THE PEER REVIEW PROCESS IN ASIA

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Abstract

Peer reviewers are the custodians of sciences and scientific publishing. Previously regarded as a purely altruistic work, with the advent of Publons and Peer Review Week initiatives, reviewers can now get scholarly credits for their accomplishments. The number of skilled peer reviewers is limited. The sheer volume of published literature in today's world calls for active involvement of a large corpus of reviewers. Asia has a growing workforce of biomedical researchers and scientific authors who are inadequately exposed to the global research reporting and English writing standards. Several global initiatives are underway to groom the next generation of peer reviewers and credit them for their efforts. These need to be expanded and made more accessible to scholars in Asia. Ultimately, this untapped potential may provide quality services to international peer-reviewed journals and create informed researchers and skilled authors.

Keywords: Research peer review, Asia, Medical education, Non-Anglophone authors

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INTRODUCTION

In the era of evidence-based medicine, ensuring quality and integrity in healthcare research is crucial. Peer review defined as “the assessment by experts (peers) of material submitted for publication in scientific and technical periodicals” has been adopted by almost all medical journals since the late 20th century [1]. Despite the pitfalls exemplified by retractions of research papers in leading peer reviewed journals during the COVID-19 pandemic, peer review is currently the favoured method to vet the quality of research [2]. In the current scenario where the medical community is inundated by the sheer magnitude of journals and publications, there is an

urgent need for checks and balances to maintain ethics, scientific methods, and novelty of research [3]. The reviewer thereby has a central role as the gatekeeper of science. In what follows, we discuss the peer review challenges and suggest a few recommendations for reviewers in Asia.

CHALLENGES FOR PEER REVIEW

The quality of peer review varies widely due to the lack of uniform guidelines and training. Peer reviewers are globally viewed as experts who are competent to evaluate research works in a specific field [4]. One study explored the characteristics of good reviewers, and

contrary to what is expected those actively involved in research and those holding academic positions did not make better reviewers [5]. The roles and tasks expected of a reviewer are also unclear. A reviewer in addition to being proficient in the subject and a skilled critic is also expected to be unbiased, ethical, and have a duty towards science.

The peer review quality benefits from skilled evaluators' input and feedback monitoring [4]. There are few opportunities for training and mentorship. A training and certification system which mandates a certain number of reviews in a year may have a positive impact on the peer review process. A randomized controlled trial that explored the effect of a short-term training programme on the quality of peer review found little difference in the review quality after training [6]. It is not known if longer period of training improves the peer review. Unlike research and article writing accomplishments, peer review is often a thankless task [7]. Reviewers are expected to be altruistic and consider peer reviewing a privilege and a service to science. A survey of 276 reviewers in the latter half of 1988 found that the estimated weighted average time reviewers spent per review was 2.4 hours. This may vary depending on reviewer experience and availability. Although the actual time spent seems small, most reviewers contribute to multiple journals and somehow manage to spare time despite their clinical and research obligations [8].

The issues with peer review have been recognised more than a century ago [9]. The peer reviewer is sometimes villainized as the main factor behind a paper's rejection [10]. The reviewer may be viewed as a scheming, jealous contemporary who gains by delaying or rejecting a manuscript.

Another issue is the level of experience of the reviewers. The wordings of an inexperienced reviewer maybe more prone to be misread. And a careless word or sentence can shake the very foundations of trust in the peer review process [11]. Peer reviewers may also share common biases depending on their background and anecdotal learnings from medical schools. This can introduce biases in sciences and prevent emergence of new concepts [12]. Also, reviewers often overlook statistical mistakes and inappropriate data reporting [13].

Although peer review is an integral part of evidence-based medicine, very few aspects of peer review are actually evidence-based in themselves. Some strategies recommended to improve peer review are training interventions, addition of a separate statistics review, and use of a checklist [14].

