7-31-2020

Perceptions of Cultural Competency Among Premedical Undergraduate Students

Reeti Goyal
Loyola University Chicago

Skky Martin
Loyola University Chicago

Dana Garbarski
Loyola University Chicago, dgarbarski@luc.edu

Recommended Citation

Goyal, Reeti; Martin, Skky; and Garbarski, Dana. Perceptions of Cultural Competency Among Premedical Undergraduate Students. Journal of Medical Education and Curricular Development, 7, : 1-7, 2020. Retrieved from Loyola eCommons, Sociology: Faculty Publications and Other Works, http://dx.doi.org/10.1177/2382120520934823

Perceptions of Cultural Competency Among Premedical Undergraduate Students

Reeti Goyal, Skky Martin and Dana Garbarski

Department of Sociology, Loyola University Chicago, Chicago, IL, USA.

Journal of Medical Education and Curricular Development
Volume 7: 1–7

DOI: 10.1177/2382120520934823
SAGE

ABSTRACT

BACKGROUND: Cultural competence is a difficult skill to teach, as it has several operational definitions as well as limited and unstandardized training procedures. Currently, there is no formal cultural competency training at the undergraduate level for students who seek to become a medical doctor. The purpose of this study is to explore perceptions of cultural competence among premedical undergraduates by assessing how they define and understand cultural competency and their knowledge (and sources thereof) of sociocultural realities in health and medicine.

METHODS: Structured in-depth interviews took place in 2016 and 2017 at a medium-sized private college in the Midwestern United States. Twenty premedical students were interviewed. The interviews were transcribed and thematically coded following an inductive, iterative, and systematic process.

RESULTS: Most students can provide a definition of cultural competence that includes at least one component of how it is conceptualized by the Association of American Medical Colleges. However, students focus largely on defining cultural competence as individual attitudes and interaction rather than systemic or structural realities that produce inequalities in health care. When explicitly asked, students varied in the level of detail provided in explaining the social determinants of health (such as race or ethnicity, sex, gender, and socioeconomic status) and varied in the accuracy of their definitions of traditional health practices. Each student noted the importance of training on cultural competence and many placed patients' health at the center of their reason for doing so rather than focusing on their own training as a motivation. Students discussed various aspects of sociocultural differences and the need for physicians to understand patients' outlooks on health care and be able to communicate to patients the purpose of suggested medical treatment, as well as the inherent tension in balancing patients as individuals and members of sociocultural groups. Premedical undergraduate students see their own cultural competence as an informal skill that is gained through social interactions across various areas of life, such as work, family, friends, and school.

CONCLUSION: This study traces the sources of sociocultural information that premedical students will bring to their medical training as well as places where cultural competence can be further explored, practiced, and formally integrated in premedical education.

KEYWORDS: cultural competency, premedical students, social determinants of health, qualitative research

RECEIVED: April 1, 2020. **ACCEPTED:** May 26, 2020.

TYPE: Original Research

FUNDING: The author(s) received no financial support for the research, authorship, and/or publication of this article.

DECLARATION OF CONFLICTING INTERESTS: The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

CORRESPONDING AUTHOR: Dana Garbarski, Department of Sociology, Loyola University Chicago, 1032 West Sheridan Road, Chicago, IL 60660, USA.
Email: dgarbarski@luc.edu

Background

The Association of American Medical Colleges (AAMC) defines cultural competence as the following:

> a set of congruent behaviors, knowledge, attitudes, and policies that come together in a system, organization, or among professionals that enables effective work in cross-cultural situations . . . [combining] the tenets of patient/family-centered care with an understanding of the social and cultural influences that affect the quality of medical services and treatment.[1]

In a diverse society, it is vital that the system of health care can successfully interface with patients of all backgrounds and beliefs. Successful communication is an essential aspect related to quality health care.[2] When physicians are not culturally competent, they are unable to provide health care fully across the diversity of experiences in the population.[2,3] Patients, in turn, may develop a fear of being misunderstood or disrespected, and become deterred from seeking out medical care. This can lead to mistrust across communities and systemically result in large parts of the population neglecting health care.

