ORIGINAL RESEARCH

A Health Disparities Lecture for Child and Adolescent Psychiatry Fellows

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Introduction: Mental health disparities are prevalent among marginalized communities, and racism and discrimination are significant contributors. Nevertheless, health disparities education is lacking in Child and Adolescent Psychiatry (CAP) fellowship programs. In response, this study offered a lecture and educational resources to CAP fellows and sought to measure their impact.

Methods: A two-hour lecture was given to CAP fellows on mental health disparities, the history of racism in psychiatry, social determinants of health, structural competency, implicit bias, and immigrant health. A comprehensive resource list on health disparities, mental health, and race was provided to attendees. Anonymous pre- and post-lecture surveys were distributed to evaluate the impact of the lecture and were analyzed with a paired sample T-test.

Results: Eleven fellows attended the lecture. Six participants completed both surveys. Pre-lecture survey respondents desired more learning about racism and health disparities (75%) and more resources to learn independently (88%). All respondents reported having a better understanding of health disparities and race after attending the lecture. There was also a statistically significant increase in how much learning participants reported receiving on the Cultural Formulation Interview (CFI) after the lecture ($p<0.05$).

Discussion: This lecture helped fill a gap in CAP education related to racism and health disparities. However, future studies should include a larger and more diverse sample, and evaluate for downstream effects on patient care. Future directions include expansion of the lecture into a series, CFI practice opportunities, and greater distribution of the list of resources to encourage self-learning on health disparities.

Keywords

health disparities • medical education • child and adolescent psychiatry

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Introduction

Mental health disparities within psychiatry are prevalent. Members of marginalized racial and ethnic groups have less access to needed mental health services than their white counterparts, and are more likely to receive poor quality care when treated.[1] Indeed, people of color experience inequities related to healthcare access,[1] diagnosis of severe mental illness,[2] misdiagnosis,[3] effective treatment,[4] and reported medical coercion.[5]

Racism and bias are known contributors to health disparities.[6] In marginalized communities, structural forces[7] that perpetuate chronic poverty,[1] housing and employment instability,[7] and increased exposure to violence,[8] may all negatively impact mental health. Perceived discrimination itself is highly associated with depression,[9] anxiety,[9] chronic stress,[10] and poor self-esteem.[11,12] When considering the effects of racism on children and adolescents, the magnitude is significant and long-term.[13]

The Accreditation Council for Graduate Medical Education (ACGME) began requiring health disparities education for resident physicians in 2004; however, there has not been widespread integration of health disparities curriculum in residency programs since.[14] Within Child and Adolescent Psychiatry (CAP) fellowships, structural, historical, and economic factors are considered to be less important than familial factors, and are allotted less instructional time.[15] Even when included, structural and historical social determinants (e.g., "institutionalized poverty and racism, community history") are often taught less effectively than all other social determinants of health categories.[13] Indeed, these topics are not routinely included in medical training and there are few examples of formal didactic curricula in the literature. Currently, there is only one other published lecture on racism and health disparities for CAP fellows in MedEd Portal, where qualitative feedback from trainees on the lecture were unanimously positive.[16]

Medical training has been moving toward competency-based training and a focus on "continuous professional development."[17] Including education of health disparities and racial inequities in formal curricula indicates to trainees that knowledge of these topics is expected in order to provide sound medical care.[18] The goal of this study was to address the lack of validated educational materials currently being used to teach CAP fellows about health disparities by offering a lecture and comprehensive resources. This study also sought to measure the impact that the lecture and resources had on how CAP fellows understand health disparities and their ability to further broaden their knowledge.

Methods

Lecture (Appendix A)

The lecture was presented to the CAP fellows at The University of Michigan as part of the fellows' weekly required didactic series. It took place via zoom over the course of two hours in May 2021. The fellows were asked to complete anonymous surveys immediately before and after the lecture. The lecture covered several broad topics as follows: an overview of mental health disparities by race; a history of racism in psychiatry; actionable education on social determinants of health, structural competency, and implicit bias; immigrant health and competency in healthcare; and a list of resources.

Resources (Appendix B)

A comprehensive list of resources was provided as part of the lecture series with the goal of encouraging learners to have an action plan for further growth, learning, and development. Resources included mental health resources for Black communities; information on structural racism and structural competency; guidance on how to talk to children about race, equity, and injustice; guides for psychiatrists to talk to their patients about race and racism; and organizations focused on health disparities in mental health.

