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We identify the ways the policies of leading international bioethics journals limit the participation of researchers working in the resource-constrained settings of low- and middle-income countries (LMICs) in the development of the field of bioethics. Lack of access to essential scholarly resources makes it extremely difficult, if not impossible, for many LMIC bioethicists to learn from, meaningfully engage in, and further contribute to the global bioethics discourse. Underrepresentation of LMIC perspectives in leading journals sustains the hegemony of Western bioethics, limits the presentation of diverse moral visions of life, health, and medicine, and undermines aspirations to create a truly “global” bioethics. Limited attention to this problem indicates a lack of empathy and moral imagination on the part of bioethicists in high-income countries, raises questions about the ethics of bioethics, and highlights the urgent need to find ways to remedy this social injustice.

Keywords: academic publishing, bioethics, developing countries, global health, medicine, moral imperialism, non-Western philosophy, open access, publication practices

Imagine that you work in a health care institution in a developing country1 and you have a serious interest in bioethics. Some published articles, you realize, are essential for your research, education, and service. How will you gain access to them? Your institution does not subscribe to international journals because it cannot afford to pay for them, especially when the amounts are reckoned in foreign currencies—dollars, pounds, and euros—all of which are made too costly by high exchange rates. When you search for an important article online, you are rebuked: “Access to the full text of this article requires a subscription or payment.” The article costs $45/£30—more, maybe much more, than your one day’s salary. You feel lucky if the article comes with a summary or abstract that is made available without charge from PubMed. If you have patience and persistence, you will find the contact information of the corresponding author, from whom you will request a free copy. In the absence of an abstract and/or contact information of the corresponding author, you face an arduous task. You search for a relative, friend, or colleague.

1. We are aware that the term “developing country” is a misnomer and flawed one. Historically, many “developing” countries have been “cradles of civilizations.” We use the term “low- and middle-income countries” (LMICs) with the caution that income level does not necessarily translate to health outcomes.

This is a revised and amended version of an article published online and quickly retracted by the Journal of Bioethical Inquiry (JBI). We, the authors, had made an innocent mistake in our review of the HINARI website and, as a result, misreported the availability of bioethics journals to scholars in low and middle income countries. When the error was called to our attention, we immediately revisited the HINARI website, corrected our facts, and revised our analysis and paper accordingly. Use of the corrected data did not substantially alter our conclusions. We contacted the editors of JBI and asked if they would be willing to either publish our revised version, or allow us to withdraw our paper and publish the new version elsewhere. Their first preference was to leave the incorrect version and add an errata, but in light of our preference to withdraw, and after further consultation with their advisors, they retracted the article. A contemporaneous report is available here: http://retractionwatch.com/2016/01/29/an-innocent-mistake-leads-to-bioethics-article-retraction/#more-36321

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abroad with access to an online library and ask the person to call on his or her resources to secure the article for you. But, aside from the fact that this may violate copyright laws, how many times a week can you (or anyone in your place) make such requests without placing an undue burden on friends and colleagues? More importantly, how long can you keep up these struggles—day in and day out—to gain access to the basic scholarly resources you need?

This scenario should help bioethics colleagues in wealthy countries understand the plight of bioethics researchers working in the resource-poor settings of developing countries. If bioethics workers in resource-rich countries can place themselves in this situation, they will begin to appreciate just how constrained and frustrated their colleagues in low- and middle-income countries (LMICs) feel. The issue at hand is not just the scholarly anguish of individual bioethicists in low-resource countries. Scholars in other fields in these same countries have the same problem (Arunachalam 2004). But because this is a question of social justice, it should be of special concern to bioethicists and bioethics journals. However, there has been little, if any, discussion and debate about ethics of open access publishing in bioethics (Parker 2013). The current policies and practices of major bioethics journals (and their publishers) restrict access and thus participation of LMIC researchers in the global bioethics arena. These exclusionary practices maintain global disparities in bioethics publishing, despite commitments by bioethics scholars in wealthy nations—home to a minority of the world’s population—to support and advance “capacity building” for bioethics in LMICs. By failing to acknowledge and address these problems, bioethics professionals in wealthy countries maintain the hegemony of high-income country bioethics and are acting—to put it baldly—as agents of the moral imperialism of Western bioethics.

**BIOETHICS JOURNALS: NEEDY POOR NOT ALLOWED**

Ethical issues surrounding health care and medicine are discussed and debated in multiple forums, including academic journals. These issues appear in journals of associated subject disciplines (e.g., medicine, theology, philosophy, ethics, social sciences, and law), as well as in those devoted to bioethics and its newer subspecialties, for example, neuroethics. Some of the leading international bioethics journals are published by for-profit commercial publishing houses (e.g., Springer, Wiley-Blackwell, Taylor & Francis), others by university presses (e.g., Oxford or Cambridge University Press), and still others by academic centers/institutes (e.g., Institute of Medical Ethics, United Kingdom; The Hastings Center and the Kennedy Institute of Ethics, United States). Worth noting is that many of these international bioethics journals are published by a handful of well-known commercial publishers from wealthy countries where the majority of their editors live and work (Chattopadhyay, Myser, and De Vries 2013). More important to note, as we demonstrate in the following, none of the subscription-based leading international bioethics journals (measured in terms of their impact factors) are freely accessible to bioethics scholars in all low-resource countries.

Lack of access to information in the scientific literature by health researchers in LMICs is not a new phenomenon. A World Health Organization (WHO) study done in 2001 reported that 56% of research institutions in very low-income countries had no subscriptions to international scientific journals and 21% averaged only two such subscriptions. Even in the next lowest income group, 34%, had no subscriptions, and an additional 34% had between two and five (Aronson 2004; Contreras 2012).

The inaccessibility of important scientific information often comes with a price, not just for scholarship, but for the public health and life in the majority world. For example, James Tumwine—professor of pediatrics at Makerere University, Kampala, Uganda—was asked by the WHO to investigate a mysterious illness in southern Sudan called “nodding disease,” in which affected children experience seizures when they eat. Before beginning his investigation of the outbreak, he went online to study previously published papers on this disease, but was unable to access the relevant literature because it was behind a prohibitively expensive paywall (Yamey 2008).

