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Abstract

Purpose

To describe how racial microaggressions may affect optimal learning for underrepresented health professions students.

Method

The authors conducted focus groups and individual interviews from November 2017 to June 2018 with 37 students at University of California, Davis and Yale University who self-identified as underrepresented in medicine or nursing. Questions explored incidence, response to, and effects of racial microaggressions, as well as students' suggestions for change. Data were organized and coded then thematic analysis was used to identify themes and subthemes.

Results

The data showed consistent examples of microaggressions across both health professions and schools, with peers, faculty, preceptors, and structural elements of the curricula all contributing to microaggressive behavior. The 3 major themes were: students felt devalued by microaggressions; students identified how microaggressions affected their learning, academic performance, and personal wellness; and students had suggestions for promoting inclusion.

Conclusions

The data indicated that students perceived that their daily experiences were affected by racial microaggressions. Participants reported strong emotions while experiencing racial microaggressions including feeling stressed, frustrated, and angered by these interactions. Further, students believed microaggressions negatively affected their learning, academic performance, and overall well-being. This study shows the need for leadership and faculty of health professions schools to implement policies, practices, and instructional strategies that support and leverage diversity so that innovative problem-solving can emerge to better serve underserved communities and reduce health disparities.

Increasing the diversity of the health professions workforce has become a national priority because of the known value that underrepresented providers bring to a culture of health and health equity.[1,2] Nevertheless, health professions (HP) schools still struggle to recruit and support underrepresented students.[3] A strategy for supporting underrepresented HP students may be through promoting inclusion by mitigating racial microaggressions that occur during students' educational experience. Racial microaggressions are a form of exclusion and marginalization, the prevalence and impact of which has not been explored thoroughly in HP schools to our knowledge. This study describes how racial microaggressions presented a barrier to optimal learning for underrepresented HP students in classroom, clinical, and organizational environments.

Racial microaggressions are subtle statements and behaviors that unconsciously communicate denigrating messages to people of color.[4] Racial microaggressions are distinguished from deliberate acts such as racial epithets, physical assaults, and blatant racism that leave no doubt in the mind of the receiver about the intention of the perpetrator.[5] Racial microaggressions can be an output of unconscious bias, which refers to the beliefs and prejudices we hold that reside outside of our awareness.[6] Perpetrators of microaggressions are usually unaware that they have engaged in a demeaning exchange.[5] Although racial microaggressions are often subtle, recipients may feel conflicted as they simultaneously experience a negative emotion, try to determine what was meant, and then decide how to respond.[5] The term "micro" is used because the aggression might seem trivial or harmless to those who do not share the trait or identity targeted.[7] However, the emotional response triggered by a microaggression usually does not feel trivial or harmless to the recipient.[5]

Racial microaggressions are particularly difficult to deal with because of their intangibility. Researchers conducted a study to examine depletion in cognitive resources resulting from exposure to racial prejudice cues.[8] They used a sample of 250 Princeton University undergraduates; 122 black and 128 white students. They found that racial prejudice can affect cognitive functioning, but does so differently in white subjects than black subjects. White subjects experienced the greatest cognitive impairment when they saw blatant prejudice, but black subjects experienced the greatest impairments when they saw ambiguous evidence of prejudice (i.e., microaggressions). They concluded that black people are better prepared than white people to cope with blatant prejudice, but are particularly vulnerable to cognitive impairment resulting from exposure to ambiguous prejudice (a level of prejudice that white persons may not even register).