Evaluation (Appendices C and D)

The study was deemed as exempt by the Institutional Review Board at The University of Michigan. The effectiveness of the lecture was evaluated using optional surveys before and following the lecture via Qualtrics.

The administered surveys were created by the authors of this study. The surveys collected demographic information where participants self-reported their current year of training, gender, and race/ethnicity. Survey questions assessed confidence around knowledge of health disparities and their impact on health, self-reported ability to identify strategies to minimize the influence of unconscious bias, familiarity with the Cultural Formulation Interview (CFI), and awareness of resources on health disparities, diversity, and race. Additional questions assessed prior teaching on the topics of racism and health disparities, developmental challenges in immigrant children, and the CFI. Participants rated their ability to self-reflect, grow, and remain curious about the role of diversity in psychiatry, whether they routinely displayed sensitivity to diversity in psychiatric encounters, could discuss the effect of their own cultural background during interactions with patients, and serve as a role model or teacher of compassion, integrity, and sensitivity to diverse populations (Table 1). Changes in the pre- and post-lecture surveys were analyzed with a paired sample T-test with a p-value set to <0.05. Descriptive statistics were analyzed in Qualtrics.

Table 1. Likert Scale Survey Questions

I am ____ confident about current health disparities in child/adolescent psychiatry				
1 = Not	2 = Somewhat	3 = Very		
I can describe how health disparities and race relate to overall health				
1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
I am able to identify strategies to minimize the influence of unconscious bias				
1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
I am ____ familiar with the Cultural Formulation Interview				
1 = Not	2 = Somewhat	3 = Very		
I am able to use elements of the Cultural Formulation Interview when working with patients and families				
1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree

(*Continued*)

Table 1. (*Continued*)

I am aware of the resources and tools to help me grow and learn as it relates to issues around health disparities, diversity, and race				
1 = No, I am not aware of any resources	2 = Yes, I am aware of resources and I have enough	3 = Yes, I am aware of resources but I desire more		
How much learning takes place around the topic of racism and health disparities?				
1 = None and not desired	2 = None and more desired	3 = Some but not enough	4 = Just right	5 = Too much
How much learning takes place around the topic of developmental challenges in immigrant children				
1 = None and not desired	2 = None and more desired	3 = Some but not enough	4 = Just right	5 = Too much
How much learning takes place around the topic of the Cultural Formulation Interview?				
1 = None and not desired	2 = None and more desired	3 = Some but not enough	4 = Just right	5 = Too much
I am able to demonstrate the capacity for self-reflection, empathy, and curiosity about and openness to different beliefs and points of view, and respect diversity				
1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
I am able to provide examples of the importance of attention to diversity in psychiatric evaluation and treatment				
1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
I routinely display sensitivity to diversity in psychiatric evaluation and treatment				
1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
I am able to discuss my own cultural background and belief and the ways in which these affect interactions with patients				
1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
I serve as a role model and teacher of compassion, integrity, respect for others, and sensitivity to diverse patient populations				
1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree

Finally, the post-lecture survey asked additional questions, including assessment of the efficacy of the speaker and participant satisfaction using quantitative and qualitative feedback (e.g., "*Was this lecture helpful for you? If yes, please explain;*" "*Do you have suggestions that would improve the delivery of this lecture? If so, please describe*").

Results

Eleven CAP fellows attended the lecture. 6 attendees completed both pre- and post-lecture surveys. Demographic information (Table 2) revealed that participants were predominantly in their 1st year of fellowship or PGY5 (67%), identified as female (83%), and White or Caucasian (33%).

Among pre-lecture survey participants (N=9), 88% desired more resources and tools to learn about issues related to health disparities, diversity, and race. The majority of participants desired to learn more about topics related to racism and health disparities (75%), developmental challenges in immigrant children (100%), and the CFI (100%).

On pre- versus post-lecture survey analysis, there was no statistically significant change in confidence regarding health disparities in CAP (2± 0, 3 ± 1, p=0.08), self-reported ability to identify strategies to minimize the influence of unconscious bias (4 ± 1, 4 ± 1 p=0.61), self-reported ability to use elements of the CFI when working with patients and families (3 ± 1, 4 ± 0, p=0.2), or awareness of resources and tools for learning about issues around health disparities, diversity, and race (3 ± 1, 3 ± 0, p=0.36). There was a statistically significant increase in reported amount of learning around the CFI after the lecture (2 ± 0, 3 ± 1, p = 0.03) (Table 3).

