Promoting inclusivity in health professions education publishing

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Abstract

A taskforce established by *Medical Education* asks readers to engage in discussion about how the journal and field can do better to ensure that health professional education publishing is inclusive of diverse knowledge and perspectives.

1 INTRODUCTION

Significant global events including the Covid-19 pandemic, Black Lives Matter, the #MeToo movement and climate change have magnified inequality and increased consciousness of equity, diversity and exclusion issues. This wider socio-political context has contributed to growing recognition of structural inequalities in scholarly publishing with the need for ideas on how these should be changed. These concerns are exemplified by evidence of geographical differences in scholarly publishing that may not be related to variations in the quality or relevance of the articles being reviewed, particularly when comparing high versus low-middle income countries (LMIC).[1] These issues present major challenges for inclusivity in journals that aspire to be international and whose interests and readership span the globe.

Health professions education (HPE) is not exempt from these challenges. Although gender balance in HPE scholarship is reaching parity,[2] geographical representation remains problematic. The literature shows strong author representation from a few developed countries, with the regions of Asia (7.4%), South America (1.5%) and Africa (1.2%) being least represented.[3] These figures accord with those from *Medical Education*; in 2020, the top ranking countries in terms of number of research papers accepted (and percentage accepted based on submission numbers) came from the United States (12%), Canada (20%), the United Kingdom (13%), Australia (19%) and the Netherlands (24%). In contrast, papers submitted from other parts of the world had only a 5% acceptance rate. This under-representation in publication from certain regions is then perpetuated in review articles, where the conclusions are based on syntheses of papers from a limited range of countries and cultures.[1] For example, only three of 194 studies published on selection and widening access to medicine between 1997 and 2015 were from LMICs, whereas 185 originated from the United States, the United Kingdom, Europe, Canada and Australasia.[4]

As deputy editors and members of the international editorial board of *Medical Education*, our aim in this commentary is to 'hold up a mirror' and look inward to first identify how we may be perpetuating unconscious bias and reinforcing current inequities in publishing and then consider how we might address this situation. Our short-term goal in doing so is to legitimise the conversation about inclusion and diversity, whereas our long-term goals are to introduce measures that might promote equity and greater diversity of authors in the journal.

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Our position is that under-representation in scholarly publishing cannot be assumed to relate solely to variations in the quality or relevance of the articles, or to colleagues in some geopolitical contexts simply not carrying out educational research ('their problem'). Instead, we must examine critically how 'we' (systems, processes, people and norms) are part of the problem. This dialogue is the first step in the transformational change that will be required to address privilege and marginalisation in HPE research and publishing.

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2 WHY IS THIS IMPORTANT?

The need for quality health care services and access to these services is universal. HPE seeks to train future health care providers to serve all patients and all communities. When research from certain geographical, cultural, social and ethnic groups is under-represented in the HPE literature, this gap may limit our development as a field and also limit our insights and perspectives on problems and recommendations—we may apply a 'one size fits all' way of thinking, regardless of context. Moreover, we are complicit in perpetuating the neo-colonisation of HPE, increasing the influence and need to conform to educational practices from a few dominant Western countries[5] and keeping silent about the diversity, rich voices and practices from other cultures and settings.[6, 7] For example, research into breaking bad news identifies that the publication bias towards the dominant West is influencing the adoption of the western curricula, ignoring cultural-determined practices and values, with potentially negative impacts on patient care.[8] If diverse voices are not heard via publication, the power hegemony is perpetuated. Conversely, increasing diversity in research and scholarship will benefit HPE and health care outcomes by building a community that benefits from the practices and knowledge of all its members and generates multi-directional, multifaceted, inclusive and equitable knowledge.[9]

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We appreciate the complex systemic problems and structural issues in the realities of publishing, such as the overemphasis on Western metrics for quality journals (Q1), 'publish or perish' mantras leading to a rise of predatory journals and paywalls that limit open access to knowledge. However, in this commentary, we focus on what the community of HPE scholars can actively and meaningfully affect. With this in mind, we believe the problem of representation of authorship from diverse countries can be broken down into two broad areas: before and after submission.