Arthur Amman, President of Global Strategies for HIV Prevention (www.globalstrategies.org), tells a similar story, emphasizing the harm of restricted access:

> “I recently met a physician from southern Africa, engaged in perinatal HIV prevention, whose primary access to information was abstracts posted on the Internet. Based on a single abstract, they had altered their perinatal HIV prevention program from an effective therapy to one with lesser efficacy. Had they read the full text article they would have undoubtedly realized that the study results were based on short-term follow-up, a small pivotal group, incomplete data, and were unlikely to be applicable to their country situation. Their decision to alter treatment based solely on the abstract’s conclusions may have resulted in increased perinatal HIV transmission.” (quoted in Barbour et al. 2006)

A more recent example comes from the Ebola epidemic. A research paper published in 1982 reported the results of a serological survey of Ebola and other viruses among Liberian residents, clearly indicating that Liberia should be included in the Ebola endemic zone (Knoebloch, Albiez and Schmitz 1982). However, full information about this survey was unavailable to Liberian health officials during the 2014 Ebola outbreak (Tennant et al. 2016) that killed 11,310 people in West Africa, including 4,810 deaths.

2. That mainstream bioethics is Western—that is, has a strong bias of the West—is no new discovery. See Carrese and Rhodes (1995), Alora and Lumitao (2001), Myser (2007), and Chattopadhyay and De Vries (2008).
in Liberia (Centers for Disease Control and Prevention [CDC] 2016). This 1982 research paper still requires a payment of $31.50 for full access—more than three decades after publication. These published stories reflect the life experience of countless health care professionals, volunteer health workers, researchers, and scholars in LMICs, who find paywalls to be insurmountable barriers to accessing essential information and knowledge.

In 2002—recognizing what Barbour and colleagues (2006) call the “potentially deadly gap between the information-rich and the information-poor” in an unequal world—the World Health Organization (WHO) set up a mechanism with major publishers—the Health InterNetwork Access to Research Initiative (HINARI)—the goal of which is to provide “free or very low cost online access to the major journals in biomedical and related social sciences to local, not-for-profit institutions in developing countries” (WHO 2015b).

The creation of HINARI was a laudable effort, but this “information philanthropy” (Contreras, 2012) has not been a panacea for the problem of access for health and bioethics workers in low-resource countries. To understand why the problem of access persists, it is necessary to describe how HINARI works. The HINARI website explains (http://www.who.int/hinari/eligibility/en, emphasis added):

Local, not-for-profit institutions in two groups of countries, areas, or territories may register for access to the publications through the Core Offer of HINARI. The country lists are based on five factors: Total Gross National Income (GNI, World Bank figures), GNI per capita (World Bank figures), United Nations Least Developed Country (LDCs) List, Human Development Index (HDI) and Healthy Life Expectancy (HALE). . . .

- If your institution is in a Group A (free access) country, area, or territory, then HINARI is free. If your institution is in a Group B (low-cost access) country, area, or territory, HINARI costs US$ 1500 per institution per calendar year (from January through December).

- If your institution is in a Group B (low-cost access) country, area, or territory, and cannot, or chooses not to, pay the annual fee, the institution will still be eligible for free access to a small number of information resources.

3. This research paper could well be a required reading for a course on ethics of research and collaboration between global North and South. German scientists collected blood samples from residents in Liberia, examined the presence of antibodies to Ebola and other viruses, and published their findings in a distinguished virology journal of a Paris-based institute.

4. HINARI is part of the larger collective “Research4Life” program consisting of, in addition, AGORA (Access to Global Online Research in Agriculture), OARE (Online Access to Research in the Environment), and ARDI (Access to Research for Development and Innovation). This comprises a public–private partnership between several United Nations agencies, universities, and major commercial publishers.

The list of the countries in Group A and Group B is found in Table 1.

Review of this list reveals a major problem with access: Health science researchers working in several developing countries, including, for example, India, Brazil, Mexico, Indonesia, and China, cannot take advantage of the HINARI system. Access for scholars in Group A and B countries is further limited by the need to be at an institution that is part of the HINARI system. If you are an “independent” researcher working in a Group A or Group B country with no association with a recognized institution, or if you work at an institution in a Group B country that cannot pay the US$1500 per year fee, you will not have access to all the HINARI resources.3

A few cases serve to illustrate the limitations of HINARI. Assume that you are a bioethicist working in Mexico and you wish to read a recent article, “The Challenges of Research Informed Consent in Socio-Economically Vulnerable Populations” (Kalabuanga et al. 2016) in Developing World Bioethics. Because you are not in a HINARI-eligible country, the HINARI webpage will direct you to the journal webpage, where you will discover that this article can be “rented” (for 48 hours with no option for printing) for US$6.00, or purchased for US$38.00. You will face the same paywall if you are interested in the Developing World Bioethics editorial “Ethical Issues in Health Systems Research in Low and Middle-Income Countries” (Ndebele and Hyder 2016). Similarly, a bioethicist in China who wishes to study the U.S. complicity in Japan’s wartime medical atrocities in China (Nie 2006) will find that access to a pertinent article in American Journal of Bioethics requires a payment of US$42.00 for 24-hour access. You would face the same obstacle if you were in a HINARI-eligible country but work as “independent” researcher, not associated with a HINARI-registered institution that could provide you with the user name and password required for access. Finally, if you lack regular power supply or a reliable connection to the Internet in your resource-constrained setting, it matters not where you live or work.

Exclusion from HINARI—driven perhaps by concern with market share and profits on the part of publishers (Chan, and Kirsop 2009; Sharma 2011)—is the first of several problems with the system. Other limitations include:

- Journals made available by donation to the HINARI are selected by the publishers, not LMIC researchers (Chan, Arunachalam, and Kirsop 2009).