Several studies have explored racial microaggressions as experienced by students of color in higher education.[9–12] These studies found commonalities in experiences of racial microaggression, including feeling out of place and invisible; feeling that professors had lowered expectations of them and tended to draw negative conclusions about them; and reports of subtle and not-so-subtle incidents of racism. Another study found that students of color experience microaggressions at higher rates than do European American students, and that those who experience higher rates of racial microaggressions were at higher risk for anxiety that may threaten their academic performance.[9]

Administrators and academicians at institutions of higher learning must understand the harmful effects that underrepresented students experience as a result of being subjected to microaggressive behavior. Chronic racial microaggressions create stress which, cumulatively, can wear down cognitive function, flatten self-esteem, impair productivity, and damage relationships—all of which can lead to diminished learning and academic performance.[9–13]

HP schools across the nation are acknowledging the need for a diverse HP workforce, and are ramping up efforts to recruit and admit more diverse cohorts of students. However, efforts to create inclusive learning environments or to ensure the success of underrepresented students often are insufficient. The literature has documented the presence of racial microaggressions in academia,[9,10,12–14] but little is known about how underrepresented HP students experience racial microaggressions. We conducted this qualitative study with the intention of exploring how underrepresented HP students experienced racial microaggressions, and if and how those experiences inhibited learning, academic performance, and well-being.

Method

From November 2017 to June 2018, we conducted focus groups and individual interviews with nursing and medical students from University of California, Davis and Yale University who self-identified as underrepresented in medicine or nursing. For this study, we defined underrepresented in HP as black, Latinx (a non-gender specific term for Latino/a), Native American, or Southeast Asian. We gave students the option of participating in individual interviews or focus groups, because some underrepresented HP students preferred to discuss their experiences in a group setting with peers to support and validate them, while other students preferred the privacy of an individual interview. Our sampling included schools of medicine and schools of nursing in two well-regarded, predominantly white universities[*] on opposite coasts of the United States. We recruited students via email, classroom announcements, and snowball sampling. Semi-structured, open-ended discussion questions remained consistent throughout interviews and focus groups. We asked follow-up questions to pursue ideas and thoughts, as well

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[*] Percentage of underrepresented minority students at the universities ranged from 25% to 27%, excluding Southeast Asian students, who were not disaggregated from Asian students in university reports.

as to clarify meanings. Students received a definition of racial microaggressions during the opening of the interview or focus groups (see Supplemental Digital Appendix 1, at http://links.lww.com/ACADMED/A772). Two of us [K.A.B., D.L.] one female, one male; one East Coast, one West Coast; and one a nurse, one a physician, respectively) conducted the interviews. Both are HP scholars of color with extensive experience working with HP students. Both researchers interviewed the first participants together to ensure consistency in their interviewing style. Interviews and focus groups took place in private conference rooms or offices and lasted 20–90 minutes. The interviews were audio-recorded and then transcribed. The study was approved by the Institutional Review Board of the University of California, Davis Office of Research and the Yale University Human Investigation Committee.

We organized and coded data using NVivo 11.0 software (QSR International Ltd.). Thematic analysis within a social constructivist framework (understanding that there are multiple truths and realities that are socially constructed) enabled us to identify themes and subthemes through pattern identification and the number of mentions across the data set. This means that although participants offered insights about many nuanced experiences that they described, only the major themes of the data are reported in this study. We determined data saturation after a sample size of 37 when familiar themes recurred without new insights. Investigator triangulation and expert peer review methods established the validity and trustworthiness of the data. The research team independently analyzed and coded data, then compared, discussed, and agreed upon themes. The team consisted of five individuals (K.A.B., D.B., R.G.C., R.O., D.L.), representing multicultural interprofessional perspectives that contributed to the data interpretation. Following completion of data analysis, six colleagues (not among the author team) with expertise in supporting students of color in HP education conducted a peer review of de-identified raw data to "weigh in" about the plausibility of themes.

Results

The total sample size was 37, 22 medical students, 14 nursing students, and 1 physician assistant student; 24 women and 13 men; 17 black, 6 bi/multiracial, 12 Latinx, and 2 Southeast Asian students. The group represented all years of their respective schools; the majority of medical students were second-year, while the distribution of nursing students was fairly equal Fifteen students participated in focus groups, and 22 engaged in individual interviews. Representative quotations from participants are by type of setting (interview [I] or focus group [FG]). The examples of racial microaggressions were remarkably consistent across the type of profession and HP school. Racial microaggressions came from numerous sources, including peers, faculty, preceptors, and structural elements of the curricula. The three major themes of the data were: students felt devalued by microaggressions; students identified how microaggressions influenced their learning, academic performance, and well-being; and students had suggestions for promoting inclusion (see Table 1).

