Defense Health Agency (DHA) Clinical Communities Speaker Series

APR 2023 CCSS: Targeted Interventions Focused on the Whole Health and Wellbeing of the Military Child

S04: Diversity, Equity and inclusion in Pediatric Medicine

Resource List

Science has traditionally been driven by curiosity and followed one goal: the pursuit of truth and the advancement of knowledge. Recently, ethics, empathy, and equity, which we term "the 3Es," are emerging as new drivers of research and disrupting established practices. Drawing on our own field of GIScience (geographic information science), our goal is to use the geographic approach to accelerate the response to the 3Es by identifying priority issues and research needs that, if addressed, will advance ethical, empathic, and equitable GIScience. Organized around the 3Es we discuss ethical issues arising from locational privacy and cartographic integrity, how our ability to build knowledge that will lead to empathy can be curbed by data that lack representativeness and by inadvertent inferential error, and how GIScientists can lead toward equity by supporting social justice efforts and democratizing access to spatial science and its tools. The Proceedings of the National Academy of Sciences of the United States of America (2022) conclude with a call to action and invite all scientists to join in a fundamentally different science that responds to the 3Es and mobilizes for change by engaging in humility, broadening measures of excellences and success, diversifying our networks, and creating pathways to inclusive education.

FDA's Office of Minority and Health Equity (OMHHE) (2022) advances regulatory science by supporting research that contributes to the reduction of health disparities and advancement of health equity. For example, supporting research that contributes to advancing inclusion of racial and ethnic minority populations in clinical trials, and the continued evaluation of FDA regulated products by demographic data including, but not limited to, ethnicity, race, age, and geography.

From a health care perspective, lack of equity translates to higher costs. "When we exclude particular populations, decrease access, increase barriers, or provide subpar care, then at the end of the day, those people are going to utilize health care dollars at a much higher rate," says Mary Fleming, MD, president of the nonprofit Reede Scholars, Inc. and program director of the *Leadership Development to Advance Equity in Health Care* program at the Harvard T.H. Chan School of Public Health (2022). A DEI representative or office can pinpoint these areas—like lack of access to public transportation, for example—and propose effective solutions that can lead (directly or indirectly) to better outcomes.

Structural barriers are thought to be partly responsible for workforce disparity in academic medicine. Tenure and academic promotion systems place value on productivity in early career phases through which peer-reviewed publications, external funding for research, and leadership positions are heavily weighted. However, there are significant funding gaps where racial and ethnic minorities are less likely to receive funding from organizations such as the National Institutes of Health. In addition, early career is a time where competing demands overlap such as with childbearing and childrearing responsibilities. These systems-level metrics for promotion are considered to be structural barriers that prevent academic promotion leading to the "leaky pipeline." The National Science Foundation is addressing barriers to career development, promotion, and retention through funding for institutional changes, and are modifying tenure track timing to better align with work-life balance for young professionals. An awareness of the barriers serves as a starting point in circumnavigating these structural challenges.

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