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## Editorial

## Prioritizing equity and inclusion in global health dermatology



In recent months, there have been accelerated efforts to address the lack of equity and inclusion in global health. The Decolonize Global Health movement (@KarolinskaDGH, 2020; Duke Decolonizing Global Health Working Group, 2020; Harvard Chan Student Committee for the Decolonization of Public Health, 2020; University of Michigan School of Public Health, 2020), which emerged in 2018 to 2019 and has gained significant traction since then, urges global health practitioners to examine the colonial roots of global health (Greene et al., 2013), identify how colonialism persists in global health today (Kumar, 2020), and work as individuals, organizations, and institutions to prioritize equity and inclusion in global health (Büyüm et al., 2020; Eichbaum et al., 2020; Lawrence and Hirsch, 2020; Pai, 2019a, 2019b). Decolonizing global health has been prioritized by the National Institutes of Health (NIH) Fogarty International Center (Glass, 2020), London School of Hygiene and Tropical Medicine (London School of Hygiene & Tropical Medicine, 2020), Global Health Council (Global Health Council, 2020), other nonprofit organizations, and numerous academic institutions.

Dermatologists are engaged in all aspects of global health work: research, training, and direct care delivery. Herein, we highlight key issues in these three domains in the context of transnational work involving individuals, organizations, and institutions in high-income countries (HICs) and low- and middle-income countries (LMICs). Through careful examination, we identify the ways in which dermatology has contributed to upholding structural inequities, think critically about solutions for dismantling these structures, and recommend actions to decolonize global health dermatology by prioritizing equity and inclusion.

## Research

Global health research involves the process of conceptualizing studies, securing funding, obtaining regulatory approvals, collecting and analyzing data, and disseminating findings. Funding for global health research has grown steadily in the last several decades (Sridhar, 2012), and the vast majority of funding comes from institutions in the Global North (Boum et al., 2018), which refers to the generally more developed countries in the Northern Hemisphere compared with the generally less developed countries in the Southern Hemisphere (i.e., Global South), but this is an imperfect categorization (Royal Geographical Society, 2013). Importantly, funders ultimately determine the beneficiaries of money, the targets of their interventions, and the research deliverables.

As such, they set the agenda and priorities around a given public health problem. This means that research agendas may not be driven by the needs of communities, physicians, or scientists in LMICs, but instead by the policy and health goals of the countries and multilateral institutions that provide the financial resources to conduct studies (Sridhar, 2012). Agenda setting may therefore occur without consideration of a local community's belief systems, culture, and sociopolitical context (Jumbam, 2020). To complicate things further, leaders at host LMIC institutions may not see challenging or insisting on setting the research agenda as a high priority, because research funding supports gaps in clinical care infrastructure, addresses health issues that are not the local government's priority, and offers training that is not otherwise available locally.

There are also several common manifestations of power imbalance in the dissemination of findings from collaborative global health research. One is authorship roles. In a systematic review of infectious disease research conducted in Africa, 49.8% had an African first author and 41.3% had an African last author (Mbaya et al., 2019). In another systematic review, only 54.0% of all authors and 52.9% of first authors were from the country of the paper's focus. This representation dropped if any authors were from the United States, Canada, or Europe, and especially if any author was from a top U.S. university, in which case only 23% of first authors were from the country of the paper's focus (Hedt-Gauthier et al., 2019).

Another manifestation of power imbalance is in the choice of journal for publication. Many North American and European researchers prioritize publication of findings in high-impact journals because this is essential for their academic success—promotions, future grants, publicity, and fulfilling funders' expectations (Abimbola, 2019). However, these journals may not be open-access, and as such, published findings may not benefit the local population (Abimbola, 2019). Instead, publications in lower-impact, open-access, international journals and local journals may be more likely to reach their target audience of local policymakers and health care providers (Abimbola, 2019). For African researchers, the impact factor of journals where their work is published may not impact promotion.

It also important to consider who determines what gets published. Global health journals lack diversity and inclusion in their editors and editorial board members. In one study, one third were female, one third were based in LMICs, and 10 of 12 journals were managed by institutions in the United States or Europe (Nafade

et al., 2019). Finally, travel costs and conference fees at international conferences are usually cost-prohibitive for researchers and policymakers from LMICs, so even though the vast majority of global health research is performed in LMICs, the work is presented by partners from HICs. Moreover, these important stakeholders from LMICs are not present for the networking and agenda-setting meetings that occur at these conferences.