Theme 1: Students felt devalued by microaggressions

The first theme identified was how participants felt microaggressions devalued the perspectives, experiences, and contributions of underrepresented medical and nursing students. This rich dataset yielded several subthemes, including feeling underrepresented and isolated, discounted and devalued contributions, assumptions of intellectual inferiority, and the hidden curriculum teaching biological inferiority.

Underrepresented and isolated. This subtheme contextualized the underrepresentation of students of color that contributes to experiences of isolation. Participants expressed an acute awareness of how few individuals of color were at their institutions:

There were only two [Latinas] in my class in a class of almost 90 who started. I became

very aware of how different I was from the general student body. I stand out very quickly

in a classroom full of people who don't look like me. (I 3H)

I think there is isolation because I feel excluded in conversations. I prefer to not be in that

position, so I spend all my time by myself. At the beginning of the year, I tried really hard

to get to know my classmates and their friends, but after some point, I just gave up. (FG 31)

Another student described a similar experience, but noted a simultaneous awareness of being

overly visible as the only person of color, but invisible when it came to opportunities:

The visibility factor, it is like there is this thing of being invisible and highly visible as

the person of color. You know, you're passed up for opportunities a lot, and at the same

time, there is a magnifying lens over you watching you for everything you do. (FG 204)

Discounted and devalued contributions. In addition to an awareness of the underrepresentation

of people of color in their schools, participants reported having their perspectives or

contributions discounted and devalued by dominant groups in their learning settings:

Sometimes I feel like I do have valid input to contribute to my class, but I feel like just

because of my accent or just because of my nationality, people think I'm stupid by the

way that I'm treated in class. (I 3E)

If I know the answer to something, or maybe I kind of doubt myself and I'll say it but,

maybe not as assertively sometimes, it's not really given credit. Or someone else will

repeat it, and oftentimes I feel like it's the white guy that repeats it, and then they get the

credit. (FG 206)

Assumptions of intellectual inferiority. Participants described experiences in which peers and faculty doubted or were surprised by their academic ability:

> One example is where everyone was asking, "Okay, what did you get on this exam?"
> And people would say, "I got an A, a B, or I had to retake it." And I didn't even want to
> mention it, but I was specifically asked, and so I said, "I got 100 percent on this exam."
> And people would not believe it for some reason. And even though other people had the
> same type of grade as me, everyone was kind of surprised and didn't take me seriously.
> So, I don't know if it's because of, you know, because of me being black. (I 4A)
>
> I raised my hand and answered the question. She [the instructor] shot in front of the
> whole class and said, "[I 3E], can we get someone else's input. I don't need your input. I
> need an educated answer; we don't need your guess." At that moment, the whole class
> went quiet, and that deterred me now from speaking up in class and actually saying my
> opinion because I feel like if I say it, I might get rejected or shot down. This is coming
> from a professor who was supposed to be inclusive. (I 3E)

The hidden curriculum: taught biological inferiority. Multiple students described experiencing microaggressions within the structure of the curricula. The most prevalent example was content that professed the existence of a genetic predisposition to health conditions. According to the students, some faculty taught that race-based biological inferiority, rather than structural inequities and other social aspects, is responsible for undermining the health of many individuals and communities. One participant summed this up by saying:

> But there are other microaggressions, like lecture. Maybe they'll talk about a disease,
> and then the next thing they say is the ethnicities with the highest incidents. And I'm
> thinking, wow. I'll be the one to ask, "so what is it about this ethnicity that makes them
> that way?" And they [the lecturer] point to genetics. And I'm like, "Well, we're 99.9

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percent alike. So, is it genetics that's making the change?" And then that's when me and the lecturer are at a standstill. [Then the lecturer says] "It's not genetics, but I don't really know the reason. So, let's move on." (I 2A)

Theme 2: Impact of microaggressions on learning, academic performance, and well-being

Theme 2 suggests that, for many students, microaggressions are not just a minor inconvenience or irritation, but may be detrimental to students' learning and well-being. Students spoke of having to engage in therapy during their HP training, some for the first time in their lives, because of microaggressions and other race-related stress. The stress that some of these students relayed included diminished confidence in themselves and their ability, such as second-guessing themselves when that was never their habit. Four subthemes that emerged illustrate the dimensions of this impact: stress, anxiety, and concentration; divesting in discourse; the "diversity tax"; and faces of resilience and coping.