Measuring and evaluating cultural competence is a complex task within itself, with varying definitions of cultural competence and varying suggestions on how to teach cultural competence. A systematic review of tools for measuring cultural competence showed a range of evaluation methods—quantitative, qualitative, and mixed methods—and within these types, little uniformity exists in the actual measuring techniques and what they assess.[4] The AAMC uses the Tool for Assessing Cultural Competence Training (TACCT) to assess cultural competence in medical school training and preparation for accreditation.[1,5] The TACCT evaluates students across domains such as health disparities, community strategies, bias/stereotyping, communication skills for cross-cultural communication, use of interpreters, self-reflection, and culture of medicine.[1,5]

A recent shift in medical education acknowledges that all future medical professionals require training to learn the

principles and practices of cultural competence. Medical schools increasingly emphasize the humanities and social sciences as sources of cultural knowledge. This trend is reflected in the most recent change to the Medical College Admissions Test (MCAT), which added a social and behavioral sciences section in 2015. Cultural competence training has proliferated as a basic requirement of medical schools in the United States, although many differences in the content and scope of cultural competency training exist across institutions. Furthermore, even with training programs in place, cross-cultural medicine may still be absent from clinical rotations.[6] The separation of theoretical cultural competence from application in practice can leave medical students ill-equipped to face real-life situations and understand the systemic contexts underlying and producing health inequalities.

Some scholars argue that cultural competence is not a curriculum that can be taught simply as a seminar, or more specifically, it should not be taught in isolation from existing medical training. Rather, the skills required to be a culturally competent physician are complicated and require a lifelong commitment to improvement,[6-8] continuing past the completion of and possibly starting prior to medical education. The concept of cultural humility explores this extended understanding, calling for a lifelong commitment to improve on awareness and self-critique through an ongoing, reflective process.[8] Because "cultural competence" itself is the more recognized term, we contend that the original concept of cultural competence could be expanded as a broader umbrella term for the immersive and ongoing learning and reflective processing required to understand the sociocultural diversity of human experiences and how that may interface with the health care system.

Based on critiques of graduate-level training, there is a case for cultural competence training to begin at the undergraduate level. Premedical students may benefit greatly from cultural competence exposure early on—not just for the medical field but for all areas of life. Engel explores the disconnect between premedical undergraduate students and the creation of humanistic physicians, suggesting that premedical students often do not value their undergraduate education as an experience within itself, but more as a requirement to get into medical school.[9] Engel calls this "pre-med syndrome . . . a condition characterized by a clear and vocal deprecation of anything not readily connected to 'getting into medical school'" and finds many instances of premedical students not caring about humanities, social sciences, or patient care.[9] The changes to the MCAT may have helped to mitigate some of the effects of pre-med syndrome, although it might not change the underlying condition (eg, learning the social determinants of health solely for the MCAT).

Current study

Cultural competence is a difficult skill to teach, with differing operational definitions of what comprises cultural competence as well as limited and unstandardized training procedures. Although formal cultural competency training may exist in medical schools, it is rarely formalized at the undergraduate level for students who wish to become medical doctors.[10] The purpose of this study is to explore perceptions of cultural competence in premedical undergraduates by assessing how they define and understand cultural competency and their knowledge and sources of knowledge of sociocultural realities in health and medicine.

Methods

Data

To study cultural competence in premedical undergraduate students, we conducted structured in-depth interviews with premedical students. The study sample consisted of 20 first- through fourth-year undergraduate students who were on the premedical track. Because we thought students' majors would be a source of undergraduates' understandings of cultural competency, we endeavored to sample across majors, although we had an easier time finding premedical students who were science majors. Our final sample consisted of 14 (70%) science majors (such as biology, chemistry, physics, mathematics, and nursing) and 6 (30%) humanities and social science majors (such as history, theology, social work, English, sociology, and psychology).

We recruited premedical students of all majors to participate in the study via flyers and emails sent by professors or academic departments. These interviews were scheduled according to the availability of the participants and were conducted in a reserved, private room on campus. Participants received compensation in the form of US$25 chipotle gift cards, which was paid for using the funding allocated from an undergraduate research fellowship awarded to one of the study authors. Interviews were conducted and transcribed by one of the study authors.