Among post-lecture survey respondents, 83% found the lecture speaker to be "effective" or "very effective." All respondents (100%) felt that the lecture was helpful and that they had a better understanding of health disparities and race after attending the lecture.

Table 2. Participant demographics

Sample Characteristics		**N (%)**
Year in training	PGY 5	4 (67%)
	PGY 6	2 (33%)
Gender	Male	1 (17%)
	Female	5 (83%)
	Non-binary	0 (0%)
	Prefer not to say	0 (0%)
	Another option not listed	0 (0%)
Race/ethnicity	American Indian/ Alaska Native	0 (0%)
	Asian or Asian American	1 (17%)
	Black or African American	0 (0%)
	Hispanic, Latino, Latina, Latinx	0 (0%)
	Middle Eastern or North African	1 (17%)
	Native Hawaiian or Pacific Islander	0 (0%)
	White	2 (33%)
	Another option not listed	1 (17%)
	Prefer not to answer	1 (17%)

Table 3. Pre- versus post-lecture survey results

Survey item	Pre-Mean ± SD	Post-Mean ± SD	Average Change	P value
I am ___ confident about current health disparities in child/adolescent psychiatry	2 ± 0	3 ± 1	1	0.08
I can describe how health disparities and race relate to overall health	4 ± 0	4 ± 1	0	0.61
I am able to identify strategies to minimize the influence of unconscious bias	4 ± 1	4 ± 1	0	0.61
I am ___ familiar with the Cultural Formulation Interview	2 ± 1	2 ± 0	0	1.00
I am able to use elements of the Cultural Formulation Interview when working with patients and families	3 ± 1	4 ± 0	1	0.20
I am aware of the resources and tools to help me grow and learn as it relates to issues around health disparities, diversity, and race	3 ± 1	3 ± 0	0	0.36
How much learning takes place around the topic of racism and health disparities?	3 ± 1	3 ± 0	0	0.17
How much learning takes place around the topic of developmental challenges in immigrant children	3 ± 1	3 ± 1	0	0.61
How much learning takes place around the topic of the Cultural Formulation Interview?	2 ± 0	3 ± 1	1	**0.03**
I am able to demonstrate the capacity for self-reflection, empathy, and curiosity about and openness to different beliefs and points of view, and respect diversity	5 ± 1	4 ± 1	-1	0.74
I am able to provide examples of the importance of attention to diversity in psychiatric evaluation and treatment	5 ± 1	4 ± 1	-1	0.61
I routinely display sensitivity to diversity in psychiatric evaluation and treatment	4 ± 1	4 ± 1	0	1
I am able to discuss my own cultural background and belief and the ways in which these affect interactions with patients	5 ± 1	4 ± 1	-1	0.36
I serve as a role model and teacher of compassion, integrity, respect for others, and sensitivity to diverse patient populations	4 ± 1	4 ± 1	0	1

Examples of qualitative feedback participants reported when asked what was helpful in the lecture included, "*comprehensive considerations of disparity*;" "*learning about the CFI interview*;" "*great resources*." When asked whether the lecture should be expanded into a lecture series, participants reported, "*I would love to see this course expanded into several lectures that would allow for a dive into each subject briefly reviewed (i.e., a background/hx lecture, one about social determinants of health, healthcare, inequality, etc.)*"; "*Practice with breakout rooms for the CFI*."

Discussion

Strengths

The objectives of this lecture were to help CAP fellows develop the knowledge, attitudes, and skills necessary to understand and address health disparities, and to encourage learners to have an action plan for further growth, learning, and development. This study revealed that most current CAP fellows at this institution desired more teaching on health disparities, immigrant children development, and the CFI, as well as specific tools and resources to further their learning about racism and health disparities. Given the current gap in CAP education on racism and mental health disparities, the development of this lecture responded to an important need, addressing the desired and necessary discussions around health disparities among CAP fellows. Though there were few statistically significant findings in the pre- vs. post-lecture survey analysis, the lecture did address the aforementioned topics of interest for learning.

The CFI was of particular interest to participants. This interview protocol allows clinicians to gather information that improves culturally sensitive diagnosis and treatment by focusing on the patient's experience and social context,[19,20] and can improve physician communication and rapport with culturally diverse patients after receiving just one hour of training.[19] Future iterations of the lecture can further enhance learning related to the CFI by including opportunities to practice among peers.