As an extreme example of power imbalance, parachute research describes the phenomenon in which scientists from HICs swoop in to investigate a disease in LMICs, collect specimens, administer surveys, and return home for data analysis, often without coordinating with people fighting the disease on the ground or sharing their ultimate discoveries with local communities (The Lancet Global Health, 2018). The benefits to scientists involved in such research may include prestige, funding, low barriers to ethics approval, and even monetary benefits related to copyrighted treatments and diagnostics for the diseases being studied. In dialogue sparked by an editorial in The Lancet Global Health (2018) entitled “Closing the door on parachutes and parasites,” authors emphasized the need for engagement of local research collaborators and inclusive authorship when conducting both primary and secondary data analysis, long-term engagement in capacity building with local staff and institutions (Sheel and Kirk, 2018), and obtaining diverse perspectives “at all stages in knowledge production for global health—from the prioritization of research questions, to the financing of particular research initiatives, and the analysis and interpretation of data” (Smith, 2018). Funders’ inclination to support long-term collaborative research based on equity between collaborators in the Global North and Global South was also highlighted (Bockarie et al., 2018). Yet another consideration is the perspective of study participants in LMICs, which has not been evaluated in any published studies (Lawrence and Hirsch, 2020). Understanding how participants in LMICs experience and interpret research ethics is critical to informing international research standards (Lawrence and Hirsch, 2020) because the use of North American and European research ethics standards is not always suitable in other contexts (Vischer et al., 2016; Wahlberg et al., 2013).

*What actions can be taken to decolonize research in global health dermatology?*

- Confirm that local partners and collaborators agree that the proposed work is relevant to the local community. Ideally, local partners and collaborators should be leading study development.
- During the early stages of study development, consider all potential contributors to the work and discuss authorship roles early on so that study personnel from LMICs have the opportunity for author representation and investigators from LMICs have the opportunity to serve as first and senior authors.
- Couple research goals with the development of LMIC trainees’ research skills and the host LMIC institution’s research capacity. Mentor LMIC scientists to become independent investigators with the ability to generate relevant research questions and compete favorably for international funding opportunities—this is where the real power and sustainability of research capacity development lies.
- Invest in LMIC researchers through funding mechanisms that
  - o Provide salary support for protected time to develop research ideas and serve as lead and principal investigators (Boum et al., 2018). Examples include the NIH Fogarty Global Health Program for Fellows and Scholars, NIH K43 Global Emerging Leader Award, and the Wellcome Trust Developing Excellence in Leadership, Training, and Science Africa award.

- o Support the research capacity development of LMIC institutions. Examples include the NIH D43 International Research Training Grants and National Institute for Health Research’s Global Health Research Centres.

- Ensure that stakeholder input from LMICs is prioritized during funding decisions by subsidizing travel and conference costs for LMIC researchers and policymakers.
- Consider carefully where to submit manuscripts to maximize dissemination to readers who are positioned to make practice or policy changes based on the reported findings.
- Budget for the cost of open-access publishing and conference presentations during project development and in grant applications.
- Diversify the editorial boards of global health journals to include more LMIC representation.
- Reconsider academic promotion criteria at HIC institutions so that individual achievements are not prioritized over work that promotes global health equity (i.e., advancement of LMIC partners, strengthening of LMIC health systems and research capacity; Boum et al., 2018).

## Training

In the last 2 decades, there has been an increase in the number of universities in HICs offering global health experiences. Among surveyed universities in North America, there was an approximate tripling of the number of global health initiatives every 5 years between 2000 (four initiatives) and 2012 (35 initiatives; Matheson et al., 2014). This partly occurred in response to demand from trainees; increasingly, trainees have begun participating in international health experiences during their undergraduate years and expect opportunities for global health work throughout medical school and residency (Gambrah-Sampaney et al., 2019).

Indeed, numerous benefits exist for trainees in HICs that engage in global health learning experiences: an expanded fund of medical knowledge, improved physical examination skills that reduce dependence on laboratory and radiologic tests, increased cultural humility, and enhanced professionalism (Jacobs and Naro, 2019). However, trainees from HIC also impose tangible burdens on host institutions. They may occupy high-demand clinical training slots that would otherwise provide training to local learners and consume resources in already stretched health care and medical education systems (Gambrah-Sampaney et al., 2019).

From an evaluation of the training landscape, it is apparent that more reciprocity and bidirectional relationships are needed. One commonly discussed approach is a 1:1 exchange of learners from HICs and LMICs. Setting up bidirectional exchanges is challenging because programs may encounter prohibitive regulatory policies that are insurmountable due to a lack of institutional will or resources. When bidirectional exchanges do exist, HIC learners traveling to LMIC consistently outnumber LMIC learners traveling to HIC (Adams et al., 2016; Crane, 2011). Recently, there has been discourse on thinking more broadly about what reciprocity looks like. For example, sending learners to LMIC institutions may be a priority for HIC institutions, but not for LMIC institutions; thus, the opportunities provided through reciprocity may not be the same on both sides (Pai, 2020).

In dermatology, there is also a broad lack of access to formal training for many LMIC physicians interested in becoming dermatologists. In addition, the populations of most LMICs have dark skin, and there is a paucity of images in these skin types in the most commonly used dermatology educational resources

(Alvarado and Feng, 2020; Lester et al., 2019). Although there are, in fact, several textbooks and manuals dedicated to skin of color, the cost of accessing these resources in LMICs is prohibitive.

