

Disparities Education: What Do Students Want?

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BACKGROUND: Educating medical students about health disparities may be one step in diminishing the disparities in health among different populations. According to adult learning theory, learners' opinions are vital to the development of future curricula.

DESIGN: Qualitative research using focus group methodology.

OBJECTIVES: Our objectives were to explore the content that learners value in a health disparities curriculum and how they would want such a curriculum to be taught.

PARTICIPANTS: Study participants were first year medical students with an interest in health disparities (n=17).

APPROACH: Semi-structured interviews consisting of 12 predetermined questions, with follow-up and clarifying questions arising from the discussion. Using grounded theory, codes were initially developed by the team of investigators, applied, and validated through an iterative process.

MAIN RESULTS: The students perceived negative attitudes towards health disparities education as a potential barrier towards the development of a health disparities curriculum and proposed possible solutions. These solutions centered around the learning environment and skill building to combat health disparities.

CONCLUSIONS: While many of the students' opinions were corroborated in the literature, the most striking differences were their opinions on how to develop good attitudes among the student body. Given the impact of the provider on health disparities, how to develop such attitudes is an important area for further research.

KEY WORDS: health disparities; health care disparities; focus groups; curriculum development; medical education.

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BACKGROUND

It is estimated that by 2050, more than half of the US population will be made up of ethnic minorities.¹ While data demonstrating the existence of health and health care disparities (hereafter referred to as health disparities) are abundant, much

less is known about successful interventions to overcome and solve these disparities in health. Health disparities are extensive and found across the spectrum of human disease.² Evidence also suggests that the individual medical provider's perceptions and actions may contribute to health disparities.³⁻⁶

Educating medical students about health disparities, therefore, may be one step in diminishing the disparities in health among different populations. The Institute of Medicine suggests that medical school curricula include "the impact of social inequalities in health care and the social factors that are determinants of health outcomes" as a high-priority topic.⁷ Additionally, the Association of American Medical College's Medical Schools Objectives Project recommends that graduating medical students should demonstrate "a commitment to provide care for patients who are unable to pay and to advocate for access to health care for members of traditionally underserved populations."⁸

There are, however, limited examples of⁹⁻¹⁵ and no widespread consensus on what constitutes health disparities education. Further, there are challenges in developing health disparities curricula, including finding space in a crowded medical school curriculum, defending perceptions of such education as "soft science," and the lack of validated course evaluation tools and knowledge assessments.¹⁶

Because there are few health disparities medical school curricula, and scant research on health disparities education, we conducted a qualitative study using focus group interviews¹⁷ of medical students to inform the creation of health disparities curricula. Our objectives were to explore through open-ended query: (1) the content that learners value in a health disparities curriculum and (2) how they would want such a curriculum to be taught.

METHODS

Setting

Albert Einstein College of Medicine is located in Bronx, New York, and serves a predominantly minority and underserved patient population.

Participants

A convenience sample of first year medical students participated in the interviews. The first group (n=10) was made up of students who responded to an invitation to participate in a discussion on health disparities education sent to the entire first year class (n=183) via e-mail. The second group of students (n=7) volunteered to participate from the total of nine students who took a short pilot elective on health disparities.

Focus Group Interviews

The focus group interviews were completed during lunch to foster informality and honest, open expression by participants.¹⁸ The two separate sessions took place in May 2009, lasted 90 min each, were conducted by the same investigator (CMG), and were audio recorded and professionally transcribed for content analysis of the open-ended questions. These semi-structured interviews consisted of 12 predetermined questions, along with follow-up and clarifying questions arising from the discussion.

Data Analysis

Using grounded theory,¹⁹ each transcript was analyzed to identify recurring themes. The codebook was initially developed by the team of investigators (CMG and JBJ), applied, and validated through an iterative process. All data were coded by two reviewers. Differences in coding were reviewed and resolved through discussion and consensus. The study was approved by the Albert Einstein College of Medicine Institutional Review Board.

RESULTS

Student Characteristics

All participants were first year students aged 22 to 28 years. Fifty-nine percent were women, and 71%, 18%, 6%, and 6% self-identified as Caucasian, Asian, Latino, and "Mixed race," respectively. No student self-identified as African American. Minorities constituted a smaller percentage of our sample than (12%) are represented in the entire medical school class (29%).