2.1 Before submission

HPE scholarship is a maturing field[6] but one which remains relatively under resourced compared to biomedical and clinical research globally.[10] The perceived value of HPE scholarship, for example, in terms of esteem, impact and staff progression, is often limited by structures and systems that still value the creation of positivist, discipline-specific knowledge over other types. There are many other obstacles to HPE research production, including the development of academic and clinical positions without a research component and little support to publish; limited workforce trained in HPE scholarship; a heavy burden of teaching and clinical responsibilities; limited knowledge about the philosophy of educational research and research methodologies; and inadequate resources (e.g. time, research training and funding) or infrastructure (e.g. reliable data storage systems) to support scholarly endeavours. These barriers are present in most countries but are inequitably over-represented in LMIC. They may result in health professions educators who lack the support to access conferences, collaborations and opportunities to co-author before positioning themselves to lead on publications. These constraints may make educational research genuinely challenging even where there is interest[11] and ultimately may limit the transportation of knowledge across

contexts. Moreover, even in contexts where HPE research is happening, publishing in an international journal may be seen as unobtainable and thus discounted as an option.

Thinking of *Medical Education* specifically, many colleagues may lack the confidence to submit their work given factors such as low acceptance rates, the journal being perceived as too ‘elite’ or theoretical or perhaps not ‘speaking to’ the intended audience in the same way as regional journals. Previous experiences of rejection may also deter repeat submission to the journal. However, although the number of papers submitted from certain countries and groups may be disproportionately low, they do occur. We must learn more about the issues and the opportunities for those who have overcome the above barriers, carried out HPE research and submitted a paper to an international journal such as *Medical Education*.

2.2 After submission

The review system both benefits and suffers from reviewers' and editors' perspectives, biases and frames of reference.[12-14] For example, reviewers may judge research based on their own standards. Perhaps inevitably, the pool of peer reviewers for *Medical Education* is relatively small compared to the number of submissions[15]; its distribution, however, maps closely onto submission number; 54.7% of the more than 66 000 reviewers in the journal's database come from one of the five countries listed above as being top ranked in terms of submission numbers.

Research has also identified limitations in geographical, gender, race and sexual diversity in editorial boards of many academic journals[16, 17] and a possible homophilic relationship between the demographics of the gatekeepers (i.e. the reviewers and editors) and authors in determining the outcome of peer review.[12, 18] We could argue that with five sets of eyes (the Editor-In-Chief, Deputy Editor and typically three reviewers), some checks and balances are built in to assessing any paper that makes it to the peer review stage. However, as editors, reviewers and authors work together, they form the standard for the journal, coming to similar understandings of what constitutes quality. These understandings are garnered from research training and reading already published papers which are dominated by perspectives from a limited range of countries. Thus, exclusivity is perpetuated. It is important to consider what voices are not part of those crucial conversations.

Second, every journal has its house style, set of values and definition of quality. These are linked to the vision and mission of a journal which is stated on journal webpages alongside guidelines for editors and reviewers. *Medical Education* adopts three broad questions that foreground quality: (i) originality, (ii) educational significance, and (iii) methodological rigour. Yet these criteria are open to subjectivity; for example, educationally significant for whom? Editors and reviewers internalise the journal ‘style’ (consciously or not) and bring these norms into how they judge quality in submitted papers. It is these explicit and implicit rules that are at the core of why journals within the same field publish very different papers.

Research teams which are well represented in scholarly publishing are those which have themselves come to know the journal styles, knowing how to plan and write research in ways which are attractive to their target journals. How HPE research is funded and valued in a particular context may of course contribute to success in publishing[19] but arguably more important are social capital, links and ties,[20] ways of making connections and accessing information beyond the familiar, ‘to generate outcomes which are valued’ (p. 398).[21] This

needing to learn ‘how things are done around here’ may be a core issue for those groups who are under-represented in scholarly publishing.

3 REFLEXIVITY

As a group of authors and journal editors, we differ in terms of race, ethnicity, gender, learning experiences and disciplinary backgrounds, research interests and personal life courses. We are based in Australia, Canada, Malaysia, New Zealand, Singapore, South Africa, Switzerland/Vietnam, Uganda, the United Kingdom and the United States, each of which have different medical education and training systems. We also represent very different contexts in terms of power and privilege and how access and opportunity are distributed in society. Even within this relatively small group, the discussions were wide ranging and sometimes nuanced, challenging and emotive. We realised that some of the language of our discussions privileged particular ways of thinking; for example, one of the metaphors we were drawing from was ‘the elephant in the room’, a term which was meaningful for some group members but not others. We worried about how we might recognise and transcend our own boundaries and privilege.

4 CONCLUSION

This commentary is a nascent attempt to acknowledge our complicit participation in socially constructed privilege and systemic inequalities in HPE publishing. It is the first step in considering the ambiguity and uncertainty, and possibly exclusionary practices, that surround geographical inclusion in publishing in a top-tier journal like *Medical Education*. It starts the journey towards including diverse views and opinions which will in turn inform creative ideas, research and solutions to global issues.

