

Acknowledging and Addressing Bias Towards Research from Lower and Middle-income Countries

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Bias against research and indeed researchers from lower and middle-income countries (LMICs) does exist (1). A fair amount has been written about the subject, including by the author of this editorial, prompted by a painful rejection. Painful mainly because of the dismissive tone used by two of the three reviewers of a paper (2). This paper remains unpublished primarily because it has been so hard to revisit it.

It appears both conscious and unconscious forms of bias exist against research from low-income countries. Major journals attempt to mitigate this source of bias by choosing diverse members for their editorial boards and reviewers from developing countries to review manuscripts from other LMICs (3). In the specialty of Neurology, a recent review of the current status found that none of the 144 editorial board members of 5 leading Neurology journals had any representation from the developing world (4). While doing this proactively is a step in the right direction, it does not fully eliminate the risk of bias which does also exist in LMIC researchers against research and researchers from other countries in this greatly inhomogeneous designation bloc (5). Thus, reviewers of manuscripts from LMICs should be aware of these forms of bias and consciously attempt to mitigate it, perhaps by blind reviewing (5). Indeed the very term 'LMIC' itself reinforces the High Income Country (HIC):LMIC dichotomy (6). This has been examined further, identifying that lower income does not necessarily mean low-resourced and conversely high-income countries can sometimes be less adequately resourced (7). Also, challenging the very fundamental core pretexts of bias is the recent debate in the literature about the validity of existing constructs of race, ethnicity or geographic origin, implying greater shared genetic ancestry, as valid ways of subdividing the human race in biomedical research (8, 9).

Over the years of publishing from my research, I have often felt that names like mine or other "ethnic" sounding names can lead reviewers to spuriously comment on the English and grammar in the article, perhaps assuming that English is not my native language. While this may indeed be driven by bias, it also has been my own

observation that American English grammatical styles are subtly different from the way English is used in the UK and the English-speaking Caribbean. The differences can be enough to prompt the request for more attention to be paid to grammar and punctuation, or suggest the article be proof-read by a native English-speaker! While there is no specific published evidence for this hopefully unconscious bias, there is, on the other hand, evidence that names of prestigious authors can significantly impact the acceptance rate of articles submitted for publication. Reviewers were more likely to recommend acceptance when the prestigious authors' names and institutions were visible (single-blind review) than when they were redacted (double-blind review) (87% vs 68%). They also gave higher ratings for other details including methods (10). This would appear strongly confirmatory of the profound impact of conscious bias. While studying this prospectively would, in theory, provide the best quality evidence, it is likely that the Hawthorne Effect - better performance when under observation- could come into play as a confounding factor (11).

It is undoubtedly true that LMICs are underrepresented in making good quality data available through good research. For example, Africa hosts 15% of the world's population but contributes 1.3% of global health research publications. Research output is closely correlated with Gross National Product (GNP) and as this continent grows its economic base, research output has been rising (12).

However, bias alone does not always explain these discrepancies and we must also accept that sometimes, the quality of research submitted for publication is not as good as it needs to be in order to attain peer approval. It is difficult to receive a rejection especially as the more time we spend on a research paper the more we become attached to the way we did the work. A rejection if unanimous among 3-4 reviewers is likely to be sending an important message (13). We must understand the value of the evidence we are providing, not only in terms of statistical accuracy but also in terms of the strength of the conclusions drawn (14). As a researcher from a LMIC, I have gained several insights over the years: developing

core competencies to improve research capabilities is essential (15); formal training in research methodologies helps; publishing collaboratively with recognized researchers, local and foreign, also helps to get experience in addressing reviewer comments; collaborating with intellectual honesty, not just to get your name on a publication but to be a meaningful contributor to the generation of new knowledge; avoid taking personal offence to reviewer comments, while not being afraid to write to the editors if you feel the reviewer comments are unfair and/or inappropriate.

Of course, many logistical hurdles do impede research in LMICs. A paucity of digital data from the lack of electronic health record systems (EHRs) make doing clinical research difficult, although paradoxically, the use of paper files can be an advantage in places where electricity supply is erratic (16). Despite this, collaborators from developed countries may still find it difficult to transcend the frustrations we have to live with in many LMIC settings. But building relationships will pay off. To this end, using the growing plethora of electronic communication platforms such as Teams® and Zoom® helps to sustain contact and build friendships. Technologies bridge gaps and appropriately used, can advance research and clinical care at an often surprisingly quicker pace and less expensively than you might anticipate (16).

In principle, in LMICs, like HICs, we need to recognize the importance of research quality instead of quantity. Good quality research generates good quality data which is the basis for making important contributions to health policy and clinical care. Ultimately, the principal driver for good research is that we are all the beneficiaries of good quality research. It is attention to detail that will raise the quality of our research and help to dispel the stigma and biases against research from LMICs. Most of us who have worked or collaborated overseas with major academic institutions have eventually felt accepted, valued and comfortable working with these external agencies. We have a lot to contribute, especially with the growing interest in North America and Europe in understanding diseases of “minority” populations given the growing diversity of their own populations through migration. Medical research whether basic science, clinical or epidemiological, utilizing quantitative methodologies or the less used but valuable qualitative or mixed methods, serves critically important roles in advancing healthcare in the setting where the research is done and may be generalizable to other similar LMICs and relevant minority populations living in HICs. It must be emphasized too that not prioritizing

ethical issues in research undermines everyone’s work and leads to the perpetuation of suspicion and skepticism. These issues continue to be relevant(17, 18).

Finally, organs like the West Indian Medical Journal (WIMJ) serve a very important role in disseminating our research throughout the region and beyond. An increasingly competitive forum for submissions that have regional relevance raises the standing of our beloved Journal, which is in and of itself an important aspiration. Enjoy your research journey and the excitement and satisfaction that publishing meaningful research can bring.

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