- Copyright laws that are applicable to subscription-based journals prohibit HINARI users from sharing, reproducing, or even translating the materials into the local language (PLoS 2006).

5. http://www.who.int/hinari/faq/Participating_Academic_Institutions_HINARI.pdf/see WHO (2015a) for a listing of HINARI eligibility.
### Table 1. Core Offer countries, areas and territories.

<table>
<thead>
<tr>
<th>Group A (free access)</th>
<th>Group B (low cost)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>Albania</td>
</tr>
<tr>
<td>Angola</td>
<td>Algeria</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Argentina</td>
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<tr>
<td>Benin</td>
<td>Armenia</td>
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<tr>
<td>Bhutan</td>
<td>Belize</td>
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<tr>
<td>Burkina Faso</td>
<td>Bolivia</td>
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<tr>
<td>Burundi</td>
<td>Bosnia and Herzegovina</td>
</tr>
<tr>
<td>Cambodia</td>
<td>Botswana</td>
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<tr>
<td>Cameroon</td>
<td>Cook Islands</td>
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<tr>
<td>Cabo Verde</td>
<td>Dominica</td>
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<tr>
<td>Central African Republic</td>
<td>Ecuador</td>
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<tr>
<td>Chad</td>
<td>El Salvador</td>
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<tr>
<td>Comoros</td>
<td>Fiji</td>
</tr>
<tr>
<td>Congo</td>
<td>Gabon</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>Georgia</td>
</tr>
<tr>
<td>Democratic People’s</td>
<td>São Tomé and Príncipe</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>Grenada</td>
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<tr>
<td>Democratic Republic of the Congo Djibouti</td>
<td>Guyana</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>Jamaica</td>
</tr>
<tr>
<td>Eritrea</td>
<td>Jordan</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Kosovo (in accordance with Security Council resolution 1244 [1999])</td>
</tr>
<tr>
<td>Gambia</td>
<td>Libya</td>
</tr>
<tr>
<td>Ghana</td>
<td>Maldives</td>
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<tr>
<td>Guatemala</td>
<td>Marshall Islands</td>
</tr>
<tr>
<td>Guinea</td>
<td>Mauritius</td>
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<tr>
<td>Guinea-Bissau</td>
<td>Mongolia</td>
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<tr>
<td>Haiti</td>
<td>Montenegro</td>
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<tr>
<td>Honduras</td>
<td>Nauru</td>
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<tr>
<td>Iraq</td>
<td>Niue</td>
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<tr>
<td>Kenya</td>
<td>Palau</td>
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<tr>
<td>Kiribati</td>
<td>Paraguay</td>
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<tr>
<td>Kyrgyzstan</td>
<td>Republic of Moldova</td>
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<tr>
<td>Lao People’s Democratic Republic</td>
<td>Saint Helena</td>
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<tr>
<td>Lesotho</td>
<td>Saint Kitts and Nevis</td>
</tr>
<tr>
<td>Liberia</td>
<td>Saint Lucia</td>
</tr>
<tr>
<td>Madagascar</td>
<td>Saint Vincent and the Grenadines</td>
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<tr>
<td>Zimbabwe</td>
<td></td>
</tr>
</tbody>
</table>

- Availability of these journals may be withdrawn by the publishers without notice: There are no in-built institutional mechanisms for content continuity.

This last point is well documented. In early 2011, for example, researchers in Bangladesh, one of the world’s poorest countries, ceased to have access to 2500 journals from Elsevier, Lippincott Williams & Wilkins, and Springer (Kmietowicz 2011; Koehlmoos and Smith 2011). Five years earlier, in 2006 and 2007, Springer, provider of more than 500 journals through HINARI, had excluded several countries, including Bangladesh (Sharma 2011).
The case of Bangladesh is no exception: Low-resource countries like Kenya, Tanzania, and Nigeria (all qualifying for free and unrestricted access to literature in the Group A of the HINARI) also faced closed doors to access from publishers (Koehlmoos and Smith 2011; Sharma 2011). Latin American scholars have also described the irregular nature and limitation of the HINARI system. For instance, in 2007 Peruvian researchers were unable to access any of the top five journals from major publishers such as Nature Publishing Group and Elsevier. Nor could they access to any of the first-level journals from Blackwell, Oxford University Press, Lippincott Williams & Wilkins, or Wiley and Sons. In 2003, all these journals had been available (Villafuerte-Gálvez, Curioso, and Gayoso 2007; Koehlmoos and Smith 2011). Although access to scientific literature was reported to be restored—possibly because of the outcry in the international science community—the “information philanthropy” of HINARI is only a stopgap measure and not a reliable and steady solution for the problem of inaccessibility in LMICs (Contreras 2012; Koehlmoos and Smith 2011; Yamey 2008).

HINARI is not the only means of accessing scholarly resources. Articles in open-access journals are freely available to all. PubMed Central (PMC), maintained by the U.S. National Library of Medicine (NLM) and the National Institutes of Health (NIH), offers a free digital archive of articles in biomedical and life sciences journals. Similar services are offered by Europe PMC and PMC Canada, which, in collaboration with their U.S. counterparts, constitute the PMC International. While PMC is a valuable resource, it too comes with limitations. For example, categories of access to articles in PMC include:

- **NIH Portfolio:** All NIH-funded articles are available.
- **Full participation:** All content—starting with a particular volume (issue), or publication date—is available.
- **Selective deposit:** Articles chosen by the publisher are available. Author manuscripts are a form of selective deposit that includes compliance with NIH and Canadian Institute of Health Research (CIHR) open access submission requirements, but this does not automatically mean that articles in their final form are published in PMC.

All these are commendable initiatives to provide free unrestricted access to important information, research findings, and scholarly literature. However, scholars in LMICs still face insurmountable barriers to information even when it is pertinent to their health and life. Consider, for example, the article “AIDS Care and Treatment in Sub-Saharan Africa: Implementation Ethics” (Rennie and Behets 2006), published in the Hastings Center Report: More than a decade after its publication it still lies behind a paywall.