Stress, anxiety, and concentration. Medical and nursing schools are inherently stressful because of the heavy academic load and rigorous performance expectations. In addition to this stress, underrepresented HP students described an additional burden they must navigate. Stress, anxiety, and concentration constituted the most prominent subtheme related to the impact of microaggressions:

I've had to go on anxiety meds for depression because of the stress that we go through … having to go to therapy when I had never gone to that before getting into medical school. So, I feel, I don't know if it's a consequence of medical school in itself or the microaggressions…. (FG 1B)

I think the more pebbles you add to your pouch, the heavier it gets to drag with you as you go through school or go through any difficult journey in life. There were many instances when I thought I wasn't going to make it through the school. I [have] never

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doubted myself like I have here. Like I wasn't good enough to be here, that it was a mistake and that I would go back home a failure and disappoint my family. It was super upsetting. (I 3H)

Divesting in discourse. This subtheme describes the silencing effect that microaggressions have on the voices of underrepresented HP students. Students described withdrawing from both contributing in class and from social interactions:

It [microaggressive behavior] has had an impact on me academically. In the past, if I had questions, I would have just raised my hand. I wouldn't have thought twice about it, and I would have sought out the answer. Now I think twice. In fact, every day before I go to school, I look at this thing I wrote for myself that says, "Please the teacher. Melt into the metal. Stay silent." I try to look at that and read that every day before I leave the house to remind myself to keep my head down and keep my mouth shut—not draw any attention to myself. (I 4B)

I don't feel like I should open up to be ridiculed by this other student, so I just stay quiet. (I 2E)

The diversity tax. This concept refers to the expectation that people of color take on the burden of addressing and solving the diversity issues in their organization. Students described feeling pulled away from their studies to "show up" at diversity-related meetings and events. They also described an added responsibility of having to explain to, or educate, their classmates about inequities and injustices:

And I feel like that's been the hardest where I often feel like I just want to study, but I don't have time to study because I'm going to all these meetings about things that are going on, and things that are wrong, and things that I want to change, organize for ourselves, that the school is not doing for us. (FG 1A)

I don't want to spend the time and energy telling people, "oh, that's wrong." Because

people should know better, but sometimes they don't. So then I usually just spend time

and energy on that when, maybe, I could use it to focus on other stuff that is more

important, like class, and reading, and learning. (FG 28)

Faces of resilience and coping. A few participants stated that coping with the experiences of

microaggressions made them work harder to prove themselves, which they felt likely influenced

their grades favorably. Others acknowledged that although the outcome may have resulted in a

better grade, there may be a cost to resilience:

Aside from just feeling annoyed with the person or whatever the case may be, I feel like

I'm able to kind of just push through it and do what I need to do, and I don't know if that

just comes from dealing with these things for so long. (I 3K)

It made me work so hard to prove her wrong that I ended up doing so well on my final.

Like a grade that is almost impossible to get! I pushed myself. The only thing is I am a

little afraid. The truth is [that] drive is good, but the type of drive that got me there is not

a good type of drive. (I 3L)

Theme 3: Student suggestions for promoting inclusion

Using a positive deviance approach to understand what can be done to create inclusion

excellence, students were asked about their thoughts on strategies. Students had multiple

suggestions for promoting inclusion in HP schools.

