Title

Editorial diversity in medical education journals.

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Structured Abstract

Background:

In recent years, the field of medical education has sought to amplify the voices of those from traditionally marginalised groups and medical education journals have sought to become more accessible and diverse. This study sought to examine the gender and geographical representation of editors and editorial board members in medical education journals.

Methods:

Information about individual editors and editorial board members of ten medical education journals was retrieved from their websites in January 2021, including their gender and the country in which they were based. Countries were categorised according to World Bank Income Classification and World Bank Geographical Regions. We then calculated the Composite Editorial Board Diversity Score for each journal.

Findings:

Of 488 editors and editorial board members, 283 (58.0%) were male, 452 (92.6%) were based in high-income countries, and 322 (66.0%) were from the four countries with greatest representation (USA, UK, Australia and Canada).

Discussion:

The composition of medical education journals' editorial leadership teams remains dominated by males and those from higher income and Western countries. Strikingly, little change has taken place since this was last examined 17 years ago despite the field becoming apparently more globalised. As medical education strives to become a more inclusive and diverse discipline, developing policies to create more globally representative editorial leadership teams should now be an urgent priority.

Full text

Background

Recent discoveries during the COVID-19 pandemic have reaffirmed the far-reaching impact of social inequity within society, and specifically within the healthcare professions[1]. Representation in medical education (ME) has received much attention as a result, with a renewed focus on gender equality and global representation in medical leadership[2].

A recent article on ME scholarship identified stagnant change in geographic representation of publications in over a decade[3]. One proposed factor behind poor publication rates of research from lower-middle income and lower-income countries in medical journals is editorial bias. If editorial boards are not representative, we risk exacerbating problematic North American bias, with predominating perspectives from USA and Canada. There have been increasing calls for scholars to focus on the impacts of globalization and the importance of culture in non-Western contexts when considering discourses in ME practice and policy[4]. In this special themed issue on "diversity, inclusivity and equity", we draw attention to the composition of editorial boards in ME journals. This study examines the gender, geographical region, and income classification of members on the editorial boards of leading health education journals.

Methods

We selected ten established, general ME journals with impact factors (*Medical Education, Medical Teacher, Academic Medicine, Advances in Health Sciences Education, Perspectives in Medical Education, Teaching and Learning in Medicine, Postgraduate Medical Journal, BMC Medical Education, Medical Science Educator,* and *Anatomical Sciences Education)* and retrieved the list of editors and editorial board members from the respective websites on the 14th January 2021. Individuals were categorised by editorial roles, including editor-in-chief, deputy and associate editors and editorial advisory board members. We categorised

individuals by the listed affiliated country, and further classified countries according to the World Bank Income Classification and World Bank Geographical Region[5]. We classified members by gender (binary). Where there was any ambiguity on gender from the listed name, an internet search was completed to find an online profile to seek the appropriate pronouns, and the final list of names was inspected by both authors to reach a consensus. Finally, the Composite Editorial Board Diversity Score (CEBDS), a recently published composite scoring system for evaluating diversity[6], was calculated for each journal to provide a means of monitoring gender, World Bank Income Classification and Geographical Region respectively. This allows comparison to other editorial boards in the future. While the CEBDS provides a useful framework for analysis, we note that it does have flaws, as having one female editor is enough to score 2 points on the gender-related scale, which could benefit tokenism (the same can be said of income and regional domains).

Findings

There were a total of 488 editors and editorial board members across the selected journals, 283 (58.0%) of which were male.

(Table 1)

Overall, 452 (92.6%) were based in high-income countries, 26 (5.3%) were based in an upper-middle income country, 9 (1.8%) were based in lower-middle income countries and 1 (0.2%) was based in a lower income country. The countries with highest representation were USA with 167 (34.2%), UK with 64 (13.1%), Australia with 51 (10.2%) and Canada with 40 (8.2%). All other countries represented in the world make up 34.0% of these editorial board members. Detailed results for each journal can be found in Table 1. Of the ten journals, seven explicitly mention the word “international” in their aims and/or scope statements. See Figure 1 for a geographical representation of the countries represented by editorial board members.

(Figure 1)

Amongst 11 editor-in-chiefs, 6 (54.5%) were male and all were from high-income countries. Amongst 316 deputy and associate editors, 176 (55.7%) were male, 297 (93.4%) were from high income countries, and 232 (73.5%) were from either North America or Europe. Amongst 161 editorial board members, 1 (62.7%) were male, 144 (89.4%) were from high income countries, and the majority were from North America at 75 (47.0%).

The CEBDS calculated for each journal can be found in Table 2. The creators of the CEBDS regarded journals to have "good", "moderate", and "poor" diversity according to the score, as shown in Table 2. The median gender diversity score was 4 (range 2 to 4), the median geographic region diversity score was 1.5 (range 0 to 3), median country income-level diversity score was 1 (range 0 to 3). The median overall CEBDS was 5 (representing "poor" diversity on the editorial board) and scores ranged from 5 to 9.