Qualitative feedback also suggested that learners appreciated the list of resources due to its "comprehensive considerations of disparity." The purpose of providing resources was to serve as a comprehensive fund of information to facilitate learners' growth and to be shared with others to perpetuate learning and conversations around health disparities. Respondents cited that they desired access to more resources, which the authors of this paper interpreted as an indication that they are interested in empowering themselves to better care and advocate for their patients. As health disparities education continues to evolve and its long-term impacts are measured, the medical community may benefit from a more centralized database of evidence-based resources for developing health disparities curricula for residents. This is particularly salient, as people of color are often seen as experts for their peers to learn about racism and disparities, and are more often tasked with advancing health equity and developing didactic materials compared to their white counterparts, thereby increasing their workload relative to their white peers.[21] Their responsibilities are further complicated by a lack of sufficient resources and compensation for these efforts.[21] Access to curricular resources may encourage trainees of all races to equip themselves with knowledge on these topics, potentially increasing the number of people willing to develop and implement health equity curricula and alleviate the burden that many minority resident physicians experience throughout their training.

Limitations

Despite the strengths of this paper, there were also several limitations. In addition to the small sample sizes, participants also predominantly identified as White, representing a potential bias in what participants reported finding most effective in the lecture and what future directions were suggested. The lecture is part of a series that CAP fellows are required to attend on a weekly basis; therefore, the positive feedback affirms that the lecture was beneficial for this program. However, as the lecture series expands, it will be necessary to diversify the sample of respondents to ensure that the lecture meets the interests and perspectives of a more diverse workforce.

Furthermore, while there is general consensus on the importance of providing high-quality, patient-centered care to all patient populations, the extent to which health disparities education in residency and fellowship improves patient outcomes is difficult to ascertain. Most published studies focus on educational outcomes,[22] which may not always correlate with more equitable, culturally appropriate care. Future studies are needed to develop and examine methods for tracking the impact of health disparities education on patient care. Additionally, it is incumbent to go beyond recognition of social determinants of health and equip physicians-in-training with resources and advocacy skills that address upstream determinants of health.[23] Residents and fellows must also be aware of their own biases[24] and identify ways to combat the effects of their unconscious biases in order to decrease the perpetuation of disparities due to prejudice on the part of the clinician.

Conclusion

The overall positive response elicited in this study suggests that aspects of the lecture could be integrated into other CAP fellowship programs, or provide structure, guidance, and content for other health disparities curricula within graduate medical education. Future directions include presenting this lecture on an annual basis to CAP fellows and gathering data on its effectiveness. Based on participants' feedback, additional elements will be incorporated in future iterations of the lecture, including allocating time to practice the CFI, more widely distributing the list of resources to increase accessibility of this education, and hosting a journal club with the included articles. Health disparities education is essential throughout medical training and this lecture serves as a model for such education in CAP programs.

Additional File

Additional file for this article can be accessed at: 10.3998/mjm.6360.s1.

References

1. **Office of the Surgeon General (US), Center for Mental Health Services (US), National Institute of Mental Health (US).** *Mental Health: Culture, Race, and Ethnicity: A Supplement to Mental Health: A Report of the Surgeon General*. Substance Abuse and Mental Health Services Administration (US); 2001. Accessed October 16, 2022. http://www.ncbi.nlm.nih.gov/books/NBK44243/.
2. **Nazroo JY, Bhui KS, Rhodes J.** Where next for understanding race/ethnic inequalities in severe mental illness? Structural, interpersonal and institutional racism. *Sociol Health Illn*. 2020;42(2):262–276. doi:10.1111/1467-9566.13001.