Themes

Several major themes emerged that identify barriers and potential solutions to the development of a health disparities curriculum. Since both groups emphasized the same major themes, we organized our data using the same categorization scheme for both groups to present the data in a more cohesive format. Themes and representative quotes are presented below.

Barriers to the Development of a Health Disparities Curriculum

The students identified negative student attitudes toward health disparities education as a major potential barrier to the effective development of a health disparities curriculum. Participants expressed views that supported the importance of developing a good attitude about the value of disparities curricula among all students. They felt all students should be exposed to health disparities curricula, predicting that students needing such education most would be least interested in taking an elective. However, they also predicted student backlash against busy work and feeling that the topic was being forced on them.

Things that are required, many people often dislike them for the reason that they are required to do it.

Participants also felt the topic itself could create resentment by mandating exploration of difficult issues and personal biases. *'There's a lot of hindrances with discussing health care disparities, because it's things that relate to...racial profiling and are hard to discuss in a very formal setting.'*

Proposed Solutions to the Barriers

The students proposed several methodologies and potential solutions to the aforementioned barriers including creating a positive learning environment, tangible methods of learning, and skill-based instruction.

Creating a Positive Learning Environment. Participants emphasized the need for a safe learning environment for open and honest discussion. Students with negative attitudes towards health disparities education were felt to threaten the learning environment. To address such students, the groups suggested that some components be mandatory and integrated into the existing curriculum. They suggested having an informal setting, limiting outside reading, the inclusion of relevant non-medical literature, limiting scheduling conflicts, and requiring minimal pre-class preparation in favor of focusing more on rich in-class discussion to make the course more palatable and develop favorable attitudes. For those students with a special interest in the topic, they suggested granting credit for community service participation, selective options within existing courses, elective and summer course options, and encouraging scholarly products resulting from their experiences as alternatives encouraging student involvement while fulfilling requirements of the medical school. *'...having a smaller group situation facilitates discussion, especially if there's no...nagging assignment behind it.'* *'I think something for a future course curriculum is really just focusing on minimizing the time and maximizing that impact that you take away from it.'*

The value of physician faculty to help "legitimize" the course was suggested as another way to reach all of the students; however, the value of non-physician facilitators was deemed equally important. Non-physician facilitators including other students, nurses, community health workers and leaders, and patients were mentioned as a way to overcome the limited amount of time physician faculty may have to lead several small group sessions or panel discussions.

...one of the great parts of this course [the elective] was when...we got to interact with [community leaders] to talk to them about what they saw as health care issues. So to hear from the other doctors about how they see the health care system and to hear from the people themselves who are actually utilizing it was very different and very insightful and helpful.

With regard to addressing subconscious bias and a safe learning environment, a particular emphasis was placed on teaching that bias is not unexpected and itself is not the problem, but that awareness of biases must be raised so that patient care is equitable across populations. *'...It's important to make people aware that, regardless of how they think or how they feel, they act, or whatever, that everyone has these biases. That isn't the problem. Having these ideas doesn't make you a bad person.'*

Tangible Forms of Learning.

Real Patient Interactions. Participants suggested several methods for making health disparities real to students including visiting local underserved communities, following individual families throughout the students' 4 years in medical school, and accompanying patients to their doctor's visits. Additionally, students wanted to practice interviewing actual patients, see faculty role model positive behavior during real patient encounters, and participate in community-based interventions. *'...It's hard to put a face or to make it feel real until you're actually out in the community and seeing it for yourself.'*

Standardized Patients. Whether interviewing patients themselves or learning about them through case-based discussions, the students favored actual patients over standardized patients. *'...Standardized patients, in general, are always exaggerated versions of what happens in real life.'*

Case-based Discussions. Written cases of actual patient-physician encounters were also felt to allow more students to participate in the discussion as opposed to fewer students interviewing standardized patients because of time constraints. Participants felt these case-based discussions could be supplemented with relevant resources about the local populations and their cultural beliefs and specific disparities/prevalence of disease while still learning to treat patients as individuals. *'One case we discussed [in the elective]...ended up being conducive to us really having a conversation about...this family and their own culture, but then also how to extrapolate those ideas and how you would interact with the patient and the family in a broader sense as well.'*

I really want reliable access to information...[on] health disparities. I want...a website...a journal...something I can take with me in the long term. I want a resource.