Table 1 shows the sociodemographic characteristics of the 20 participants in this study.

Analytic strategy

Two of the study authors developed an interview protocol (Appendix 1) covering a range of topics related to cultural competency. Using topics from the TACCT,[1,5] the questions asked participants to describe whether and how they feel they have been exposed to the different facets of cultural competency and integral concepts related to cultural competency, such as health disparities and health systems. We also gathered sociodemographic and background information.

Consistent with the constant comparative method in grounded theory, all of the study authors then coded participants' answers for themes in an inductive, iterative, and systematic process from interview transcripts.[11,12] We coded independently and revised the coding scheme through

Table 1. Descriptive statistics of sample (N = 20).

	PERCENT
Race/ethnicity	
Asian	40
Black	10
White	50
Gender	
Women	75
Men	25
Year of study	
Freshman	25
Sophomore	50
Junior	25
Senior	25
Major	
Sciences	80
Social sciences and humanities	20

negotiated agreement. With every change added to the coding scheme, we recoded prior cases to maintain consistency. In our results reported below, we discuss the themes and the number of participants who invoke a theme for the questions related to this analysis.

Results

Defining cultural competence and its importance

When asked to define cultural competence, 12 participants of 20 provided 2 or more of the substantive themes noted below, 4 discussed 1 of the themes, and 4 provided a vague or inaccurate notion of cultural competence. Five participants indicated some uncertainty or requested clarification when asked to define cultural competence.

Regarding their substantive definitions of cultural competence, 10 participants mentioned "understanding" of different sociocultural groups. For example, Participant 17 defined cultural competence as "the ability for someone to understand the perspectives, beliefs, and ideas that originate from someone who does not belong in the same culture as the observer." Five participants mentioned being aware of, recognizing, or acknowledging differences in culture when defining cultural competence; "I would define cultural competence as being aware that not every patient you have in the future comes from the same background as you" (Participant 4). Other themes discussed included communication and interaction (5 participants) and respect (5). As an example of each, Participant 8 noted "Probably how- how you handle yourself in different cultural situations. The way that you act in other cultures and how you can respect other cultures while maintaining your own." Six participants discussed cultural competence as minimizing judgment, preconceived notions, or bias:

> I think it is the ability to recognize that people come from a variety of different world beliefs and backgrounds, and stripping away your preconceived notions of what that means and leaving them where they are, recognizing that people's attitudes are not the same as your own because people have different experiences. (Participant 10)

Overall, 80% of the premedical majors interviewed provided an answer that was consistent with at least part of the AAMC definition of cultural competence provided in their 2005 directive on cultural competence training. However, it should be noted that these definitions, much like the AAMC definition, focused on the cultural competence of individual actors and interactions rather than broader, systemic inequalities in health care.[13]

All participants indicated that they thought cultural competence training should be integrated into premedical training when asked. Their justification for doing so placed patients at the center, focusing on how cultural competence training would affect the quality of the patient-provider relationship (8); the quality of the medical treatment the patient will receive (10); and patients' comfort, needs, and desires (5). In addition, 6 students mentioned how such training allows for an understanding of the social determinants of health, such as race/ethnicity, gender, sex, and socioeconomic status. Indeed, 2 students noted that their choice of major was influenced by wanting to more deeply process and understand sociocultural differences in the world and how that related to medicine. Thus, even though definitions of cultural competence focus on individual actors and interactions, some students expressed an understanding of systemic inequalities as their justification for why cultural competence training should exist for premedical students.

Sources of students' cultural competence

When asked about the areas of life in which they have gained the most cultural competence, students mentioned various ways in which they were—or were not—able to develop cultural competency. Sixteen participants mentioned characteristics of their hometown as sources (7) or not (9) of cultural competence; 10 students mentioned characteristics of their high school as sources (6) or not (4) of cultural competence. When discussing family, participants mentioned their racial or cultural background as a source (9) or not (3) of cultural competence. Of the 9 participants who described their family as a source of cultural competence, 7 of these participants were Asian. Two of the Asian participants mentioned that their parents grew up in a different country, and they attributed this to their exposure of cultural competence. Similarly, 1 of the White participants also mentioned their parents' immigrant status as a source of cultural competence.