(Table 2)

Discussion

In keeping with other societal and scholarly trends, ME journals are making important advances in improving their accessibility and diversity, with many journals now offering reduced barriers to open access publication for lower-middle income countries, diversifying peer-reviewer pools, building international collaborations, and opening dedicated collections for research from non-Euro-American countries[7]. However, this study demonstrates that editorial roles in ME journals are still dominated by males, those from wealthier countries, and those from Europe and North America.

The findings of our study are consistent with previous literature on the editorial board composition of journals in other specialities[8,9], with male and Euro-American editorial board

members predominating. Compared with research from 17 years ago[10], our study confirms relatively little change in geographic regional representation. This suggests that narrow representation in ME scholarship has been a pervasive, long-term issue. Worryingly, despite widespread calls for greater diversity, little change has occurred.

For instance, individuals from only two countries can be found on the editorial board of *Academic Medicine*. This journal is the official journal of the Association of American Medical Colleges, likely leading to North American dominance in its governance. However, the journal claims that it seeks to "serves as an international forum for the exchange of ideas" and one might question whether this is possible without broader representation. Whilst most of the journals studied claim to be international, this does not closely match their editorial leadership composition.

This discrepancy in representation in editorial boards has implications on both the dissemination of latest scholarship, as well as facilitating publication equity to gain a truly global perspective on advances in the field[10]. Previous studies have described a frustrating tension between publishing research in local and international journals for researchers in Latin America[11]. They approach research as agents for local change rather than expecting to impact global knowledge in their field as well when compared to British or American researchers. Others have pointed out that, in lower-middle income countries, the "local" gaze whilst posing research questions and framing scholarship might differ from "foreign" priorities[12]. For instance, local educators may be discouraged from engaging in exploratory research relevant to their own setting, in favour of research which will allow affiliated institutions to engage in competitive international publication rankings[7]. Hence, evaluating such research by "international" standards may unfairly prevent changes in policy and strategies occurring at a local level. Having globally representative editorial leadership is therefore key to allow

research submissions to be evaluated with this challenging context in mind. ME journals with higher impact factors are more likely to be selected for subscription worldwide, and hence are likely to influence education strategies globally. Therefore, journals with an international scope have a duty to actively ensure adequate representation and inclusivity[13] in their editorial teams.

Gender representation varied between journals included. A few achieved 40-60% female representation in their editorial teams, and others maintained a significant 'gender gap'. However, the observed mean proportion of female editorial representation appears higher than that of previous studies of surgical journals[7,8]. Researchers in other specialties have proposed solutions, including editorial term limits and merit-based performance reviews.

Diversity has been shown to benefit research in a variety of health settings[14]. However, further research is required to understand the impact of this lack of representation on ME scholarship. To provide an equitable view on this complex issue, research is needed both from the perspective of journal editorial teams and members of the ME scholarly community in lower-middle income and lower income economies. We suggest that future studies also explore the views of ME journals' leadership teams both to provide insight into whether they are aware of and prioritise representation within their editorial appointments, and to identify the barriers to achieving greater diversity, such that appropriate interventions can be designed. Whilst researchers have suggested specific quantitative targets for editorship[10], such measures may fail to capture the multi-faceted nature of representation. Further research is required to determine the extent to which these measures affect meaningful change in inclusivity. At present, we implore the ME community to monitor the composition of editorial boards, and work towards cultural and policy changes which embed equitable representation: so that editorial boards will reflect the evolving demographics of the ME field.

The strengths of this study include the systematic nature of the search, categorisation according to accepted criteria and use of a new scoring system to evaluate diversity on editorial boards for ease of comparison. The limitations include the analysis of where board members were based was restricted to the level of country, not enabling further categorisations according to cities, institutions; hence, we cannot comment on the inequity of representation within nations more specifically. The sample of journals selected all had impact factors; this will have inherently prioritised Euro-American journals in the English language[15]. Additionally, it is possible the use of online profiles to determine gender may have introduced errors, although this is unlikely to affect the overall findings. Finally, this analysis captured diversity of board members including gender and location, however, did not address other broader dimensions such as non-binary gender, ethnicity and sexual orientation. Despite these limitations, we can still draw valuable conclusions.

Conclusion

Overall, the composition of ME journals' editorial leadership teams remains dominated by males and those from higher income and Western countries. Strikingly, little change has taken place since this was last examined 17 years ago despite the field becoming apparently more globalised[4]. There is much to be gained by privileging diversity in ME editorship, in order to promote equity for research that will be truly representative of the field. As ME journals play an essential role in influencing educational strategies for medical workers of the future, international journals have a professional duty to strive for global representation in their leadership. As ME strives to become a more inclusive discipline, developing policies to create more globally representative editorial leadership teams should be an urgent priority.

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