Role Playing. Another suggestion involved role playing and simulated experiences that allow learners to see the health care system as patients from populations experiencing disparities. *'...and then they say, "You have this illness, and you have this many children, but you only have this much money...What do you do?" And then they give you places you can go. They give you a \$10 bus ticket and say, "You go here. You need to get a translator. You need to go to a clinic." And then, it really shows you how there's so many barriers to the kind of care you can get.'*

Skill-based Instruction. Students' most frequently mentioned suggestion was the use of skill-based instruction to address health disparities. The students did not want to learn about health disparities without also gaining new skills to navigate the medical system, advocate for patients, relate to patients from diverse ethnic and racial backgrounds, and overcome their subconscious bias.

Skill: Navigating the Health Care System. Students expressed concern about working in a medical system they did not understand and could not optimally utilize for patients.

Understanding private versus government-sponsored insurance arose repeatedly, as well as how to help patients gain access to equitable care. *'...it was that idealized [notion of], "I'm going to be a doctor and help people, and anyone who needs the help, I'm just going to give it to them," without really understanding even the barriers that I'll have to work under as a doctor wanting to give care. So what is it from a patient's perspective? Why can't they get the care that they need?...I really want to be taught that.'*

Skill: Patient Advocacy. Advocating for their patients was an important skill valued by the students. They wanted to participate in hands on patient advocacy workshops, both on the individual and the community level. They suggested gaining familiarity with community and health care programs that focus on patient and community advocacy as a way to get involved and contribute to changing the current disparities in health. *'...I continue to ask myself... "What can I do to help? What are the avenues with which I can address this?"'*

Skill: Cross-cultural Communication Skills. The ability to understand patients' concerns, gain their trust, and negotiate acceptable treatment plans in a culturally sensitive way was highly valued by the students. They did acknowledge that there is a potential danger in culture-specific education to perpetuate stereotypes. *'...We just need to give students tools to continue to be aware of cultural opinions of medicine... 'If we know some popular beliefs but not in the stereotypical way that that could be translated to us changing the way we talk to patients.'*

Skill: Recognizing and Overcoming Subconscious Bias. The students were interested in raising awareness of their personal biases and learning how they might impact their individual delivery of patient care. *'...The bias website [Implicit Association Test²⁰] was really...eye opening and very helpful in understanding where I'm coming from and, therefore, how to adjust myself in certain areas or...grab on to what my generalized feelings are... 'It's important for physicians to be knowledgeable of them [biases], so that when physicians enter the realm of practicing medicine, they can treat all of their patients with the respect that they deserve and the respect that is needed.'*

Students were interested in learning how to approach patients in ways that minimize their chances of acting on subconscious biases. *'The point is being able to approach a patient/doctor interaction as a human being and understanding the person across the table, the room, whatever, is a human being as well.'*

Confronting biases early in training was important as they feared becoming jaded and depersonalizing their patients. Students also shared that they enjoyed the opportunity to confront their own biases when placed in clinical situations and thought that reflecting on them was a good learning experience. *'So I think the best way for me to realize my own stereotypes is talking to patients and then going home and realizing, "Wow! I can't believe I said that to them."'*

They felt the medical school had an obligation to teach its students about the individual provider's contributions to health disparities. *'The role of the medical school is to train the best possible physicians in order to deliver the best possible care and get the best possible outcome from all of their patients.'*

regardless of who they are. And so you don't want to be producing physicians who are continuing to not decrease the gaps that exist with health disparities, when you have the opportunity to try and minimize that differential.' '...the idea is for doctors to first do no harm...but, even subconsciously, you're contributing to worse health outcomes.'

The students emphasized the desire to have the opportunity to practice skills longitudinally throughout 4 years of medical school, whether following one family or patient over time, or small group discussions interspersed in the preclinical and clinical curriculum. This would give them opportunities to apply the concepts in actual patient encounters. 'If you're aware that these issues exist, then you'll be able to go and deliver better care...if you have that real world training, then it would make even the basic science courses more interesting.'