Eight participants found the campus culture to be a source of culture competence, largely because it provided exposure to a diverse population of students. However, 4 students describe college as lacking the opportunity to foster cultural competence. Participant 18 noted the following:

> I take a lot of classes where I'm surrounded by people who are all the same as me. Like we're all pre-med, but it seems like we draw into our own social groups within those classes if that makes sense, so um, like a lot of my friends I've noticed are from the same background I am, and that's something I of course need to work on, but that's just, yeah. (Participant 18)

Of the students who mentioned classes as sources of cultural competence, 5 mentioned social science and humanities classes as fostering cultural competence and 3 mentioned science classes as not fostering it. Eight students mentioned work or internship experiences as affording opportunities for cultural competence; only 1 noted that such opportunities were lacking. These internships and work experiences ranged from working in elementary schools, to hospitals to church mission trips in which these participants were exposed to what they called "diverse populations." Four participants reported that traveling abroad was a source of cultural competence. For these participants, immersive experiences in different cultures provided a sense of cultural competence.

Students then described how they were exposed to formal and informal training in cultural competence as an undergraduate. The most common answer was through specific work, club, or other organizational experiences on or affiliated with their campus (12). The participants comprise a very involved set of students, who are likely following the advice commonly given to students applying to medical school (eg, https://students-residents.aamc.org/choosing-medical-career/article/how-medical-schools-review-applications/). These students described an array of clubs and organizations on their campus that actively promote or foster understanding of sociocultural diversity that they themselves were involved in or benefited from. Interactions with others (11) and noting specific classes (9)—mainly sociology, anthropology, and psychology—were also common ways in which students said they were trained in cultural competence informally.

Culture's impact on health

To understand students' perspectives of cultural competency, we also asked them how they define culture. All students were able to provide an answer about what culture means to them (5 providing 1 theme, 15 providing 2 or more), although the content of those answers varied. The themes noted in participants' definitions of culture were background regarding how one was raised (9); identity (5); norms, customs, traditions, or values (11); beliefs, ideas, or attitudes (7); behaviors, practices, or habits (6); socialization (4); language (3); and religion (2). These themes directly align with common definitions of culture; the AAMC defines culture as "integrated patterns of human behavior that include the language, thoughts, actions, customs, beliefs, and institutions of racial, ethnic, social, or religious groups."[1]

Students were then asked to explain if and how culture affects medicine. Nine participants discussed what we call cultural philosophies of health care, mainly noting differences between Western medical practices and others, but also discussing differences among Western societies in the provision of and access to health care. Ten participants delineated the importance of physicians' understanding, realization, or recognition of the way cultural differences affect medicine. Similarly, 5 students described how a patient's culture may lead to resistance to treatment or medical instructions. Participant 1's discussion of how culture affects medicine illustrates these first 3 themes:

> Culture definitely affects medicine in that some cultures, especially a lot of Eastern cultures don't accept a lot of Western medical practices and physicians need to be fully aware of that and they need to make accommodations for cultural background of patients. (Participant 1)

In addition, 7 students discussed how a physician's approach to communicating or interacting with patients played a role in how culture affects medicine. Three students discussed specific examples of how religion may influence health. Overall, participants discussed various aspects of sociocultural differences and the need for physicians to understand patients' outlooks on health care and be able to communicate to patients the need for and purpose of the medical treatment that they are suggesting.

When participants were asked more specifically to describe the most appropriate way for health care providers to interact with different cultures, they used notions such as being unbiased (8); being accepting, understanding, or respectful (8); and trying to learn about patients' culture or different cultures more generally (8). A few participants noted the difficulty in balancing these interests, noting depersonalization or maintaining boundaries when referring to ways to interact with different cultures (2) or the inherent tension in balancing patients as individuals and the influence of their sociocultural background (4). As an example of the latter, Participant 10 stated "So it's kind of- it's a tricky spot because on one hand you do have to recognize that an individual is shaped by their culture, but they're not entirely determined by their culture." These students identify the tension of training medical professionals for medical interactions, diagnoses, and treatments that are both unbiased and culturally competent, as medical decisions based on a patient's sociocultural identity ignore variation within groups, while ignoring this sociocultural identity neglects potentially important differences that might exist between a majority of group members.

