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Editorial

Breaking the Glass Ceiling: Open Respiratory Archives Striving for Gender Equity in the Reviewer Field

Open Respiratory Archives lucha por la equidad de género en el campo de los revisores

In today's society, gender inequality persists in various professions. In the medical field, despite the increasing presence of women, they are underrepresented in leadership positions, both in healthcare and research.[1–4] This seems to be, consciously or not, well accepted by those directly involved, as suggested by a survey among health professionals, where it was observed that gender is considered a predictor of the role developed, associating men with surgery and women with general practice.[5]

A bibliometric analysis carried out between 2012 and 2021, including 14,875 original articles and reviews from 12 high-impact pulmonary medicine journals, showed that women were the first authors in 37% of the articles and the last authors in 22.2% of them, estimating that parity would be reached in 2046 for the first authors and in 2059 for the last authors. Likewise, it was observed that articles with women as the first or the last author are cited less than when they are men, and that articles with women as both the first and the last authors were the ones that generated the fewest citations.[6]

In terms of research funding, a study by the Veterans Health Administration found that a woman is more likely to receive Intramural Research Funding if the reviewers are women. This further perpetuates the underrepresentation of women among reviewers, since they are often chosen from funded investigators.[7]

As for career advancement, significant inequalities have also been observed. Women are promoted more slowly in academic medicine than men. In 2019, only 26% of full professors and 39% of associate professors in medical schools of the United States (U.S.) were women despite representing 48% of assistant professors and 43% of all full-time U.S. medical school faculty.[8,9] A similar situation occurs in France, where the French College of Critical Care reported that women make up between 20% and 50% of the French critical care medicine workforce, depending on age and geographic area, comprise only 8% of the professors in critical care medicine, 15% of the professors, around 20% of the invited speakers in the French Intensive Care Society (FICS) congress and less than 30% of committee members in the FICS.[10]

Peer review is a critical point of scientific publications. A critical, unbiased, independent review is an intrinsic part of a researcher's activity. In ideal circumstances, reviewers are experts in the subject of the manuscript, and this process is fundamental to maintaining scientific integrity and improving healthcare activity through improved research.[11,12]

The first English-language scientific journal, published almost 4 centuries ago, already expressed the relevance of peer reviewing for articles: the Council Minutes of 1 March 1665 explicitly requested "that the Philosophical Transactions, to be composed by Mr. Oldenburg, be printed on the first Monday of every month, if he has sufficient matter for it, and that the tract be licensed by the Council of the Society, being first reviewed by some of the members of the same." It made sense that the Royal Society did not want to see printed opinions that could bring shame on its reputation.[13]

The reviewer's activity is a decisive aid for editors to make the right decisions, accepting or rejecting articles based on their quality. In addition, it helps authors to improve their manuscripts.[12] The reviewing activity is usually voluntary, without receiving any economic incentive for it, so that sometimes it is difficult to find reviewers who are sufficiently qualified to add value with their comments.[12]

Experts on publishing suggest that the evaluation of the activity as reviewers be considered in professional promotion, on opinion shared by the majority of researchers. In addition, they propose 7 specific actions to promote being a reviewer: (1) academic institutions should convey that they expect their members to periodically perform peer reviews; (2) these institutions should carry out training activities to explain the review process to students, postgraduates in training and staff members, including participation in peer review processes being a requirement for graduation; (3) each active reviewer should identify and recommend two reviewers from among the staff of their institution; (4) journals should offer reductions in publication costs to their reviewers; (5) journals should offer some type of formal recognition to their reviewers; (6) academic institutions should recognize the work of reviewers as a form of academic work and consider it in evaluation and possible professional promotion; (7) journals should use a uniform format for peer reviews and reduce the bureaucratic tasks required for such reviews.[12]

The Spanish Foundation for Science and Technology (FECYT) developed an evaluation guide for scientific journals establishing a series of quantitative and qualitative indicators. Among the quantitative indicators, there are two categories, the mandatory ones and the recommended ones, the latter being good editorial practices in gender equality. One of the five recommended quantitative indicators is to have a minimum percentage of 40% women as reviewers of the papers submitted to the journal.[14]

Combining both concepts, gender equity and peer review, we see that the various Editorial Boards of Open Respiratory Archives have been committed to gender equity since the foundation of the journal, and the practical application of this commitment has led

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to the current situation where, between the years 2021 and 2024, both inclusive, 45% of our reviewers are women, fulfilling the recommendations of the FECYT.

Given the lack of gender equity in medicine, it is important to identify the reasons for this and propose actions to solve it.

A thematic analysis of the literature highlights three aspects that seem key to why the advancement of women in medicine is hindered. Firstly, there are social barriers such as role models, maternal identity and sociocultural pressure regarding the balance between profession and family. Secondly, it is important for them to customize their careers based on role modeling, mentoring and support from other colleagues. Thirdly, there are practical difficulties such as finding childcare or taking on part-time work.[10]

A systematic review analyses interventions to improve gender equity in graduate medicine, identifying four types of activities: (1) equipping the woman, which includes mentorship programs, workshops in manuscript writing, confidence development seminars and leadership training; (2) changing cultures, including raising awareness of unconscious bias in hiring committees, establishing a council on diversity to reduce gender insensitivity and sexual harassment, and facilitating sessions that educated faculty about implicit biases; (3) ensuring equal opportunities, including compensation plans aimed at improving transparency, awards of financial support for research efforts of junior women faculty and targeted recruitment of women for faculty positions; (4) increasing the visibility of valuing of women, which includes holding social hours for informal networking, holding yearly networking events for women faculty and allowing for formal networking with expert speakers.[3]

In conclusion, for now, we are far from achieving gender equity, although steps are being taken in this direction, some of the causes and solutions seeming to have been identified, making it necessary to maintain the commitment of various working groups as is the case in Open Respiratory Archives.

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Conflicts of interest

Gonzalez-Barcala FJ is associate editor of Open Respiratory Archives, ERJ Open Research and BMC pulmonary medicine.

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