CONCLUSIONS

The students perceived a major barrier to the successful development and implementation of a health disparities curriculum to be negative attitudes some students might have towards the subject. They proposed several potential solutions involving the learning environment, including the use of tangible learning methods. From that learning environment they wanted to develop specific skills to combat health disparities.

We were unable to identify another study focusing on students' opinions on disparities education. Of published reports of disparities educational interventions, one focuses on health disparities as a whole, from background to solutions;¹⁵ others focused on specific components of health disparities such as low socioeconomic status,^{11,14} social behavioral sciences,¹³ population health,¹⁰ community-based education and problem solving for the community,²¹ and working with refugee communities.⁹ Still others included a discussion about disparities as a part of a larger course on culture, ethics, etc.²² This work adds to the current literature by open-ended exploration of the views of a potential intended audience of such educational interventions.

The negative attitudes regarding health disparities education that concerned our students have not been previously specifically explored in undergraduate medical education, but the potential for their existence is supported by the fact that many practicing physicians do not believe that health disparities exist.²³ Our participants felt the subject matter needed to be valued by all students and agree with findings that that elective options primarily reach students with preexisting knowledge or interest in the topic.¹⁴ Our participants' views on potential resentment from students not interested in the subject has been reported in circumstances where students feel they have to spend time learning social and behavioral sciences (thought of as "common sense") at the expense of learning the basic and clinical sciences.¹³ With regard to bias, our students predicted student resentment towards exploring their own bias, and it has been recommended that this response should be anticipated in planning such sessions.²⁴

Our students proposed several possible solutions to overcome these barriers. To maintain the learning environment and reach the students less interested in the topic, our learners suggested limiting scheduling conflicts, less pre-work, and extra "credit" as ways to make the material more

palatable. One successful implementation of this concept was achieved by Vela et al.¹⁵ through a 5-day intensive elective course offered before orientation week to incoming first year medical students. That curriculum received the highest rating of any course at their medical school. Our students agreed with others who have had required components for all students and further elective and selective time for those students with a special interest in the topic.^{9,10,14} Specific projects for interested students to culminate their experience in health disparities education are favored by the students and have been used in other curricula.^{9,15} Students also favored an informal, small group discussion setting. This corroborates with expert opinion supporting small group discussion as an effective way to develop positive attitudes among the students and maintain a safe learning environment.^{11,13-15} While some have suggested reading and journaling assignments,²⁵ our students disagree and favor limiting pre-class preparation and having no "nagging assignment." Like our students, nonphysician faculty such as classmates, nurses, and community members are valued in existing curricula.¹⁴

In keeping with our students' opinions regarding bias and the safe learning environment, experts believe that such an environment is critical to providing "a structured, confidential, and nonthreatening environment in which learners can examine their personal beliefs and practices and compare them with beliefs and practices of other cultures."²⁶

The participants also suggested several teaching methodologies that have also been supported by the literature. These include using real patient encounters such as visits to local communities affected by health disparities^{10,14,15,21} and following actual families.¹⁴ Our students further agreed with established interventions favoring real patient case-based teaching²⁶ and role playing.^{15,25} In contrast to published reports supporting the use of standardized patients,^{11,13,25} our students did not consider standardized patients useful for disparities education.

The students wanted tangible learning methods to develop specific skills and knowledge to overcome health disparities including navigating the medical system and learning about insurance. These issues have been addressed in other established curricula by including learning objectives related to understanding access and barriers to health care,¹¹ providing skills to advocate for low-income patients,¹⁴ and teaching the history of Medicare and Medicaid.¹⁵

The ability to advocate on behalf of patients (individually and collectively) was yet another skill valued by our participants. One reported educational intervention required students to write a policy proposal to solve a specific health disparity within the population in which the students are working.¹⁴ In spite of this innovative example and the sentiments of our participants, disparities interventions around policy have not been widely implemented.

