items (n=15) were extracted from the national manual of ethics in medical research publications, and the validity of the manual of ethics was assessed. All the accredited Iranian journals of medical sciences (n=198) were entered into the study. The instructions to the authors of 160 accredited Iranian journals were available online and were reviewed. The ANOVA and Kendall Correlation coefficient were performed to analyze the results. A total of 76 (47.5%) of the 160 journals were in English and 84 (52.5%) were in Farsi. The most frequently mentioned items related to publication ethics comprised “commitment not to send manuscripts to other journals and re-publish manuscripts” (85%, 83.8%), “aim and scope” of the journal (81.9%), “principles of medical ethics in the use of human samples” (74.4%), and “review process” (74.4%). On the other hand, the items of “principles of advertising” (1.2%), “authorship criteria” (15%), and “integrity in publication of clinical trial results” (30.6%) were the least frequently mentioned ones. Based on the study findings, the quality of publication ethics, as instructed to the authors, can improve the quality of the journals.

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Introduction

Publication ethics is a multidimensional concern that affects numerous groups such as authors, editors, reviewers, researchers, scholars, learned societies and organizations, policy makers, practitioners, clinicians, funders, and many other stakeholders.¹ What is generally expected of scholarly publications is, first and foremost, the provision of a detailed and valid record of research;² and ideally, all editors are required to meet universal standards to achieve the maximum effect within the research community.³

Scientific journals disseminate information that may impact the public health.⁴ Taking into consideration the principles of the different

dimensions of research ethics is, therefore, one of the most important requirements of medical research. One of these dimensions is publication ethics, which has been granted special attention by the Iranian Ministry of Health and Medical Education in recent years.⁵ On preparing scientific manuscripts, ethical aspects of publishing such as “authorship criteria”, “conflict of interest”, and internationally accepted ethical principles for research on humans and animals must be taken into account. These aspects are described by the Committee on Publication Ethics (COPE).²

In addition to the global agreements for publication ethics criteria such as Uniform Requirements for Manuscripts, established by the International Committee of Medical Journal Editors, journals need to consider some special criteria in their instructions to authors with respect to their internal rules. To this end, the Commission for Accreditation and Improvement of Iranian Medical Journals and Medical Journals Editors Society has spared no effort to enhance the quality of submissions to medical journals in recent years.⁶

The aim of the present study was to evaluate the quality of ethical considerations in the instructions to the authors of Iranian journals of medical sciences.

Materials and Methods

This study was conducted on all the journals listed in the ranking file of “The Commission for Accreditation and Improvement of Iranian Medical Journals” (<http://www.hbi.ir/Nsite/Service/Special/?Level=21>) in October 2011.

Checklist items (n=15) were extracted from the national manual of ethics in medical research publications, which was published by the Iranian Ministry of Health and Medical Education and its content validity was assessed by a panel of experts. Additionally, all the questions were checked for relevancy, clarity, and simplicity.

The study focused on the instructions to the authors of Iranian journals of medical sciences. Journals were excluded if their instructions to authors were not available online or if they contained no instructions to authors. “Editorial leadership” was assessed on the basis of the most current instructions to authors and editorial policy statements. Fifteen parameters were scored as mentioned or not mentioned: “aim and scope”; “editorial freedom”; “authorship criteria”; “cover letter”; “redundant publication”; “double submission”; “author’s responsibility for data accuracy”, “principles of medical ethics in the use of human samples”, “principles of medical

ethics in the use of animal samples”; “conflict of interest”; “respect of the privacy policy”; “principles of advertising”; “integrity in reporting clinical trial results”; “copyright”; and “review process”. In addition, the impact factors, indexing level, and rating of the journals were assessed to determine their quality.

All the accredited Iranian research scientific journals of medical sciences listed in the ranking file downloaded from the website of The Commission for Accreditation and Improvement of Iranian Medical Journals in October 2011 (n=198) were entered into the study. The available online instructions to the authors of 160 Iranian journals were reviewed. The ANOVA, χ^2 , Mann-Whitney U, Kendall Correlation coefficient were used to analyze the data.