*What actions can be taken to decolonize training in global health dermatology?*

- Partner with health professional schools and training programs in LMICs that express a need for dermatology education and lack local dermatologists to support this need. Examples of dermatology training programs and dermatology curricula developed through transnational partnerships include the Regional Dermatology Training Centre in Tanzania (Fuller and Hay, 2015), Pacific Dermatology Training Centre in Fiji (Tuicakau and Whitfeld, 2017), and dermatology diploma and specialist training programs in Cambodia (Bendick, 2013).
- Establish and support the dermatology priorities of the host country and institution.
- Increase the proportion of images from dark skin types in educational resources that are readily accessible globally.
- Prioritize teaching HIC learners' core global health competencies that have been put forth by multiple organizations (Adams et al., 2016; Eichbaum et al., 2020; Jogerst et al., 2015).
- Ensure that HIC learners are prepared to recognize and respond to the ethical challenges that will arise during their experiences (Gambrah-Sampanye et al., 2019).
- Ensure that learning activities in LMICs uplift, rather than compete with, local priorities (Gambrah-Sampanye et al., 2019).
- Recognize that much of what drives dermatology trainees' interest and participation in global health experiences is a social justice mindset that aspires to health equity for every person, regardless of where they live (Adams et al., 2016). Indeed, data suggest that global health experiences drive future careers in primary care, working with underserved patient populations, or both (Bazemore et al., 2011). Nurturing this interest, such that learners are encouraged to work toward health equity throughout their career, no matter their location or type of clinical practice, should be a priority.

### Direct service delivery

Many physicians from HICs, including dermatologists, seek participation in direct service delivery in LMICs through volunteer work. Some reasons that physicians from HICs may seek these opportunities include expansion of clinical knowledge, practicing medicine without electronic medical record documentation, improving clinical decision making through reliance on history and physical examination skills, and a change in routine (Friauf, 2011; Keelan, 2015; Kolkin, 2018).

While direct service delivery has benefits for both the volunteer and the community served, there are several ways that provision of clinical care without capacity development or health systems strengthening may create harm. First, visiting physicians may erode the local health care system by undercutting local providers offering similar services or disincentivizing local health care systems from providing clinical services. Donated supplies provided by visiting physicians may also disincentivize local organizations and institutions from harnessing or developing supply chains for these products (Stoff and McMichael, 2014). Second, visiting physicians may make medical decisions without adequate awareness of locally available diagnostics, treatments, treatment costs, and accessibility of referral level care. In some cases, physicians may also perform work that is beyond their scope of practice in their home country (Stoff and McMichael, 2014). Third, volunteer trips

may be a time and cost burden to host institutions, and orienting volunteers, securing guest accommodations, and experiencing pressure to be a gracious host may result in shifting of time away from other obligations. These burdens are compounded when volunteers are short term and there are several groups each year.

To avoid some of these potential harms, dermatologists can choose volunteer experiences with organizations that espouse principles of partnership, sustainability, and capacity development. As an example, Health Volunteers Overseas, an American Academy of Dermatology partner, offers volunteer opportunities at five international sites for dermatologists to engage in teaching and mentoring of dermatology trainees and health care providers. Although there are settings in which direct service delivery is a priority, such as humanitarian crises, dermatologists should always strive to prioritize knowledge and skills transfer to local health care providers.

*What actions can be taken to decolonize direct service delivery in global health dermatology?*

- Seek opportunities that emphasize the transfer of dermatologic knowledge and skills to local providers. Patient care should be coupled directly with training of local providers.
- Seek organizations with a continuous commitment to a site, such that the focus is on long-term health care system capacity development and not short-term fixes (Stoff and McMichael, 2015).
- Avoid opportunities that do not engage with a local partner integrated into the local health care system. Exceptions include humanitarian crises, where health care delivery may occur separate from the local healthcare system.
- Honor an ethical obligation to engage in trip preparation to minimize the chance of harm. Predeparture training should include an understanding of local health care services and treatment guidelines, knowledge of the social and political context, and a discussion with prior visitors and local partners about ethical challenges that may arise (DeWane and Grant-Kels, 2018).
- Self-interrogate regarding motivations for involvement in volunteer trips, especially those that are not coupled with local partnership, sustainability, and capacity development.
- Dermatologists planning a volunteer trip are encouraged to attend the Volunteers Abroad sessions at the American Academy of Dermatology Annual Meeting.
- Host sites should also provide an orientation to volunteers that discusses these topics so that volunteers are informed of the host site's policies and best practices.

### Conclusion

In a world with global health equity, we will address social determinants of health worldwide and develop transnational solutions to complex health problems that affect communities everywhere. For dermatologists engaged in research, education, and clinical care across international borders, this will require prioritizing partnership, capacity building, and reciprocity. A two-way flow of resources, knowledge, and experiences between individuals and institutions from HICs and LMICs must be valued and prioritized (Koplan et al., 2009).

As authors, we acknowledge that each individual is at a different place in understanding how colonialism and structural racism endure in society, medicine, and dermatology. As our own understanding of this complex topic has evolved, we have come to recognize that our own choices in global health work have not always

promoted equity, and for this, we apologize. We acknowledge the errors made. We are strongly committed to approaching our current and future global health work with humility and in a manner that prioritizes equity, inclusion, and decolonization.

### Conflicts of interest

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