CHALLENGES IN ASIA

Despite a large number of medical universities in Asia, medical research and publishing are plagued by numerous regional and global problems, including the rise of 'predatory' journals. An analysis of publications in predatory journals showed that these were mostly authored by inexperienced and non-Anglophone contributors from Asia and Africa [15]. Many naïve authors may fall prey to such journals. Similarly, upcoming reviewers maybe enticed to waste their time and energy to review for such journals. The effort often goes waste as neither the editors of the predatory journal nor the author would even read the reviewer's comments.

Many countries in Asia have large patient loads and a skewed doctor-to-patient ratio. This may prevent even interested reviewers from being able to spare sufficient time for peer review [2]. The number of hours a reviewer from Asian countries can put in per manuscript may also be limited.

Medical education in most Asian countries have limited focus on research, and even less on the process of manuscript preparation and publication. Students, especially postgraduates, often have to carry out projects and submit dissertations to obtain their degrees. Peer review is rarely taught in a systematic way. Moreover, some busy reviewers even ask their students and juniors to comment on manuscripts, and ultimately submit these in their own names, denying to acknowledge those who deserve reviewer credits. Though the students get some idea about peer review, this may not be ethical practice unless this is declared to the handling editor.

REVIEWER AWARDS

Since peer review is often blinded, many researchers may not prioritize reviewing. Some may even consider it a waste of time that can be spent on other scholarly activities. Recognition for timely and quality reviews may be a way to counter the inefficiency of the peer review process. A few more recent attempts for recognition include Publons and Peer Review Week [16]. Publons is integrated with the Open Researcher and Contributor ID (ORCID) initiative and the Web of Science Researcher ID. Thus, it can integrate peer review, publications, and citations at one place.

Financial incentives are rewarded by a few journals but there are apprehensions that they may compromise reviews and currently are the exception rather than the norm [7]. Non-financial incentives such as publishing

privileges, journal subscriptions, and CME credit may be other ways to award reviewers. Again, whether such freebies are sufficient to attract genuine and dedicated reviewers is yet another issue [17].

It should be kept in mind that reviewers volunteer to safeguard science and not as a favour to authors [18]. Thus, it is not fair for reviewers to be asked only to present positive criticism. Negative criticism should not be discouraged, but it should be ensured that the language used begets the gentlemen in science without appearing to belittle.

OPEN PEER REVIEW

Certain journals have adopted a system of open peer review, wherein the review is published along with the manuscript [19]. This may entice the reviewer to use moderate language and stress the positive aspects of the manuscript. They have an option of mentioning or not mentioning the reviewers' name and it is often left at the discretion of the reviewer. Even in open peer reviews, only a minority of authors actually agree to have their names published along with their comments [20]. The Nature group of journals had initiated a system for open peer review of manuscripts on COVID-19 posted on preprint servers [21]. This may be a way forward but there will be issues that need to be handled.

OPPORTUNITIES

There have been a few noteworthy attempts to coach the next generation for peer review [22]. This can help the coached individuals to be better authors. An official peer review mentoring programme has been initiated by the European League Against Rheumatism (EULAR). Other medical societies can take a leaf out of their book and implement such an approach along with various online education schemes they have [23].

Lately, Publons also started an initiative called "Publons Academy" that promises to tie up early career researchers with expert mentors. Learning to peer review can help to practically appraise evidence. Hence, it can and should be a part of medical education.

Young academic reviewers have been found to offer higher quality of peer reviews [24]. Asian countries have a high output of young clinicians and academicians who can form the major proportion of researchers and experienced reviewers. Global collaborations and

international networking can help expose them to experience across continents. Organizations like the Emerging EULAR Network (EMEUNET) and Asia Pacific League of Associations for Rheumatology (APLAR) Young Rheumatologists (AYR) are such networks in rheumatology. Including peer reviewer from Asia can help transcend barriers of race and colour, and help diversify scientific contributions.

FUTURE DIRECTIONS

Certain journals have attempted ultra-fast peer reviews with authors providing drafts before formal submission [25]. This allows the editors to communicate with and finalize reviewers before submission, and also provides extra time to the reviewers to prepare their comments. Tie-ups with young rheumatology organization and society journals may provide newer avenues beneficial to both. Novice reviewer can begin their attempt at post-publication reviews. They can have a set of basic guidelines for themselves (Table 1) and develop their own style.