Students' understanding of some features of cultural competency

Traditional health practices. As an assessment of students' cultural competency, we asked participants to define traditional health practices and assessed their answers based on the definition of traditional medicine from the World Health Organization (WHO):

> The sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.[14]

Seven participants incorrectly defined Western medicine as traditional health practices. For many of these participants, traditional health practices are the "standard," "usual," or "expected" practices that occur in the United States. Four participants provided a definition that was similar to the WHO definition. In one of the most expansive definitions provided, Participant 16 defined traditional health practices as "local or more culture . . . it involves treatments, medication, and homeopathic medicine that occurs by people who are not learning modern medicine, so anything that's not taught in an accredited medical school, or is not dispensed by a pharmacy." Five participants described traditional health practices as valid forms of health care only if they do not interfere with or replace Western medicine. Participant 14 stated the following: "I'm all for people doing it as long as it doesn't actually get in the way of like actual treatment." These examples indicate that several students have a limited amount of knowledge on traditional health practices and were viewing it as secondary or subordinate to Western medicine, with which they are familiar. Interestingly, we noticed that the 2 participants, who noted that they learned about traditional health practices from a specific class, also had a definition of traditional health practices that closely aligned with the WHO definition. This bolsters the case for an integrated curriculum that teaches the concept of traditional health practices at the undergraduate level.

Understanding the social determinants of health. We also asked participants to describe what they know about some of the social determinants of health: "And what do you know about factors such as sex, gender, race, ethnicity, and socioeconomic status and how they affect health?" Thirteen students gave specific examples that demonstrated knowledge of these topics, 3 students answered that they did not know or gave imprecise answers, and 4 did both: demonstrated knowledge on some of the determinants and said they did not know or gave imprecise or incorrect answers for others. In students' answers, we found variation in the types of disparities in health outcomes or health determinants across some of these different factors (because the question prompted students to consider these), such as access to health care by socioeconomic status or differences in health outcomes by race and ethnicity. Two students discussed the social determinants of health as systemic influences: ". . . And it's just kind of engrained in the social system" (Participant 5).

One interesting feature of these answers was that the level of explicitness of the examples varied: an explicit comparison describes how there are better/worse/different outcomes for one group compared with another group, an implicit comparison indicates better/worse/different outcomes for a specific group without comparing it with another group, and a vague comparison is one in which the student describes that there are differences in a health outcome or determinant of interest but does not specify for which group. Seven participants made at least 1 explicit comparison, 13 made at least 1 implicit comparison, and 9 made at least 1 vague comparison. With respect to the highest level of specificity in discussing the social determinants of health, 7 made an explicit comparison, 7 made an implicit comparison, and 3 made a vague comparison. The fact that 14 students were able to make at least one implicit or explicit comparison when asked to demonstrate knowledge on the social determinants of health indicates a developing understanding of the topic—one necessary (although not sufficient) component of cultural competence.

Discussion

We examined how undergraduate premedical students understand cultural competence and some of its component parts prior to medical school. Most students can provide a definition of cultural competence that includes at least one of its domains, but the focus is largely on individual attitudes and interaction rather than systemic issues. Students varied in the level of detail provided in explaining the social determinants of health and defining traditional health practices. All students thought training on the notion of cultural competence was important and placed patients' health at the center of their reason for doing so, rather than focusing on their own training as a motivation. Students discussed various aspects of sociocultural differences and the need for physicians to understand patients' outlooks on health care and be able to communicate to patients the purpose of suggested medical treatment, as well as the inherent tension in balancing patients as individuals and the influence of their sociocultural background.