Given the disparate avenues of access, it is useful to look at the resources that are available to bioethics workers in LMICs. We identified 16 leading international journals in bioethics, using impact factors as listed in *Journal Citation Reports* (Thomson Reuters 2016). We are aware that impact factors are an imperfect measure, but being based on citations, they offer a measure of a journal’s place in the conversation occurring in the field.7

Table 2 offers a summary of the (un)availability of bioethics resources in LMICs. It shows that free and unrestricted access to all contents of the leading international bioethics journals remains a dream for bioethics workers in the majority world.

As we noted in the preceding, articles of interest to bioethicists are also published in journals that do not identify as bioethics journals; looking at top-ranking general medical journals—likely sources of bioethics articles—we find that here too, scholars in LMICs have limited and uneven access. A few—the Canadian Medical Association Journal and the Journal of Clinical Investigation, for example—are “full depositors” in PubMed Central; others make selected research papers available online, inviting online responses as a means of stimulating discussion and debate—for example, BMJ (British Medical Journal), and JAMA (Journal of the American Medical Association). There are also journals that provide access to articles after embargo periods varying from 6 months to 2 years. Often these embargos include a restriction that prevents posting of a research article on the institutional websites of authors. Having the option of delayed access is better than no access, but it hinders serious, sustained, and up-to-date research by those working in LMICs. Imagine trying to write about the global business of fake “medicines” without access to the important article “Stemming the Global Trade in Falsified and Substandard Medicines” (Gostin, Buckley, and Kelley 2013) in JAMA. Similarly, if you wish to learn more about end of life care in India, you will discover that an article in the Lancet on Hindu perspectives on care for the dying (Firth 2005) is neither freely accessible to nor open for discussion to bioethicists in India. How can health care professionals and bioethics workers in LMICs join the debate and contribute to ongoing discussions if bioethics papers are inaccessible? Thus, for many researchers working on bioethical issues in LMICs, the message is unmistakably clear and loud: “If you do not have the money to subscribe, you cannot enter the discussion and debate.”8 This situation generates interesting questions of institutional ethics:

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6. Directed by the U.S. Congress, the NIH formulated a policy in 2008 to require submission of all publications arising out of NIH-funded research to PubMed Central within 1 year of publication (Contreras 2012).

7. Use of journal impact factor for assessment of published work has been widely criticized if not condemned. The American Society for Microbiology decided to remove impact factor from its eight journals and website, as well as from its marketing and advertising (Casadevall et al. 2016).

8. Many bioethics workers from LMICs, including one of the co-authors, find it extremely difficult, if not impossible, to send any correspondence or letter to an editor in response to a locked editorial, article, or research paper published in a subscription-based international bioethics journal.
Table 2. Availability of international bioethics journals to scholars in developing countries.

<table>
<thead>
<tr>
<th>Name of journal</th>
<th>Name and location of publisher</th>
<th>Impact factor—2015&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Open access&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Available in HINARI (as of February 2, 2016)</th>
<th>Level of PubMed Central participation&lt;sup&gt;c&lt;/sup&gt; (as of February 2, 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>American Journal of Bioethics</strong></td>
<td>Taylor &amp; Francis&lt;sup&gt;d&lt;/sup&gt; (UK)</td>
<td>6.5</td>
<td>No</td>
<td>2001–current</td>
<td>SD/AM</td>
</tr>
<tr>
<td><strong>BMC Medical Ethics</strong></td>
<td>BioMed Central&lt;sup&gt;e&lt;/sup&gt;</td>
<td>1.84</td>
<td>Yes</td>
<td>2000–current</td>
<td>Full</td>
</tr>
<tr>
<td><strong>Developing World Bioethics</strong></td>
<td>Wiley-Blackwell&lt;sup&gt;f&lt;/sup&gt; (USA)</td>
<td>1.769</td>
<td>No</td>
<td>2001–current</td>
<td>SD/AM</td>
</tr>
<tr>
<td><strong>Bioethics</strong></td>
<td>Wiley-Blackwell (USA)</td>
<td>1.75</td>
<td>No</td>
<td>1997–current</td>
<td>SD/AM</td>
</tr>
<tr>
<td><strong>The Hastings Center Report</strong></td>
<td>Wiley-Blackwell (USA)</td>
<td>1.731</td>
<td>No</td>
<td>1971–current</td>
<td>AM</td>
</tr>
<tr>
<td><strong>The Journal of Law, Medicine and Ethics</strong></td>
<td>Wiley&lt;sup&gt;g&lt;/sup&gt; (USA)</td>
<td>1.613</td>
<td>No</td>
<td>2006–current</td>
<td>AM</td>
</tr>
<tr>
<td><strong>Neuroethics</strong></td>
<td>Springer&lt;sup&gt;g&lt;/sup&gt; (Netherlands)</td>
<td>1.305</td>
<td>No</td>
<td>AM/SD</td>
<td></td>
</tr>
<tr>
<td><strong>The Journal of Medicine and Philosophy</strong></td>
<td>Oxford University Press (UK)</td>
<td>1.293</td>
<td>No</td>
<td>1996–current</td>
<td>NP</td>
</tr>
<tr>
<td><strong>Public Health Ethics</strong></td>
<td>Oxford University Press (UK)</td>
<td>1.283</td>
<td>No</td>
<td>2008–current</td>
<td>NP</td>
</tr>
<tr>
<td><strong>Journal of Bioethical Inquiry</strong></td>
<td>Springer&lt;sup&gt;g&lt;/sup&gt; (Germany)</td>
<td>1.204</td>
<td>No</td>
<td>2004–current</td>
<td>SD/AM</td>
</tr>
<tr>
<td><strong>Journal of Empirical Research on Human Ethics</strong></td>
<td>SAGE (USA) with global offices including Delhi, India</td>
<td>1.146</td>
<td>No</td>
<td>2006–current</td>
<td>SD/AM</td>
</tr>
<tr>
<td><strong>Kempey Institute of Ethics Journal</strong></td>
<td>Johns Hopkins University Press (USA)</td>
<td>1.129</td>
<td>No</td>
<td>AM</td>
<td></td>
</tr>
<tr>
<td><strong>Medicine, Health Care and Philosophy</strong></td>
<td>Springer&lt;sup&gt;g&lt;/sup&gt; (Germany)</td>
<td>.974</td>
<td>No</td>
<td>1998–current</td>
<td>SD/AM</td>
</tr>
<tr>
<td><strong>Theoretical Medicine and Bioethics</strong></td>
<td>Springer&lt;sup&gt;g&lt;/sup&gt; (Germany)</td>
<td>.804</td>
<td>No</td>
<td>SD/AM</td>
<td></td>
</tr>
<tr>
<td><strong>Cambridge Quarterly of Healthcare Ethics</strong></td>
<td>Cambridge University Press (UK)</td>
<td>.697</td>
<td>No</td>
<td>1998–current</td>
<td>SD/AM</td>
</tr>
</tbody>
</table>

