Further Incorporating Diversity, Equity, and Inclusion Into Medical Education Research

Alicia Fernandez, MD

There is widespread agreement within academic medicine leadership circles on 2 separate yet related issues: the need for the physician workforce to become more representative of the U.S. population and hence much more ethnically and racially diverse, and the need for more and better training for all physicians in meeting the clinical needs of an increasingly diverse patient population.[1,2] For health equity researchers who consider medical education with these 2 priorities in mind, medical education research could do much to help achieve these goals. Traditional medical education researchers could take this on by further incorporating questions of diversity, equity, and inclusion into their work. In what might be a useful meme, diversity, equity, and inclusion have been described as being invited to the dance (diversity), actually being asked to dance (inclusion), and having them play our music (equity).

Incorporation of diversity, equity, and inclusion themes into medical education research means both asking different questions and asking traditional questions somewhat differently. Diversity, equity, and inclusion questions should be considered throughout education research, be it focused on students, faculty, or patients.

Diversity is often defined via numbers of students or faculty from underrepresented in medicine (UIM) backgrounds. This lends itself to a focus on a "different" set of questions. Medical education research has contributed in multiple ways—for example, by examining the impact of holistic review on admission to medical schools,[3] issues of recruitment and retention of diverse faculty,[4] and evaluations of programs designed to increase minority student interest in academic careers.[5] This work has been impactful: Many medical schools and residency programs now incorporate holistic review into their admissions processes.[6] Yet, much more needs to be done in this arena via research on "different questions" to further define the benefits that diverse learners bring to patients and to the training environment[7]; compare the effectiveness of different approaches to increasing medical school admissions, such as the establishment of institutional partnerships with minority-serving institutions versus more traditional casting of wide nets; define the characteristics of effective pre–medical school diversity-focused programs; and continue to refine the medical school application process itself to eliminate unnecessary barriers. Very similar questions can be asked about faculty diversity including evaluations of programs designed to increase the numbers of faculty from UIM populations.[8,9] We need to know more about the barriers to a diverse workforce at every step of the pathway for students and for faculty, and we need to know what works to negotiate, overthrow, or otherwise circumvent barriers successfully.

By contrast to research on questions of diversity, relatively little research has been done on inclusion with respect to either students or faculty. Fundamental questions remain unanswered: How do we define and measure an inclusive environment? What are effective steps medical schools can take to increase inclusivity in their teaching content and methods? What is the impact of inclusive educational environments on patients? The explosion of interest in dealing with racist patients,[10] implicit bias,[11,12] and microaggressions[13,14] reflects the growing awareness among medical educators that issues of inclusion need to be examined in clinical settings as well as in the classroom. Here is where traditional areas of medical education research can shed light by asking the usual questions slightly differently. For example, education researchers who study faculty development can investigate how to educate generations of faculty who were not themselves taught about these subjects—and for whom this is not part of their lived experiences—to teach an increasingly diverse student population. What are the best practices in teaching and mentoring across differences? And, once identified, how do we efficiently and sustainably train large numbers of faculty so that the faculty are not themselves an impediment to constructing a more inclusive environment? Student-centered questions—for example, on the student experience of both the formal and hidden curricula—are also clearly important to considerations of competency development, specialty choice, and student well-being.

Issues of faculty development linked to inclusion and educational equity also abound when considering assessment, another traditional area of medical education research. A recent study from the University of California, San Francisco (UCSF) found significant differences in the number of honors awarded to UIM and non-UIM students during clerkships.[15] This difference is likely a combination of faculty assessment bias, bias in assessment methods, and differences in student performance. The literature on student assessment has highlighted faculty variation and the difficulties involved in training faculty to assess students and deliver useful feedback. Incorporating a diversity, equity, and inclusion lens into traditional assessment research would highlight important subquestions on the intersection of possible assessment bias and the inherently subjective world of clinical assessment.

The UCSF study on clerkship honors[15] also reraised a fundamental question: How should medical education evolve so that all students can succeed and have the opportunity to excel? This question, central to the concept of equity pedagogy, should be woven into all discussion

Please see the end of this article for information about the author.

Correspondence should be addressed to Alicia Fernandez, 1001 Potrero Ave. #107, San Francisco, CA 94110; telephone: (415) 206-5394; email: alicia.fernandez@ucsf.edu.

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of competency-based assessment and progression and into all considerations of curricular development. Medical education research should go beyond establishing the mean impact of a curriculum or program to a purposeful examination of the range of success for subgroups of learners, defined more by learning characteristics than by membership in a population group.

An additional, simple example related to inclusion and modification of traditional medical education research would be, when incorporating a diversity, equity, and inclusion lens into studies of student or faculty well-being, to include an a priori plan not only to examine results by gender or faculty department but also to include a focus on the well-being of UIM participants.

The other overarching big set of questions relates to the need to improve care for diverse patient populations. Issues of health care equity are central to all discussions of curricular development. For example, how do we create physicians who can be effective with a range of diverse patients? What does that mean in terms of acquisition of knowledge, skills, and attitudes, or in more contemporary terms, what are the entrustable activities and competencies needed? A recent editorial by Peña and Sklar pointed out that determining a patient's social and environmental risks is not included in a common list of entrustable activities for the senior medical students.[16] How and when should we incorporate these specific skills and content into medical education? What about teaching practicing physicians? Are there forms of learning, such as work with simulators, that are particularly effective or that lend themselves to assessment of competencies? Does the teaching on patient communication undertaken in the preclinical years still hold when assessed before graduation? What do medical students add to discussion of health care disparities?[17] How do we support students to be change agents? And, what is still missing from our curricula? My own pet peeve is the failure until recently at my institution to teach all students to work with interpreters (still working on residents), but there are many areas where curricula need to be strengthened and evaluated, ranging from learning about disabilities to training in obesity prevention. The list of questions is as long as the major public health challenges of our time, and the list of skills and competencies is substantial.

None of this work is easy. Medical education research is still a comparatively young field and one that has been poorly supported by funders. However, when medical education research is linked with the 2 overarching needs of increased diversity and increased capacity for care for diverse populations, research can be funded by the National Institutes of Health. This would require larger networks of researchers and medical schools willing to share data and interventions, and the field has made great strides in this direction over the last 10 years.[18]

To go back to the dance meme: Further incorporating diversity, equity, and inclusion into medical education research can help our academic medical centers get us all to the party, teach both waltz and salsa, and ensure that schools have the right play mix.

It is a wonderful challenge.

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A. Fernandez is professor, Department of Medicine, University of California, San Francisco, San Francisco, California.

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