Premedical undergraduate students see their own cultural competence as an informal skill that is gained through social interactions across various areas of life. These areas include but are not limited to family, friends, classes, and work. Depending on their positionality, these areas of life provide a vehicle to learn cultural competence for some students and not others. Although many students felt they had acquired some cultural competence through various opportunities in their life, it is important to note that this is a haphazard and piecemeal approach to learning the diversity of human experience and its implications for health.

One of the goals of AAMC's cultural competence training directive is awareness of one's own cultural background and biases,[1,5] and this was evident among some students. When asked about the definition and impact of stereotyping on patient care, students used concepts such as "assumption," "judgment," "bias," "prejudice," and "discrimination" and traced mainly negative effects of stereotyping on patient care. In addition, many students, both White and students of color, associated "Whiteness," Christianity, and middle-to-upper class communities with a normative culture where culture competence is lacking, yet students do not seem to view White America as a culture in itself. Students may benefit from an introspective look at White American culture and how this plays into various power structures, especially those present in health care and medicine. This type of sociocultural knowledge requires a formal education in which these systemic and hidden inequalities are uncovered and laid bare for students.

Classes on the interrelated concepts of cultural competence or humility are generally taught in medical school, and it is clear that these students will arrive at medical school with a cursory yet incomplete understanding of the notion of cultural competence and its import for medical practice. This raises the question of whether undergraduate premedical students could benefit from beginning the ongoing, immersive, and reflective processing required for cultural competence prior to medical school with systematic training at the premedical level. Melamed et al[10] described a curriculum that can be used to teach cultural competence at the undergraduate level: training students, testing their cross-cultural skills, and providing them with volunteer clinical opportunities to practice their skills. Metzl et al[13] developed a curriculum on structural competency for undergraduates, which works to bridge the gap between individual and institutional bias, recognizing the social, economic, and political conditions that lead to health inequalities. Students we interviewed describe cultural competency at individual and interactional levels but were often able to articulate more systemic issues in the provision of health care through the social determinants of health—a curriculum on structural competency could bridge this gap and allow students to enter medical school with a firm grounding in both.

One limitation of this study is that in-depth interviews are not generalizable to the broader population of premedical students in the same way a probability-based survey study would be. In addition, the students interviewed were all from one university. However, what we lose in breadth we gain in depth, allowing for a deeper understanding of the broad and varied understandings of cultural competence that students will bring to medical school to frame future research and teaching applications. In addition, we note that the means of recruitment (voluntary) may lead to response bias in part by attracting students who were interested in this topic, meaning that these results overestimate the level of understanding of some components of cultural competence. However, it also indicates that premedical students are interested in discussing topics such as sociocultural differences, privileges, and inequalities and integrating these into their undergraduate education.

Conclusions

Cultural competence is a difficult skill to teach, with differing operational definitions of what comprises cultural competence as well as limited and unstandardized training procedures. Given the complexity of cultural competency as a learned skill to be continually developed, explicit training for cultural competence could begin at the undergraduate level. By exploring perceptions of cultural competence among premedical undergraduates, we see how they define and understand cultural competency and their knowledge of sociocultural realities in health and medicine. As a result, we delineate the sources of sociocultural information premedical students will bring to their medical training and places where cultural competence can be further explored, practiced, and taught prior to medical school. The results of this study should be used to inform future research and programs on integrating cultural competence training in premedical curriculum for undergraduates.

Acknowledgements

This study is based on work supported by the Provost's Office, the Graduate School, and the Gannon Center for Women and Leadership at Loyola University Chicago. Opinions expressed here are those of the authors and do not necessarily reflect those of the sponsors or related organizations.

Author Contributions

RG conceived of the study. RG and DG developed the interview schedule. RG conducted and transcribed the interviews. RG, SM, and DG developed the codes. SM and DG performed the analysis. All authors contributed to the final manuscript.