<sup>a</sup>From 2015 Journal Citation Reports<sup>®</sup> (Thomson Reuters 2016), Ethics subcategory.

<sup>b</sup>Open Access journals include, in addition to BMC Medical Ethics, Philosophy, Ethics, and Humanities in Medicine, Indian Journal of Medical Ethics, The South African Journal of Bioethics and Law, etc. See the Directory of Open Access Journals (DOAJ 2014).

<sup>c</sup>NP = NIH Portfolio; FP = Full participation; SD = Selective deposit; AM = Author manuscript.

<sup>d</sup>Taylor & Francis Group, a trading division of Informa UK Ltd., is based in the United Kingdom and was listed on the London Stock Exchange in 1998. The 2013 Informa (Taylor & Francis, Routledge) annual report says that revenue from academic publishing increased to £567.1 million in 2013 from £340.3 million in 2012. Adjusted operating profit increased by £4 million from £126 million in 2012 to £130 million in 2013 (Informa PLC 2014, under “Divisional Review,” p. 5).

<sup>e</sup>BioMed Central is now owned by Springer Nature, which was created through the combination of Nature Publishing Group, Palgrave Macmillan, Macmillan Education, and Springer Science+Business Media in May 2015.

<sup>f</sup>In 2007, Wiley completed the acquisition of the United Kingdom-based Blackwell Publishing (Holdings) Ltd. for $1.1 billion (£572 million) to form what is now known as Wiley-Blackwell. Wiley’s “revenue increased from less than $300 million in FY1990 to $1.8 billion in FY2012. During the same period, the company’s market capitalization increased from about $100 million to approximately $2.7 billion. Over the past decade, Wiley’s revenue has increased by 9% per year” and “its earnings per share have risen by 12% per year.” Further, “China is now the second-largest consumer of Wiley Online Library content and the second-largest source of Wiley-Blackwell journal articles, India, a well-established market for Wiley, is also developing into an important source of content” (Wiley 2015, under “Planning, Expansion, and Prosperity”).

<sup>g</sup>Springer achieved sales of €875.1 million in FY2011 and of €981.1 million in FY 2012. “Revenues from Springer’s various open access publishing offers grew above 25% in FY 2012 driven by strong growth in articles submissions and the expansion of Springer’s open access journal portfolio” (Springer 2011; 2012).
Do all bioethics workers from the majority world of LMICs need to learn from and share in the global dialogue? Should access to leading international bioethics journals depend upon one’s geographic location or ability to pay? What difference does this make for the nature and scope of bioethics and its practitioners—inside and outside the minority world of high-income countries?

INACCESSIBLE RESOURCES AND THE ILLUSION OF “CAPACITY BUILDING” IN BIOETHICS

Bioethics has long been part of the global landscape of healthcare and medicine, but even more so since the promulgation of the Universal Declaration of Bioethics and Human Rights in 2005 (UNESCO 2005). Like Christian missionaries in the past, the secular priests of Western bioethics—today’s “ethics educators”—have been hard at work to spread the “gospel” of bioethics to developing countries (De Vries and Rott 2011). In 2012, there were no fewer than six international conferences on just one topic within the field—bioethics education (Ten Have and Gordijn 2012). Millions of dollars, pounds, and euros have been, and still are being, spent for bioethics “capacity building” in LMICs. For example, the U.S. National Institutes of Health (NIH) allotted $691,673 in 2010–2012 for “centrally coordinated bioethics education for India” alone (NIH RePORT 2014). In an effort to “indigenize” bioethics in non-Western cultures and societies, doctors, philosophers, lawyers, and other scholars are invited to participate in bioethics courses offered in Europe and North America. Two prime examples of such “capacity-building” endeavors are the U.S. National Institutes of Health Fogarty program and the Erasmus Mundus Master of Bioethics program of the European Commission (until recently, run jointly by three European universities, one each in Belgium, the Netherlands, and Italy). The most pressing need of these newly trained bioethics personnel, after completion of their training, is securing access to the essential resources to do their work. Lacking this, they remain out of touch with the work of other bioethicists—globally, if not also regionally—and are unable to contribute to or further a truly “global” development of the field.

Restricted access to information, research publications, and academic resources in LMICs does not, however, happen in a socioeconomic-political vacuum. Academic and scientific publishing is a multi-billion-dollar industry (generating revenue of $9.4 billion in 2011) run by “the oligopoly of academic publishers” (Larivièbre et al. 2015) with lucrative profits of 20–35% (Van Noorden 2013). For-profit commercial publishing houses gradually replaced learned academic societies and university presses in dissemination of knowledge in the later part of the 20th century. Subscription prices of academic journals published by for-profit commercial publishers have increased at rates higher than inflation. The cost of subscribing to multiple journals became prohibitively high, resulting in significant reductions in journal subscriptions by academic libraries. In the world of scientific and academic publishing, this has been known as the “serials crisis,” from which the developing world suffered the most (Contreras 2012).