Cross-cultural communication skills were also important to the students and supported by a reported curricular intervention⁹ and expert opinion.²⁵⁻²⁷ It is suggested that students learn interviewing approaches and methods that elicit information about the patient's social and cultural context.²⁷ Experts emphasize the importance of learning and applying communication skills to negotiate patients' participation in decisions and treatment suggesting students develop the skills to apply knowledge of socio-cultural issues at the individual level.²⁵ Others also suggest educational interventions focus on

solutions and skill building in effective negotiation across cultures, languages, and literacy levels.²⁶ When looking at culture in health for medical education, the experts stress the importance of focusing on provider attitudes, behavior, bias, and stereotyping.²⁷ Importantly, our students acknowledged the possibility of unintentionally reinforcing stereotypes. This has been warned against by experts stating, "In trying to define cultural boundaries or norms, programs may inadvertently reinforce racial and ethnic biases and stereotypes while doing little to clarify for physicians in training the actual complex sociocultural contexts in which patients live."²⁸

The students also discussed provider's contributions to and the role of personal bias in health disparities. Bias exploration has been tried in an elective format using a 'First Thought' exercise demonstrating biases and stereotypes.¹⁵ Experts have suggested that one teaching goal of a curriculum on disparities should be "to help learners examine and understand attitudes, such as mistrust, subconscious bias, and stereotyping, that practitioners and patients may bring to the clinical encounter."²⁶

Our participants' suggestion that relevant disparities skills be developed in a longitudinal way throughout 4 years of medical school is also supported by the literature.²⁵⁻²⁷ Experts recommend building on didactic sessions through case-based analyses and discussions around the daily care of patients,²⁶ incorporating health disparities education from teaching interviewing skills through to when the students are precepted in a clinical setting,²⁵ and having prepared instructional material on components of culture that span the 4-year curriculum.²⁷ That said, cultural and disparities interventions typically have less than 1 week contact time²⁹ and have largely been concentrated in the preclinical years^{10,13,15,21,22} with rare exceptions.^{11,14} These limited interventions are unlikely to lead to long-term behavior change.³⁰

This work has limitations that should be considered. First, participants were a small number of self-selected students with an established interest in health disparities, and thus, views expressed may not be broadly representative of all students. Further, verbal assessment as opposed to a confidential written assessment may have introduced bias as students may have felt peer pressure to agree. However, we valued this highly interested small sample as their interest resulted in thoughtful responses and rich discussions in which students were able to build off of each other's ideas. Additionally, having a faculty facilitator could potentially influence responses. Certain opinions, such as those regarding standardized patients, may be unique to the experiences of particular students and may not be generalizable opinions. Finally, there may be other as yet untouched aspects of health disparities education that prove useful in future curriculum development that were not queried in the current focus group interviews.

In conclusion, this study of a group representing potential learners targeted for disparities educational interventions provides novel and important information to consider as the pedagogy of disparities education expands. In many instances, students' opinions corroborate with components of existing efforts and/or expert opinion. Medical educators may wish to consider these students' perspectives regarding the learning environment and skill development when developing or revising comprehensive health disparities curricula. The most striking finding is the perceived major barrier of negative attitudes among other students to the development of a health

disparities curriculum. The students proposed rich potential solutions, but understanding the root cause of these negative attitudes requires further investigation. By understanding the root cause of these negative attitudes, specific interventions can be designed to overcome them and facilitate the development of health disparities curricula that benefit all learners.