Results

Of the 160 journals, 76 (47.5%) were in English and 84 (52.5%) were in Farsi. The mean±standard deviation (SD) and the maximum and minimum of the overall score of the publication ethics in the above-mentioned cases were 8.9 ± 2.88 , 14, and 0, respectively. The highest impact factor (1.199) belonged to one of the English language journals.

According to table 1, the most frequently mentioned publication ethics items were comprised of “redundant publication and double submission” (85%, 83.8%), “aim and scope” (81.9%), “principles of medical ethics in the use of human samples” (74.4%), and “review process” (74.4%), whereas “principles of advertising” (1.2%), “authorship criteria” (15%), and “integrity in reporting clinical trial results” (30.6%) accounted for the least mentioned items.

The items of “authorship criteria”, “cover letter”, “redundant publication”, “principles of medical ethics in the use of animal samples”, “conflict of interest”, and “copyright” were significantly more frequent in the English language journals, while “editorial freedom” was an item that was significantly more frequent in the Farsi language journals.

According to table 2, the overall scores of publication ethics, impact factor, and indexing level in the English language journals were significantly higher than those in the Farsi language ones, but their ranking was identical.

There was a significant positive correlation between the overall score of the publication ethics of the journals and their ranking ($P<0.001$) and impact factor according to the Kendall correlation ($P=0.02$). Furthermore, there was a significant difference between the overall score of publication ethics in different levels of indexing using the ANOVA ($P<0.001$).

Table 1: Distribution of publication ethics items mentioned in the Iranian research scientific journals of medical sciences

| | English (%) n=76 | Persian (%) n=84 | Total (%) n=160 | P value |
|---|---------------------|---------------------|--------------------|---------|
| Aim and scope | 64 (84.2) | 67 (79.8) | 131 (81.9) | 0.30 |
| Editorial freedom | 42 (55.3) | 61 (72.6) | 103 (64.4) | 0.01* |
| Authorship criteria | 19 (25) | 5 (6) | 24 (15) | 0.001* |
| Cover letter | 52 (68.4) | 42 (50) | 94 (58.8) | 0.01* |
| Redundant publication | 70 (92.1) | 66 (78.6) | 136 (85) | 0.01* |
| Double submission | 49 (64.5) | 59 (70.2) | 108 (67.5) | 0.50 |
| Author's responsibility for data accuracy | 68 (89.5) | 66 (78.6) | 134 (83.8) | 0/08 |
| Principles of medical ethics in the use of human samples | 59 (77.6) | 60 (71.4) | 119 (74.4) | 0.47 |
| Principles of medical ethics in the use of animal samples | 58 (76.3) | 47 (56) | 105 (65.6) | 0.008* |
| Conflict of interest | 60 (78.9) | 26 (31) | 86 (53.8) | 0.001* |
| Respect of the privacy Policy | 53 (69.7) | 51 (60.7) | 104 (65) | 0.25 |
| Principles of advertising | 2 (2.6) | - | 2 (1.2) | 0.22 |
| Integrity in reporting clinical trial results | 28 (36.8) | 21 (25) | 49 (30.6) | 0.12 |
| Copyright | 68 (89.5) | 46 (54.8) | 114 (71.2) | 0.001* |
| Review process | 53 (69.7) | 66 (78.6) | 119 (74.4) | 0.21 |

The χ^2 test was used; *Significant difference between English and Persian journals (P value<0.05)

Table 2: Comparison of the overall scores of publication ethics, ranking, impact factor, and indexing level between the English and Farsi journals

| | English n=76 | Persian n=84 | P value |
|-------------------------------------|-----------------|-----------------|---------|
| Overall score of publication ethics | | | |
| Mean±SD | 9.8±2.9 | 8.13±2.62 | 0.001* |
| Ranking | | | |
| Mean±SD | 123.58±41.46 | 131.28±33.96 | 0.2 |
| Impact factor | | | |
| Mean±SD | 0.18±0.22 | 0.03±0.04 | 0.007* |
| Indexing level | | | |
| I (%) | 37 (48.7) | 25 (29.8) | |
| II (%) | 26 (34.2) | 45 (53.6) | 0.03* |
| III (%) | 13 (17.1) | 14 (16.7) | |

The Mann-Whitney U test or the χ^2 test was used, as appropriate; *Significant difference between the English and Farsi journals (P value<0.05)

Discussion

In this study, we evaluated the quality of publication ethics in the instructions to the authors of Iranian journals of medical sciences.