In a conscientious response to this crisis and with emergence of the Internet technology in the 1990s, Open Access (OA) initiatives in academic publishing ushered in a new era of free accessibility of academic and scientific literature, eliminating restrictions on their reproduction and dissemination. In 2001, distinguished scientists founded the Public Library of Science (PLoS n.d.), a nonprofit publisher of a “suite of peer-reviewed Open Access journals featuring quality research” with “a mission to accelerate progress in science and medicine by transformation in research communication” (PLoS 2006). Calls for OA echoed across the globe with a number of landmark declarations such as of Budapest, Bethesda, Berlin (known as “Three Bs”), and Salvador (Contreras 2012; Yamey 2008).

The flip side of the open access (OA) journals is the price of publishing there. The business model of OA journals requires authors to bear the cost of publication, which can be as much as £1370/ $2145/ €1745 per article.9 If the author’s institution has paid a membership fee (in dollars, pounds, euros), the cost of publication is covered or reduced. However, many institutions in low-resource settings simply cannot afford to pay these fees in foreign currencies. Open access publisher BioMed Central (owned by Springer Nature) has an “open access waiver fund” that provides an automatic waiver to authors” based in selected LMICs (https://www.biomedcentral.com/get-published/article-processing-charges/open-access-waiver-fund). A similar waiver scheme is available with SpringerOpen (http://www.springeropen.com/authors/oawaiverfund). However, these waiver options do not apply to researchers in several LMICs, including, for example, Brazil, China, India, Indonesia, Mexico, Pakistan, Philippines, or South Africa. In the absence of a paid institutional affiliation with the journal, a request for waiver of publication charges is the only option for many authors from LMICs. Such a request can be embarrassing, especially in the case of repeated requests, which may deter developing-world bioethicists from publishing there.

Barring the notable exception of BMC Medical Ethics, all other leading international bioethics journals (listed in Table 2) are subscription-based with restricted access, and many are published by for-profit commercial publishing houses (e.g., Springer, Wiley-Blackwell, Taylor & Francis). If a bioethics researcher in an LMIC wishes to publish in a subscription-based international bioethics journal and

9. This model is known as the “Gold” route to open access publishing. For-profit publisher BioMed Central launched the first significant Gold OA publishing enterprise, which is part of the Springer publishing house now. The other avenue to OA is “self-archiving” or the “Green” route to OA, in which authors post copies of their published work on departmental or institutional webpages, making them freely accessible to all (Contreras 2012). Many institutions in LMICs do not have the manpower and resources to maintain and regularly update the institutional webpages even if they succeed in creating one in the first place.
make her or his published work accessible to all health workers in LMICs, there exists the possibility of paying a publication fee for such “open choice.” These fees for “open choice” are exorbitantly high—for example, US$3200 to Wiley (for publication of an article in Developing World Bioethics); £1,788/€2,150/$2,950 to Taylor & Francis (for publishing a paper in American Journal of Bioethics); US$3000/€2200 to Springer for publishing in any of its bioethics journals.10 In the absence of institutional support and funding, paying such publication fees is out of the question, and for bioethicists workers in LMICs, becomes more of a “closed choice.”

Poor access to the resources for ongoing engagement and further development makes the “capacity building” training programmes in bioethics the intellectual equivalent of building a healthy body with a one-time glut of food followed by chronic starvation—an almost cruel “one-time only” exposure to Western (i.e., Anglo-American and European) bioethical theories and methods for new “bioethicists” in LMICs. In the absence of policies and ongoing support for LMIC researchers in education and research, one may question the rationale of such “capacity-building” initiatives in bioethics. Successful “capacity-building” measures in LMICs must find ways to ensure ongoing support for bioethics workers that will enable them to meet new challenges in health and medicine. If LMIC researchers are not provided with necessary information, literature, and scholarly resources that they absolutely need to critically think, analyze, and synthesize knowledge, bioethics “capacity-building” programs run the risk of acting—in spite of their proclaimed good intentions—as a “colony-building” enterprise of Western bioethics.

Problems of access are evident in the missing voice of LMIC bioethicists in the literature of the field. In a study of 4,029 research articles gathered from nine international bioethics journals, Borry, Schotsmans, and Diericks (2005) showed that authors from high-income countries contributed to 96.1% (3,873 of 4,029) of the publications, in contrast to 3.9% (156 of 4,029) for those from LMICs. Furthermore, from 1997 to 2003, the number of studies coming from low- and middle-income countries did not increase significantly over that percentage from 1990 to 1996. Borry, Schotsmans, and Diericks (2005) report no publications at all from 123 of 154 developing countries (79.9%).

HEGEMONY OF WESTERN BIOETHICS

Limited access to journals and other resources is not the only problem faced by bioethicists in LMICs. After their initiation into the discipline, when these scholars begin to work on issues surrounding health care and medicine in their local settings, they face numerous additional challenges. Foremost among them are the “grand challenges of global health”—the issues that afflict larger humanity, including hunger, poverty, income inequality, corruption, lack of access to basic health care and essential medicines, environmental degradation and ill health, unique challenges of occupational health, and other health disparities—most of which are neglected by contemporary mainstream bioethics (Turner 2004; Benatar, Daar, and Singer 2005; Rennie and Mupenda 2008). A second problem is the (im)possibility of applying abstract, decontextualized theories, methods, languages, and ethical principles of high-income country bioethics—built on the foundations of Western philosophical systems—to the bioethical concerns of non-Western cultures and societies (Carrese and Rhodes 1995; Christakis 1992; Fan 1997; Chattopadhyay and De Vries 2008; Chattopadhyay 2011; Myser 2011; Tai and Lin 2001; Zaman and Nahar 2011). The “color-blind” nature and “the unbearable whiteness” of United States-born Western bioethics (Arekapudi and Wynia 2003; Burton 2007; Myser 2007; Parsi 2016) present a third problem. This bias is built into the institutions of bioethics and is markedly visible in the composition of the editorial boards of its major journals—a bias that has been characterized as “institutional racism” (Horton 2003; Chattopadhyay, Myser, and De Vries 2013).11