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REFERENCES

1. United States Census 2000. www.census.gov/main/www/cen2000.html. Accessed January 5, 2010.
2. Services DoHaH. Call to Action: Eliminating Racial and Ethnic Disparities in Health. Potomac, MD: Department of Health and Human Services; 1998.
3. Ayanian JZ, Cleary PD, Weissman JS, Epstein AM. The effect of patients' preferences on racial differences in access to renal transplantation. *N Engl J Med*. 1999;341(22):1661-9.
4. Schulman KA, Berlin JA, Harless W, et al. The effect of race and sex on physicians' recommendations for cardiac catheterization. *N Engl J Med*. 1999;340(8):618-26.
5. van Ryn M. Research on the provider contribution to race/ethnicity disparities in medical care. *Med Care*. 2002;40(1 Suppl):1140-51.
6. Ashton CM, Haidet P, Paterniti DA, et al. Racial and ethnic disparities in the use of health services: bias, preferences, or poor communication? *J Gen Intern Med*. 2003;18(2):146-52.
7. Smedley BD, Stith AY, Nelson AR, eds. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Washington: National Academies Press; 2002.
8. AAMC Medical Schools Objectives Project. Report 1. Learning Objectives for Medical Student Education. Guidelines for Medical Schools. https://services.aamc.org/publications/index.cfm?fuseaction=Product.displayForm&prd_id=198&prv_id=239. Accessed January 4, 2010.
9. Pottie K, Hostland S. Health advocacy for refugees: medical student primer for competence in cultural matters and global health. *Can Fam Physician*. 2007;53(11):1923-6.
10. Chamberlain LJ, Wang NE, Ho ET, Banchoff AW, Braddock CH 3rd, Gesundheit N. Integrating collaborative population health projects into a medical student curriculum at Stanford. *Acad Med*. 2008;83(4):338-44.
11. Turner JL, Farquhar L. One medical school's effort to ready the workforce for the future: preparing medical students to care for populations who are publicly insured. *Acad Med*. 2008;83(7):632-8.
12. Mavis B, Keefe CW, Reznich C. Summer research training programme in health care disparities. *Med Educ*. 2004;38(11):1192-3.
13. Satterfield JM, Mitteness LS, Tervalon M, Adler N. Integrating the social and behavioral sciences in an undergraduate medical curriculum: the UCSF essential core. *Acad Med*. 2004;79(1):6-15.
14. Doran KM, Kirley K, Barnosky AR, Williams JC, Cheng JE. Developing a novel Poverty in Healthcare curriculum for medical students at the University of Michigan Medical School. *Acad Med*. 2008;83(1):5-13.
15. Vela MB, Kim KE, Tang H, Chin MH. Innovative health care disparities curriculum for incoming medical students. *J Gen Intern Med*. 2008;23(7):1028-32.
16. Betancourt JR. Cross-cultural medical education: conceptual approaches and frameworks for evaluation. *Acad Med*. 2003;78(6):560-9.
17. Barbour RS. Making sense of focus groups. *Med Educ*. 2005;39(7):742-50.

18. **Witkin BRAJ.** Planning and Conducting Needs Assessments: A Practical Guide. Thousand Oaks: Sage; 1995.
19. **Glaser BGSA.** The Discovery of Grounded Theory. Strategies for Qualitative Research. Chicago: Aldine; 1967.
20. Project Implicit. <https://implicit.harvard.edu/implicit/>. Accessed November 29, 2009.
21. **Davidson RA.** Community-based education and problem solving: the Community Health Scholars Program at the University of Florida. Teach Learn Med. 2002;14(3):178–81.
22. **Flores G, Gee D, Kastner B.** The teaching of cultural issues in US and Canadian medical schools. Acad Med. 2000;75(5):451–5.
23. National Survey of Physicians Part I: Doctors on Disparities in Medical Care. <http://www.kff.org/minorityhealth/20020321a-index.cfm>. Accessed November 29, 2009.
24. **Murray-Garcia JL, Harrell S, Garcia JA, Gizzi E, Simms-Mackey P.** Self-reflection in multicultural training: be careful what you ask for. Acad Med. 2005;80(7):694–701.
25. **Kripalani S, Bussey-Jones J, Katz MG, Genao I.** A prescription for cultural competence in medical education. J Gen Intern Med. 2006;21(10):1116–20.
26. **Smith WR, Betancourt JR, Wynia MK, et al.** Recommendations for teaching about racial and ethnic disparities in health and health care. Ann Intern Med. 2007;147(9):654–65.
27. **Tervalon M.** Components of culture in health for medical students' education. Acad Med. 2003;78(6):570–6.
28. **Gregg J, Saha S.** Losing culture on the way to competence: the use and misuse of culture in medical education. Acad Med. 2006;81(6):542–7.
29. **Beach MC, Price EG, Gary TL, et al.** Cultural competence: a systematic review of health care provider educational interventions. Med Care. 2005;43(4):356–73.
30. **Engler CM, Saltzman GA, Walker ML, Wolf FM.** Medical student acquisition and retention of communication and interviewing skills. J Med Educ. 1981;56(7):572–9.