Diversity and allyship. Nearly every student stated an awareness of the lack of representation of

students and faculty of color in clinical and academic HP settings. The most prevalent

recommendation from students, therefore, was to diversify the student body, faculty, staff, and

leadership. In addition to diversification, students described the concept of allyship, referring to

the important role that white people play in promoting diversity and inclusion:

I think there needs to be more of an effort to have a more diverse community of students, faculty, and administrators in the school. (I 4B)

Ultimately, this is a white-dominated space and probably will be for a very long time. Having white allies in the administration would be really helpful. (FG 37)

Curriculum reform. Students further stated that curriculum reform was needed. They felt that race and ethnicity should be de-emphasized as the basis for health issues, while placing greater focus on social determinants of health and promoting health equity:

Not everyone can take a U.S. Health Justice course, so we need to find a way to really integrate this into our curriculum so that everyone is getting exposed to these things at least at some foundational level. (I 3I)

If they really want to keep advertising the fact that we're a diverse school, [they] need to show that not just in admission numbers but in the curriculum, too. (FG 1A)

Open conversations. Students went on to say that as part of curriculum reform, classroom discussions should include open conversations about race, ethnicity, and racism:

We kind of miss the core of what we're talking about, and we're really talking about racism. And I think we should get back to having those real uncomfortable conversations. I feel like at [names university] we are uncomfortable with having uncomfortable conversations. (I 2G)

Safe spaces. Finally, students expressed a desire to have both informal and formal safe spaces to connect with others who have similar backgrounds:

I don't know if it needs to be a physical space or just a place, where students of color could go to either debrief or just talk. BE. Just be. A place where there are no judgments. (I 3L)

It would be nice to kind of have a safe space with faculty and classmates where they could just talk about what's going on. (I3C)

Discussion

We found that the daily experiences of underrepresented HP students were affected by microaggressions related to their racial and ethnic identities. Participants reported strong emotions while experiencing racial microaggressions, including feeling stressed, frustrated, and angered by these interactions. These findings align with previous studies related to racial microaggression experiences in higher education.[9–14] Our study found that students believed microaggressions detracted from their learning and academic performance, which was also consistent with the literature.[9–13] Finally, students indicated that microaggressions affected their overall well-being, especially when unmitigated by peers, faculty and/or the institutional cultural climate. The multi-institutional, cross-coastal, interprofessional approach to this study suggests a climate of poor or inadequate inclusivity that may exist across schools, geographical locations, and different health professions. These data indicate that we should direct further attention to the culture of inclusion across institutions and health professions. In addition, several important findings from the third theme may offer guidance for change.

Health care systems must have providers who equitably represent the diversity within the communities they serve. The perspectives of underrepresented health providers are vitally needed to promote curricula, research, policies, and resource allocation that reflect the needs of underserved communities.[15,16] The impact that microaggressions have on learners conflicts with efforts to increase diversity in the HP pipeline. Participants suggested that true representation of different racial and ethnic minorities could increase a sense of community and inclusion. Students also proposed open conversations to improve interpersonal, intergroup, and institutional relations. They suggested a strategic review of written materials and teaching strategies to

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encourage structural competency (identifying health inequities in relation to the institutions and social conditions that determine resource allocation[17]) and to promote cultural humility. These suggestions serve as a call to action for HP schools to comply with stated missions and values related to diversity, equity, and inclusion.

Accrediting bodies for HP schools, such as the Liaison Committee on Medical Education (LCME) and American Association of Colleges of Nursing (AACN), have an important influence on the policies and practices of HP schools and may be helpful in holding schools accountable for inclusive learning environments. The LCME included Standard 3.3 (Diversity/Pipeline Programs and Partnerships) into its accreditation requirements, which establishes expectations for recruitment and retention of students, faculty, and staff of color. To promote inclusive learning environments and student well-being, additional language could be added to Standard 3.3 requiring educational institutions to conduct periodic climate surveys, to establish policies to ensure inclusion excellence, and to compel curricula to uphold an anti-biased reflection of patients and health conditions.[18] The AACN has accreditation language in its Standard III-G about exposing students to individuals with diverse life experiences as well as accreditation expectations for recruiting diverse students and faculty. However, it could hold nursing schools to even higher standards for diversifying the nursing workforce as well as accountability for inclusion excellence and curricula that teach social determinants of health. This study demonstrates a significant gap in the HP education scholarship related to understanding microaggressions as experienced by underrepresented minority HP students, with implications for future research. To our knowledge, interventional studies examining microaggressions and/or inclusive learning environments are scarce, suggesting the need for more research in this area. We focused on racial microaggressions specifically, and did not explore microaggressions categorized by identities other than race and ethnicity. Investigation to