CONCLUSION

Peer review is an art as much as a science. As envisaged by a few, it is not the job of jury, judge and executioner, but a friend, guide and co-philosopher. It needs to be an inclusive partnership between authors, peer reviewers, and editors. Asia with its emerging young talent in the medical sciences has promise to contribute and diversify current trends in peer review. However, this iron like potential needs to be guided by the fire of experience to form durable steel guarding the gateways to science and beyond.

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CONFLICTS OF INTEREST

The authors have no potential conflicts of interest to disclose.

DISCLAIMER

No part of this article has been submitted simultaneously or published elsewhere. All views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any institution or association.

Table 1. Recommendations to peer reviewers

Do's	Don't's
Follow the guidelines for peer review provided by the target journal	Accept a manuscript that is not in your area of reasonable expertise
Be critical and unbiased	Accept an invitation to review from a 'predatory' journal
Declare conflicts of interest if any (including if help was taken from someone else)	Get swayed by the status of the author
Identify any fatal flaws that should lead to immediate rejection	Be too generous or excessively critical
Provide constructive criticism	Ask for unreasonable changes
Be clear and succinct	Use language that is likely to be misinterpreted
Adhere to the timeline	Ever be condescending or disrespectful of the authors' work or effort

REFERENCES

- Gregory AT, Denniss AR. Everything you need to know about peer review — The Good, The Bad and The Ugly. *Heart Lung Circ* 2019;28:1148–1153.
- The Lancet. COVID-19: a stress test for trust in science. *The Lancet* 2020; 396(10254):799.
- Bastian H, Glasziou P, Chalmers I. Seventy-five trials and eleven systematic reviews a day: How will we ever keep up? *PLoS Med* 2010; 7(9):e1000326.
- Glonti K, Cauchi D, Cobo E, et al. A scoping review on the roles and tasks of peer reviewers in the manuscript review process in biomedical journals. *BMC Med* 2019; 17(1):118
- Black N, Van Rooyen S, Godlee F, et al. What makes a good reviewer and a good review for a general medical journal? *J Am Med Assoc* 2015; 280(3):231–233.
- Schroter S, Black N, Evans S, et al. Papers Effects of training on quality of peer review: randomised controlled trial. *BMJ* 2020; 328(7441):673.
- Gasparyan AY, Gerasimov AN, Voronov AA, Kitas GD. Rewarding peer reviewers: maintaining the integrity of science communication. *J Korean Med Sci* 2015; 30:360–364.
- Yankauer A. Who are the peer reviewers and how much do they review? *JAMA J Am Med Assoc* 1990;263:1338–1340.
- Csiszar A. Peer review: troubled from the start. *Nature* 2016;532:306–308.
- Misra D, Agarwal V. Blaming the peer reviewer: don't shoot the messenger!! *Indian J Rheumatol* 2020; 15:162–164.
- Ahmed S, Mohini. Building trust in journals and in peer review: need of the hour during the COVID-19 pandemic. *Rheumatol Int.* 2020.
- Haffar S, Bazerbachi F, Murad MH. Peer review bias: a critical review. *Mayo Clin Proc* 2019;94:670–676.
- Nylen M, Riis P, Karlsson Y. Multiple blinded reviews of the same two manuscripts. Effects of referee characteristics and publication language. *JAMA* 1994;272:149–151.
- Bruce R, Chauvin A, Trinquart L, et al. Impact of interventions to improve the quality of peer review of biomedical journals: a systematic review and meta-analysis. *BMC Med* 2016;14:85.
- Shen C, Björk B-C. 'Predatory' open access: a longitudinal study of article volumes and market characteristics. *BMC Med* 2015; 13:230.
- Mullan Z. Recognition for peer review. *Lancet Glob. Health* 2016;4:e784.
- Zaharie MA, Seeber M. Are non-monetary rewards effective in attracting peer reviewers? A natural experiment. *Scientometrics* 2018;117:1587–1609.
- Goswami R. Don't pull punches in peer review. *Nature* 2019; 574:176–176.
- Callaway E. Open peer review finds more takers. *Nat News* 2016;539:343.
- Bravo G, Grimaldo F, López-Iñesta E, et al. The effect of publishing peer review reports on referee behavior in five scholarly journals. *Nat Commun* 2019;10(1):322.
- Johansson MA, Saderi D. Open peer-review platform for COVID-19 preprints. *Nature* 2020; 579:29.
- Sidalak D, Purdy E, Lockett-Gatopoulos S, et al. Coached Peer Review: Developing the Next Generation of Authors. *Acad Med J Assoc Am Med Coll* 2017;92:201–204.