ORCID iD

Dana Garbarski https://orcid.org/0000-0002-7764-9751

REFERENCES

1. American Association of Medical Colleges. Cultural competence education. https://www.aamc.org/system/files/c/2/54338-culturalcomped.pdf. Published 2005. Accessed March 30, 2020.
2. Kaihlanen A, Hietapakka L, Heponiemi T. Increasing cultural awareness: qualitative study of nurses' perceptions about cultural competence training. *BMC Nurs*. 2019;18:38-39.
3. Marshall JK, Cooper LA, Green AR, et al. Residents' attitude, knowledge, and perceived preparedness toward caring for patients from diverse sociocultural backgrounds. *Health Equity*. 2017;1:43-49.
4. Kumaş-Ta Z, Beagan B, Loppie C, MacLeod A, Frank B. Measures of cultural competence: examining hidden assumptions. *Acad Med*. 2007;82:548-557.
5. Lie D, Boker J, Crandall S, et al. A revised curriculum tool for assessing cultural competency training (TACCT) in health professions education. *MedEdPORTAL*. 2009;5. https://www.mededportal.org/doi/full/10.15766/mep_2374-8265.3185.
6. Kripalani S, Bussey-Jones J, Katz MG, Genao I. A prescription for cultural competence in medical education. *J Gen Intern Med*. 2006;21:1116-1120.
7. Gregg J, Saha S. Losing culture on the way to competence: the use and misuse of culture in medical education. *Acad Med*. 2006;81:542-547.
8. Tervalon M, Murray-García J. Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education. *J Health Care Poor Underserved*. 1998;9:117-125.

9. Engel M. Achieving 'narrative flow': pre-medical education as an essential chapter of a physician's story. *J Med Humanity*. 2005;26:39-51.
10. Melamed E, Wyatt L, Padilla T, Ferry RJ Jr. Patient-based cultural competency curriculum for pre-health professionals. *Fam Med*. 2008;40:726-733.
11. Charmaz K. *Constructing Grounded Theory*. Los Angeles, CA: SAGE; 2014.
12. Corbin J, Strauss A. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Los Angeles, CA: SAGE; 2007.
13. Metzl JM, Petty J, Olowojoba OV. Using a structural competency framework to teach structural racism in pre-health education. *Soc Sci Med*. 2018;199:189-201.
14. World Health Organization. Traditional medicine. https://www.afro.who.int/health-topics/traditional-medicine. Published 2020. Accessed April 1, 2020.

Appendix 1

Interview schedule.

QUESTIONS	DOMAIN
1. What year are you in school? 2. What are your majors and minors? 3. How long have you been at Loyola? 4. So briefly describe for me your reasons for pursuing medicine. 5. And how are you currently involved in medicine as an undergraduate, whether that is through volunteering or research or anything else? 6. What area of medicine do you intend to practice in?	Demographic and background questions
7. How would you define cultural competence? 8. How important is it to integrate cultural competence training into the premed track at Loyola? 9. Describe the areas of your life from which you feel you have gained the most cultural competence. 10. Do you feel like you were exposed to (cultural competence) in high school or maybe outside of school in general? 11. In what ways are you exposed to cultural competence training as an undergraduate, formally and informally?	Definitions and sources of cultural competence
12. And what do you know about factors such as sex, gender, race, ethnicity, and socioeconomic status and how they affect health? 13. How would you feel that some of these factors are significant from a patient's standpoint? 14. How do you feel those factors are viewed from a physician standpoint?	Social determinants of health
15. What does the term "culture" mean to you? 16. Explain if and how culture affects medicine. 17. Explain if and how religion affects medicine.	Culture's impact on health
18. What does the term "traditional health practices" mean to you? 19. What and where have you learned about traditional health practices?	Traditional health practices
20. Explain your knowledge on health care systems and how they may help or hinder health. 21. What are some internal issues within the health care system that you are aware of, whether that is our health care system or health care systems in different countries?	Systems of health care
22. What does the term "stereotyping" mean to you? 23. What do you feel is the impact of stereotyping in health systems as a physician who is stereotyping?	Stereotypes
24. Describe your knowledge on patterns, causes, and effects of health and disease in a population.	Knowledge of population health
25. Describe some of your experiences in being exposed to different cultures.	Experiences with culture
26. How have you seen the culture of your family or friends affect their own health? 27. To your knowledge, what is the most appropriate way to interact with different cultures in the medical field? 28. What factors do you feel are the most important in contributing to health and why?	Personal experiences/opinions