understand microaggressions based on additional identities, as well as intersecting social identities such as gender and gender identity, would constitute another worthy research direction. Such a focused study would add a valuable layer of insight into students' experiences of inclusion, or lack thereof. Because participants also identified the curriculum as a source of microaggressions, that would be another important area of inquiry. Additional research into whether curricula that integrate social determinants of heath and health equity mitigate the prevalence of microaggressions would produce valuable data.

Conclusions

Students bravely shared their experiences and insights on racial microaggressions so that educators and academic leaders can employ innovative approaches and adjustments to encourage more inclusive climates in health professions schools. Supporting students by mitigating and ameliorating racial microaggressions is necessary to create inclusive learning environments that help underrepresented minority students not only survive HP schools but also to thrive and reach their full academic potential. This study is a call to action for HP schools' leadership and faculty to implement policies, practices, and instructional strategies that support and leverage diversity so that innovative problem-solving can emerge to better serve underserved communities and reduce health disparities.

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Table 1

Data Themes and Subthemes, With Additional Quotations, From a Study of 37 Underrepresented Medical and Nursing Students' Experiences of Racial Microaggressions, University of California, Davis and Yale University , 2017–2018

Theme and subtheme	Quotation[a]
Students felt devalued by microaggressions	
Underrepresented and isolated	• I was the only visible minority in our graduating cohort. (I 3G) • I'm one of just two students in a class who is a minority student. (I 3L)
Discounted and devalued contributions	• There were times when people would not acknowledge anything that I said [and] when people almost seem to go out of their way to challenge things that I'd say. There were times when people would give a slight sort of acknowledgment but quickly move on to show that they weren't comfortable, not interested in what I had to say. There were many, many instances. (I 3J) • That's been my experience with topics that I want to be able to contribute to; I am immediately crowded over by other voices that feel like they have the authority on those conversations that, most of the time, are not even about them. (I 3L)
Assumptions of intellectual inferiority	• There are some cases where a professor would kind of, I wouldn't say talk down but feel surprised if I said something that … they didn't expect. (I 2B)
The hidden curriculum: taught biological inferiority	--
Impact of microaggressions on learning, academic performance and well-being	
Stress, anxiety, and concentration	• But I have noticed at times it has affected studying. So, I guess concentration, like instead of concentrating on studying or the task I have at hand I would be thinking about that a little bit. (I 2B) • You're performing, and you're always stressed, how are you going to learn?… But when you're learning, and you're feeling like you're already expected to fail that is not a good feeling. (FG 1D)

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Divesting in discourse	• The first year of med school for me was really tough because of social interaction with peers who were very much different from me and who didn't like me a lot based on the microaggressions that they did. All the processing that happened for me led me to become super disinvested and disengaged from the social scene. (FG 33)
The diversity tax	• I think that it takes a lot of energy educating people because once you are aware of knowledge, you want to educate people about their behavior, but constantly educating people takes a lot of time and energy. (FG 35)
Faces of resilience and coping	• Although I feel like it [experiencing microaggressions] is to a lesser extent as the year went on because I've kind of gotten used to it, which may or may not be a good thing. (FG 22)
Student suggestions for promoting inclusion	
Diversity and allyship	• I think admitting more students with various, different identities would definitely help. (FG 35)
Curriculum reform	• Within the curriculum, I don't see as much diversity in ideas or inclusiveness, and I think that could be improved. (I 2B)
Open conversations	--
Safe spaces	--

Abbreviations: I, interview; FG, focus group.

aEach individual has been assigned either a number or number/letter combination to maintain confidentiality]].

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