23. Ahmed S, Zimba O, Gasparyan AY. Moving towards online rheumatology education in the era of COVID-19. *Clin Rheumatol* 2020; 39(11):3215-3222.
24. Evans AT, McNutt RA, Fletcher SW, Fletcher RH. The characteristics of peer reviewers who produce good-quality reviews. *J Gen Intern Med* 1993;8:422–428.
25. Sutherland WJ, Lythgoe KA. Coronavirus: full peer review in hours. *Nature* 2020;584:192.

АЗИЯДАҒЫ РЕЦЕНЗИЯЛАУ ПРОЦЕСІ

Түйіндеме

Рецензенттер - ғылымның және ғылыми басылымдардың сақтаушылары. Бұрын бұл жұмыс альтруистік деп саналды, бірақ Publons және Peer Review Week сияқты бастамалардың пайда болуымен рецензенттер өздерінің жетістіктері үшін академиялық бағалар ала бастады. Қазіргі уақытта білікті рецензенттердің саны шектеулі. Дегенмен, бүгінгі таңда әлемде жарияланған ғылыми жұмыстардың үлкен көлемі көптеген рецензенттердің белсенді қатысуын талап етеді. Азияда тиісті түрде әлемдік ғылыми есеп беру стандарттарымен және ағылшын тілінде жазу стандарттарымен таныс емес биомедициналық зерттеушілер мен ғылыми авторлардың саны артып келеді. Рецензенттердің келесі буынын оқыту және олардың күш-жігерін бағалау бойынша бірнеше жаһандық бастамалар жүзеге асырылуда. Азия ғалымдары үшін білікті рецензенттер штатын кеңейтіп, қол жетімді ету қажет. Сайып келгенде, бұл мамандардың пайдаланылмаған әлеуеті халықаралық рецензияланған журналдарға сапалы қызмет көрсете алады, сонымен қатар мен білікті авторлар мен зерттеушілердің әсерлі тобын құра алады.

Түйін сөздер: Зерттеулерге рецензия, Азия, Медициналық білім, ағылшын тілінде сөйлемейтін авторлар

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ПРОЦЕСС НАУЧНОГО РЕЦЕНЗИРОВАНИЯ В АЗИИ

Резюме

Рецензенты - хранители науки и научных публикаций. Ранее рецензирование считалось альтруистической работой, однако с появлением таких инициатив как Publons и Peer Review Week рецензенты начали получать академические оценки за свои достижения. На данный момент количество квалифицированных рецензентов ограничено. При этом огромный объем публикуемых в современном мире научных работ требует активного участия большого количества рецензентов. В Азии растет штат биомедицинских исследователей и научных авторов, которые не знакомы должным образом с глобальными стандартами исследовательской отчетности и стандартами английского письма. В настоящее время реализуется несколько глобальных инициатив, направленных на подготовку следующего поколения рецензентов и признания их усилий. Необходимо расширять штат квалифицированных рецензентов, привлекая специалистов из Азии. В конечном итоге неиспользованный потенциал специалистов из Азии может быть полезным международным рецензируемым журналам, а также он позволит создать внушительную массу информированных исследователей.

Ключевые слова: Рецензирование исследований, Азия, Медицинское образование, Неанглоязычные авторы

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