Related to the previous three problems is a fourth: Hidden in plain sight is a resistance to accepting, and scant regard for, non-Western philosophical systems and worldviews (e.g., Native American, African, Indian, Chinese philosophical ideas) in bioethics discourse (Carrese and Rhodes 1995; Metz 2010; Stonington and Ratanakul 2006; Tangwa 1996; Fayemi and Macaulay-Adeyelure 2016). Diverse moral visions of life, health care, and medicine—for example, those of Buddhist folk-healers; practitioners of Ayurveda, acupuncture, and Unani in Asia; Navajo medicine and Shamanism among Native Americans; or African folk medicine as practiced in both Western and

10. According to an online news report in 2013 (http://www.edui con.com/News/Details/3627.html), entry-level university teachers in Bangladesh get paid $135 a month and professors $413 a month. Converted to local currency in Bangladesh, an “open” choice publication fee of US$3000 is “mountain of fortune” in countries like Bangladesh.

11. As Richard Horton points out in his 2003 Lancet commentary, “institutional racism” of major journals in diverse academic fields does not mean an individual editor is racist; rather, it means ethical issues surrounding health and medicine of the wealthy countries are presented as and de facto become the mainstream and the acceptable norm. Editors seek a global status but “shut out the experiences and practices of those living in poverty” in the majority world. “One group is advantaged, while the other is marginalised.”

non-Western cultures and societies—are shared by millions across continents but are nearly absent in leading international bioethics journals. Similarly, Eastern philosophical and moral worldviews like ahimsa, dharma, karma, and Zen—although increasingly popular in the West—remain “minoritized” in a “foreign” land.13 Finally, developing-world bioethicists also face the weighty challenge of acting as a “voice of the voiceless” in bioethics discourse—bringing the voices of those who suffer most from the worst problems in LMICS and whose health priorities, cultural values, and belief systems are mostly marginalized, if not excluded, from policy discussions.

Facing these challenges, LMIC bioethics scholars and health professionals—who live with the concrete social realities of low-resource countries and marginalized communities across continents—can offer uniquely rich experience and insight about how ethical issues in health care and medicine are, and should be, addressed. If they were valued and could find space in the global arena of ideas, the reflections, analysis, experiences, and insights of LMIC bioethics scholars, who are addressing many bioethical issues of global significance in their own countries, could also make a significant contribution to a much deeper and richer understanding of global bioethics. Certainly, this enriched discourse is desperately needed—more than ever—in the increasingly multicultural and multireligious societies of the East and West alike.

Some may argue that restricted access to the contents of international bioethics journals is perhaps a blessing in disguise, minimizing the one-way traffic of information from global North to South, preventing Western bioethics from unduly influencing non-Western cultures and societies. Bioethics workers in LMICs, with a not-so-distant history of colonization, are vulnerable to becoming “colonized minds,” disregarding their own moral belief systems in favor of Western bioethical theories and methods. But while it is true that bioethicists in LMICs should not be passive consumers of the one-way flow of information from North to South, they do need the scholarly resources required to critically think, analyze, synthesize, and create the new knowledge for local as well as “global” bioethics. Bioethics workers in LMICs need a means of gathering information as a basis for comparing and contrasting knowledge—or, more importantly, they need access to an open public space for contesting and correcting knowledge from the North. By incorporating their own experiences, perspectives, and insight, these scholars will contribute to a truly global bioethics capable of addressing their own bioethical problems, as well as problems in high-income countries.

TOWARD A NEW BEGINNING

Imagine a world where information, literature, and other resources are available and freely accessible for all. Imagine a world where all publicly funded research is freely available—irrespective of ability to pay or geographic location. To make such a world possible in bioethics, we can begin by looking to other disciplines where scholars are developing online systems to provide free and unrestricted access to information and literature. Researchers in physics, mathematics, statistics, and computer science, for example, have developed an electronic archive and distribution server for research articles. Started in 1991, this archive (https://arxiv.org) is maintained and operated by the Cornell University Library, and—while not perfect—it provides open access to e-prints in these areas of specialized knowledge. The Cold Spring Harbor Laboratory, a not-for-profit research and educational institution in the United States, operates bioRxiv (http://biorxiv.org), a “free online archive and distribution service for unpublished preprints in the life sciences.” Similarly, a worldwide collaboration of specialized research networks in social sciences led, in 1994, to the formation of the Social Sciences Research Network (SSRN, https://www.ssrn.com/en), “devoted to the rapid worldwide dissemination of social sciences research.”14 In computer and information science, similar services are offered by a digital library and search engine known as CiteSeerX (http://citeseerx.ist.psu.edu/index), hosted by Pennsylvania State University, which “aims to improve the dissemination of scientific literature.” Likewise, “collaborative effort of hundreds of volunteers in 89 countries” in economics and related fields led to formation of the RePEc (Research Papers in Economics) to enhance the dissemination of research through a bibliographic database (repec.org). Unfortunately, as yet there is no collaborative network or online archive offering free and unrestricted use of research papers and other scholarly resources in bioethics.

The Universal Declaration of Human Rights (UDHR; United Nations 1948) states that “everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits” (UDHR Article 27, section 1, emphasis added). The International Covenant on Economic, Social, and Cultural Rights (ICESCR), which translates the rights articulated in the UDHR into a legally binding instrument, recognizes the right of everyone to “take part in cultural life” and to “enjoy the benefits of scientific progress and its applications” (Article 15, section 1, emphasis added). In 2003, the United Nations (UN) convened a meeting that produced “The Declaration of Principles of the World Summit on the Information Society.” The key principle of that document is “equal access to all scientific knowledge and the creation and dissemination of scientific and technical information, including open access initiatives for

13. We know a scholar from the Philippines who struggled to get approval from his teachers—White Anglo-European philosophers—for his master’s thesis to work on Mahatma Gandhi’s Satyagraha and bioethics in a training program on European soil. A quick PubMed search using keywords medical ethics with dharma or karma will yield four and six papers, respectively.