As was demonstrated, the most frequently mentioned principles of publication ethics in the instructions to authors were “redundant publication” (85%), “author’s responsibility for data accuracy” (83.8%), “aim and scope” (81.9%), “principles of medical ethics in the use of human samples” (74.4%), “review process” (74.4%), and “copyright” (71.2%). The Iranian journals of medical sciences, included in the present study, were of high quality in terms of editorial leadership vis-à-vis the aforementioned ethical considerations as expressed in their instructions to authors. Nevertheless, the editors need to upgrade their instructions to authors regarding “principles of advertising” (1.2%), “authorship criteria” (15%), “integrity in reporting clinical trial results” (30.6%), “conflict of interest” (53.8%), and

“principles of medical ethics in the use of animal samples” (65.6%).

One of the most frequently mentioned ethical considerations was “redundant publication”, which was significantly of a higher frequency in the English language journals than in their Farsi language counterparts (P<0.01). Kim et al.⁷ in Korea, showed that 5.93% of the index articles were associated with 29 duplicate articles, which exceeded expectations. Thus, they suggested that researchers receive further education on publication ethics. One way to overcome such a problem is to augment instructions to authors of journals. In a similar vein, a study by Kitagawa,⁸ in Japan suggested that raising awareness about duplication publication among researchers requires the understanding of publication ethics.

“Conflict of interest” was another item of publication ethics assessed in the present study. About half (53.8%) of the Iranian journals demanded that authors declare “conflict of interest” in their research. The item was more frequently

mentioned in the English language journals than in the Farsi language ones ($P < 0.001$). Alfonso et al.⁹ in Spain, reported that less than half of the journals included in their assessment had a specific policy on “conflict of interest” as one of the principles of publication ethics.

In the present study, one of the principles of publication ethics least mentioned in the instructions to authors was “authorship criteria” (15%); the English language journals were, however, significantly more directive on this item than were the Farsi language ones ($P < 0.001$). Our findings were consistent with those of the study by Sakaran et al.¹⁰ in India, indicating that editors must upgrade their instructions to authors through the inclusion of ethical requirements, particularly “authorship criteria”. This view chimed in with the Matarese study,¹¹ in Italy.

A study in Iran on the views of the editors of Iranian medical journals reported that most of the editors were not familiar with the standard “authorship criteria” and peer review in biomedicine.^{12,13} In our study, there was promotion in considering the peer review process. Be that as it may, journals still need to urge consideration of “authorship criteria” further.

Demanding publication ethics in developing countries is a relatively recent phenomenon. Accordingly, the “aim and scope” of most of our journals tend to be general and the editors are liable to draw upon national standards for publication ethics, whereas most journals in developed countries work on specific fields professionally and follow international guidelines such as those specified by the Committee on Publication Ethics (COPE, www.publicationethics.org.uk) and International Committee of Medical Journal Editors (ICMJE, www.icmje.org).

To obtain more information about publication ethics in journals, further studies based on the COPE guidelines are required to check the publications against the international standards such as the ICMJE.^{14,15}

Conclusion

In the present study, there was a correlation between the rankings of the journals and publication ethics specified in the instructions to authors. As a result, adherence to publication ethics in journals seems to be of vital importance if the quality of the journals is to be enhanced. Quality improvement requires editors to be familiar with the international guidelines of publication ethics (COPE and ICMJE).

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Erratum

In the article entitled "Scientific Publications on Medical Ethics in Thomson Reuters Database, 1990-2010", published in Vol 37, No 4, December 2012, the first author's affiliation is hereby corrected to: Department of Library and Information Sciences, Shiraz University, Shiraz, Iran.