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We now ask you to engage to help us understand your views. This is not a research study and we will not be publishing the data, but you can help us think better about *Medical Education*'s capacity to facilitate diversity, equity and inclusion by visiting https://tinyurl.com/4s6mm8bt and telling us (i) what equity related barriers do you face getting published in HPE journals such as *Medical Education?* and (ii) have you observed any strategies that we might learn from in our efforts to facilitate broader legitimate and collaborative engagement in knowledge creation? The authors will collate and use the feedback to offer guidance to the journal's Editorial Advisory Board and to continue the conversation with the wider community at conferences and through social media. To that end, please also start local, regional and national discussions about how we can do better as a journal and as a field to ensure that HPE is a welcoming place for challenging discussions that reflect a full diversity of perspectives.

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REFERENCES

1. Skopec M, Issa H, Reed J, Harris M. The role of geographic bias in knowledge diffusion: a systematic review and narrative synthesis. *Research Integrity and Peer Review*. 2020; 5(1):2.
2. Madden C, O'Malley R, O'Connor P, O'Dowd E, Byrne D, Lydon S. Gender in authorship and editorship in medical education journals: A bibliometric review. *Med Educ*. 2021; 55(6): 678- 688.
3. Doja A, Horsley T, Sampson M. Productivity in medical education research: an examination of countries of origin. *BMC Med Educ*. 2014; 14(1):243.
4. Patterson F, Knight A, Dowell J, Nicholson S, Cousans F, Cleland J. How effective are selection methods in medical education? A systematic review. *Med Educ*. 2016; 50(1): 36- 60.
5. Bleakley A, Brice J, Bligh J. Thinking the post-colonial in medical education. *Med Educ*. 2008; 42(3): 266- 270.
6. Paton M, Kuper A, Paradis E, Feilchenfeld Z, Whitehead CR. Tackling the void: the importance of addressing absences in the field of health professions education research. *Adv Health Sci Educ*. 2021; 26(1): 5- 18.
7. Naidu T, Kumagai AK. Troubling muddy waters: problematizing reflective practice in global medical education. *Acad Med*. 2016; 91(3): 317- 321.
8. Holmes SN, Illing J. Breaking bad news: tackling cultural dilemmas. *BMJ Supportive & Palliative Care*. 2021; 11(2): 128- 132.
9. Cleland JA, Jamieson S, Kusurkar RA, Ramani S, Wilkinson TJ, van Schalkwyk S. Redefining scholarship for health professions education: AMEE Guide No. 142. *Med Teach*. 2021; 1- 15.
10. Archer J, McManus C, Woolf K, et al. Editorials: without proper research funding, how can medical education be evidence based? *Br Med J*. 2015; 350(h3445): 1- 2.
11. Ajjawi R, Crampton PES, Rees CE. What really matters for successful research environments? A realist synthesis. *Med Educ*. 2018; 52(9): 936- 950.
12. Lee CJ, Sugimoto CR, Zhang G, Cronin B. Bias in peer review. *J Am Soc Inf Sci Technol*. 2013; 64(1): 2- 17.
13. Haffar S, Bazerbachi F, Murad MH. Peer review bias: a critical review. *Mayo Clin Proc*. 2019; 94(4): 670- 676.
14. Roberts SO, Bareket-Shavit C, Dollins FA, Goldie PD, Mortenson E. Racial Inequality in psychological research: trends of the past and recommendations for the future. *Perspect Psychol Sci*. 2020; 15(6): 1295- 1309.
15. Eva KW. Publishing during COVID-19: Lessons for health professions education research. *Med Educ*. 2021; 55(3): 278- 280.
16. Salazar JW, Claytor JD, Habib AR, Guduguntla V, Redberg RF. Gender, race, ethnicity, and sexual orientation of editors at leading medical and scientific journals: a cross-sectional survey. *JAMA Intern Med*. 2021; 181(9): 1248- 1251.
17. Yip SWL, Rashid MA. Editorial diversity in medical education journals. *Clin Teach*. 2021; 18(5): 523- 528.
18. Murray D, Siler K, Larivière V, et al. Gender and international diversity improves equity in peer review. *bioRxiv*. 2019;400515.
19. Monrouxe LV, Liu GR-J, Yau S-Y, Babovič M. A scoping review examining funding trends in health care professions education research from Taiwan (2006-2017). *Nurs Outlook*. 2020; 68(4): 417- 429.
20. Halpern D. Social Capital. Polity Press; 2005.

21. Croll P. Families, social capital and educational outcomes. *Br J Educ Stud*. 2004; 52(4): 390- 416.