14. Elsevier, one of the most prolific commercial publishers, acquired SSRN in 2016.
scientific publishing” (Contreras 2012; Yamey 2008). The UN Millennium Project’s Task Force on Science, Technology and Innovation in its report *Innovation: Applying Knowledge in Development* categorically states: “The United Nations has championed the need to promote open access to information and technology . . . dissemination of scientific discoveries and ideas provides the foundation for progress in science and medicine. The more widely and freely accessible information is, the greater is the value of peer-reviewed research” (Yamey 2008). Surprisingly, there has been little, if any, reflection on this right in the policies and practices of the leading international bioethics journals and their for-profit commercial publishers. Bioethics workers and scholars in Asia, Africa, and Latin America remain marginalized, with limited access to valuable academic resources. Consequent underrepresentation of LMIC perspectives in bioethics publishing and the absence of diverse moral visions of life, health, and healing systems represent a moral failure, a failure that is scarcely noticed in the bioethics community. The special nature of (bio)ethics—field committed to both the study and promotion of moral behavior—creates an obligation to strive for equitable access to bioethics literature in the majority world of LMICs.

Mechanisms for addressing this inequity are long overdue. A few steps, suggested here, can act as a new beginning in this regard.

First, leading international bioethics journals published by academic institutes and centers—for example, the *Journal of Medical Ethics*, the *Kennedy Institute of Ethics Journal*, and The Hastings Center Report—should make their contents freely available and accessible to all—doing away with the limitations of HINARI and embargo periods.

Second, bioethics journals published by for-profit commercial publishing houses like Springer, Taylor & Francis, and Wiley-Blackwell should make their bioethics content available to all scholars in LMICs, regardless of HINARI status or affiliation with an HINARI-registered institution.

Third, transnational commercial publishers should publish and provide low-priced editions of their bioethics journals, books, and other resource materials for LMIC scholars, residents of the same countries to which most office and editorial work have been outsourced in recent years. A policy of “profits over people” is not ethically justifiable anywhere, and is particularly unacceptable in bioethics.

Fourth, practitioners of bioethics should commit to supporting and developing alternative models of publishing and distribution of literature including OA journals. This may include a commitment to publish in general OA journals like *PloS Medicine* and sincere efforts to further develop (bio)medical ethics specialty journals such as the *AMA Journal of Ethics* (http://journalofethics.ama-assn.org), a student-driven OA journal of the American Medical Association, the *South African Journal of Bioethics and Law* (http://www.sajbl.org.za/index.php/sajbl), and the *Indian Journal of Medical Ethics* (IJME, http://ijme.in), all of which do not require article processing charges or publication fees.

Fifth, commercial publishers of subscription-based international bioethics journals and OA journals should institute a waiver of publications fees and article processing charges (in dollars, pounds, and euros) for all authors from LMICs, making their published work freely accessible to all, especially colleagues in LMICs.16

Sixth, bioethics authors should strive to use institutional and/or other working paper repositories for archiving individual articles. The international bioethics community must explore avenues to create a repository of all papers in the field of bioethics for open public view and discussions. Concerted efforts by bioethics scholars with academic societies, institutions of higher learning, universities, and funding agencies including philanthropic organizations will go a long way to build such repositories offering free and unrestricted access to all.

Last, but not least, leading international bioethics journals should widen their moral landscape by opening up to non-Western philosophical systems and worldviews, addressing bioethical issues more relevant to LMICs. The incorporation of bioethics researchers from the global south in their editorial boards and policymaking bodies will make these journals more open, sensitive, and responsive to the health care needs and moral aspirations of larger humanity.

In recent years, health workers have called attention to the need to reduce, if not eliminate, health disparities between high-income countries and LMICs. In the field and profession of bioethics, these disparities are found in the scholarly attention given to questions surrounding race and (institutional) racism, in the disregard of the issues and perspectives of the majority world, and in the accessibility of information and resources required for genuine capacity building in bioethics. Improved access to bioethics literature in the developing world will create more opportunities for crucial experiences, perspectives, and insights to be shared by those currently marginalized, thereby preventing loss of the treasures of diverse moral visions of health and medicine that might uniquely and fruitfully be shared by the whole world. The alternative to this cultural and moral diversity is unabated moral imperialism of Western bioethics and accepting or facilitating—inadvertently or consciously—what could be regarded as

15. The IJME—currently in its 25th year of publishing—offers both a model and a cautionary tale for new journals in health and bioethics. Run by a nonprofit organization “For the Promotion of Medical Ethics Society”—co-organizer of the 14th World Congress of Bioethics in 2018—its success has come at the cost of countless hours of unpaid work and sacrifice on the part of its staff and editors.

16. One of the co-authors does not have free access to his own published work in a subscription-based international bioethics journal. Almost the entire production work of the literature with restricted access for researchers in developing countries is done by workers of a developing country, to which many international publishers have outsourced their office and editorial work.
cultural and moral genocide, that is, the annihilation of varieties of culture and moral visions of life and medicine that have evolved over eons. A bioethics worthy of its name must create more opportunities and outside-of-the-box creative solutions for fruitful and meaningful engagement with a larger humanity in an increasingly interdependent world. Bioethics must widen its moral horizon and open its public space to the whole of humanity.

CONFLICTS OF INTEREST

The first author is a member of the editorial board of the Indian Journal of Medical Ethics, an open-access journal with no article processing charges or publication fees. Apart from that, the authors declare no conflicts of interest.

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REFERENCES


Parker, M. 2013. The ethics of open access publishing. BMC Medical Ethics 14:16.


PLoS. n.d. Who we are. https://www.plos.org/who-we-are