3. **Moreno FA, Chhatwal J.** Diversity and inclusion in psychiatry: The pursuit of health equity. *Focus Am Psychiatr Publ*. 2020;18(1):2–7. doi:10.1176/appi.focus.20190029.
4. **Hankerson SH, Suite D, Bailey RK.** Treatment disparities among African American men with depression: Implications for clinical practice. *J Health Care Poor Underserved*. 2015;26(1):21–34. doi:10.1353/hpu.2015.0012.
5. **Tran DQ, Ryder AG, Jarvis GE.** Reported immigration and medical coercion among immigrants referred to a cultural consultation service. *Transcult Psychiatry*. 2019;56(5):807–826. doi:10.1177/1363461519847811.
6. **Nelson A.** Unequal treatment: Confronting racial and ethnic disparities in health care. *J Natl Med Assoc*. 2002;94(8):666–668.
7. **Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT.** Structural racism and health inequities in the USA: Evidence and interventions. *Lancet Lond Engl*. 2017;389(10077):1453–1463. doi:10.1016/S0140-6736(17)30569-X.
8. **Fitzpatrick KM, Boldizar JP.** The prevalence and consequences of exposure to violence among African-American youth. *J Am Acad Child Adolesc Psychiatry*. 1993;32(2):424–430. doi:10.1097/00004583-199303000-00026.
9. **Priest N, Paradies Y, Trenerry B, Truong M, Karlsen S, Kelly Y.** A systematic review of studies examining the relationship between reported racism and health and wellbeing for children and young people. *Soc Sci Med 1982*. 2013;95:115–127. doi:10.1016/j.socscimed.2012.11.031.
10. **Clark R, Anderson NB, Clark VR, Williams DR.** Racism as a stressor for African Americans. A biopsychosocial model. *Am Psychol*. 1999;54(10):805–816. doi:10.1037//0003-066x.54.10.805.
11. **Schmitt MT, Branscombe NR, Postmes T, Garcia A.** The consequences of perceived discrimination for psychological well-being: A meta-analytic review. *Psychol Bull*. 2014;140(4):921–948. doi:10.1037/a0035754.
12. **Greene ML, Way N, Pahl K.** Trajectories of perceived adult and peer discrimination among Black, Latino, and Asian American adolescents: Patterns and psychological correlates. *Dev Psychol*. 2006;42(2):218–236. doi:10.1037/0012-1649.42.2.218.
13. **Trent M, Dooley DG, Dougé J, Section on Adolescent Health, Council on Community Pediatrics, Committee on Adolescence.** The impact of racism on child and adolescent health. *Pediatrics*. 2019;144(2):e20191765. doi:10.1542/peds.2019-1765.
14. **Fernandez A.** The unacceptable pace of progress in health disparities education in residency programs. *JAMA Netw Open*. 2020;3(8):e2013097. doi:10.1001/jamanetworkopen.2020.13097.
15. **Kronsberg H, Bettencourt AF, Vidal C, Platt RE.** Education on the social determinants of mental health in child and adolescent psychiatry fellowships. *Acad Psychiatry J Am Assoc Dir Psychiatr Resid Train Assoc Acad Psychiatry*. 2022;46(1):50–54. doi:10.1007/s40596-020-01269-y.
16. **Legha RK, Richards M, Kataoka SH.** Foundations in racism: A novel and contemporary curriculum for child and adolescent psychiatry fellows. *Acad Psychiatry*. 2021;45(1):61–66. doi:10.1007/s40596-021-01396-0.
17. **Sectish TC, Zalneraitis EL, Carraccio C, Behrman RE.** The state of pediatrics residency training: A period of transformation of graduate medical education. *Pediatrics*. 2004;114(3):832–841. doi:10.1542/peds.2004-0088.
18. **Medlock M, Weissman A, Wong SS,** et al. Racism as a unique social determinant of mental health: Development of a didactic curriculum for psychiatry residents. *MedEdPORTAL*. 13:10618. doi:10.15766/mep_2374-8265.10618.
19. **Jarvis GE, Kirmayer LJ, Gómez-Carrillo A, Aggarwal NK, Lewis-Fernández R.** Update on the Cultural Formulation Interview. *FOCUS*. 2020;18(1):40–46. doi:10.1176/appi.focus.20190037.
20. **Aggarwal NK, Lewis-Fernández R.** An introduction to the Cultural Formulation Interview. *FOCUS*. 2020;18(1):77–82. doi:10.1176/appi.focus.18103.

21. **Osseo-Asare A, Balasuriya L, Huot SJ,** et al. Minority resident physicians' views on the role of race/ethnicity in their training experiences in the workplace. *JAMA Netw Open*. 2018;1(5):e182723. doi:10.1001/jamanetworkopen.2018.2723.
22. **Dupras DM, Wieland ML, Halvorsen AJ, Maldonado M, Willett LL, Harris L.** Assessment of training in health disparities in US internal medicine residency programs. *JAMA Netw Open*. 2020;3(8):e2012757. doi:10.1001/jamanetworkopen.2020.12757.
23. **Castrucci BC, Auerbach J.** Meeting individual social needs falls short of addressing social determinants of health. *Health Aff Forefr*. Accessed March 15, 2023. https://www.healthaffairs.org/do/10.1377/forefront.20190115.234942/full/.
24. **Lang KR, Dupree CY, Kon AA, Dudzinski DM.** calling out implicit racial bias as a harm in pediatric care. *Camb Q Healthc Ethics CQ Int J Healthc Ethics Comm*. 2016;25(3):540–552. doi:10.1017/S0963180116000190.

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