

# MOVING FROM INJUSTICE TO EQUITY: A TIME FOR THE PHARMACY PROFESSION TO TAKE ACTION

## QUALITATIVE RESEARCH

### Effects of Racial Trauma on Black Doctor of Pharmacy Students

Tyler Marie Kiles, PharmD,<sup>a</sup> Alina Cernasev, PhD, PharmD, MSc,<sup>b</sup> Britney Tran, BSPS,<sup>b</sup> Marie Chisholm-Burns, PharmD, PhD, MPH, MBA<sup>a-c</sup>

<sup>a</sup> University of Tennessee Health Science Center, College of Pharmacy, Memphis, Tennessee

<sup>b</sup> University of Tennessee Health Science Center, College of Pharmacy, Nashville, Tennessee

<sup>c</sup> University of Tennessee Health Science Center, College of Pharmacy, Knoxville, Tennessee

Submitted January 22, 2021; accepted June 23, 2021; published October 2021.

**Objective.** In the wake of several high-profile police killings, in 2020 the United States began another reckoning with structural racism, injustice, and violence against Black Americans. The objectives of this study were to explore the impact of racialized sociopolitical events on Black Doctor of Pharmacy (PharmD) students.

**Methods.** Focus groups were conducted with second- to fourth-year Black PharmD students enrolled at the University of Tennessee Health Science Center College of Pharmacy. The focus groups were conducted in summer 2020, beginning two months after the murder of George Floyd and concluding before the start of the fall semester. Data analysis was conducted using a phenomenological approach, and themes were identified using inductive coding.

**Results.** Twenty-four participants were recruited into five focus group sessions. Thematic analysis of the transcripts resulted in three distinct themes related to the study objectives: Vicarious Trauma, Hypervigilance, and Fight or Flight Responses. Black students reported that they experienced significant psychological distress as a result of prominent racially traumatic events. Some Black students reported withdrawing from non-Black persons due to hypersensitivity and anxiety while others were willing to engage in candid conversations.

**Conclusion.** Racial trauma has implications for student wellness and academic success. As racism and police brutality have proven to be an ever-present problem, this study offers key information for consideration as institutions recruit, support, and retain diverse learners. The data may also inform educators and pharmacy students regarding interactions with Black patients, coworkers, and health professionals during times of sociopolitical unrest.

**Keywords:** mental health, wellness, diversity, race

## INTRODUCTION

Black communities in the United States have suffered prejudice and inequality for centuries, and even today, Black Americans continue to experience inequities in housing, education, and health outcomes.<sup>1,2</sup> Perhaps one of the most glaring disparities exists with regard to police brutality. According to Mapping Police Violence, Black Americans are three times as likely to die at the hands of police as White Americans.<sup>3</sup> While state-sanctioned

violence against Black citizens is not a new phenomenon, unfiltered brutality against Black bodies can now be quickly and easily viewed and immediately shared by the public because of the advancement of technology and ability to capture photo and video evidence. In the past several years, multiple police killings of unarmed Black Americans, such as Eric Garner, Tamir Rice, Alton Sterling, Philando Castile, Walter Scott, Terrence Crutcher, Laquan McDonald, and many others, have been caught on tape and garnered national media attention.<sup>4</sup> In 2020, the high-profile killings of Ahmaud Arbery, Breonna Taylor, Rayshard Brooks, and George Floyd, a Black man killed by a police officer kneeling on his neck for 8 minutes and 46 seconds, triggered worldwide protests, memorials, and

---

**Corresponding Author:** Tyler Kiles, The University of Tennessee Health Science Center (UTHSC), College of Pharmacy, 881 Madison Ave., Ste. 581, Memphis, TN 38163. Tel: 901-448-3354. Email: tkiles@uthsc.edu

online reactions. In response to George Floyd's murder, mass protests took place in over 2,000 cities in the United States and around the world.<sup>5</sup> These tragic, preventable events served as a catalyst for communities across the globe to speak up against racism. Weine and colleagues state that "people are not only calling for an end to injustice, police brutality, race-based violence, and institutional racism, they are also calling for a broader understanding that locates the root cause of these problems in socio-economic and political systems that entrench structural power and privilege in the hands of a few and then blame the victim for their own oppression."<sup>6</sup> In the groundswell of this racial reckoning, racism has been declared a public health crisis.<sup>7</sup> While many health disparities such as disproportionate fetal and maternal mortality and chronic disease burden have been well-described,<sup>8-10</sup> there is room for investigation of mental health disparities. This includes how the horrifying images of police brutality and the aftermath of these sociopolitical events affect Black individuals' stress and well-being.

According to a Robert Wood Johnson Foundation study, police killings of unarmed Black people adversely affect the mental health of Black adults, and according to the *Washington Post*, depression and anxiety spiked among African Americans after George Floyd's murder.<sup>11,12</sup> The framing of racism as a public health issue compels organizations to devise policies, education, support, and systemic changes in the ways that other threats to public health have historically been addressed.<sup>13</sup> In order to devise these structures of support for diverse communities, it is important to first gain a deeper understanding of how Black individuals are affected by these events. There is a paucity of qualitative studies describing the experiences of Black pharmacy students. While stress is known to be an important factor in success and well-being for all, research shows race-related stress is a significantly more powerful risk factor for psychological distress in African Americans than other stressful life events.<sup>14,15</sup> Black students may face a unique set of stressors in response to publicized racial violence.<sup>16,17</sup> The objectives of this project were to explore the impact of racialized sociopolitical events on Black Doctor of Pharmacy (PharmD) students.

## METHODS

A phenomenological qualitative approach was selected for this study. Phenomenology has been described as the study of lived experience between start and finish points. Van Manen explained phenomenology as "the study of the world as people experience it."<sup>18</sup> The

phenomenological approach was appropriate for this study because it aims to uncover the lived experiences of racial trauma through the student pharmacist's lens.<sup>19</sup> To enhance the potential for producing richer data and obtaining a collective opinion about the research question, focus groups were used.<sup>20,22</sup> The focus group guide was designed to elicit the pharmacy students' experiences, and perceptions interacting with their peers related to the recent events. The semi-structured strategy allowed researchers to pose largely the same questions; however, the later focus groups incorporated additional questions that had been raised during earlier discussions.

The study was approved by the University of Tennessee Health Science Center (UTHSC) Investigational Review Board, and informed consent was obtained from all participants. The participants were recruited via email sent from the lead investigator to students who self-identified as Black/African American in years two to four (P2-P4) of the PharmD curriculum enrolled at UTHSC College of Pharmacy. Through criterion and snowball sampling, recruitment of participants continued until saturation (defined as a point beyond which no significant new information was being obtained) was reached.<sup>22</sup> All focus groups were conducted virtually via Zoom videoconferencing by the lead investigator and co-investigator.<sup>20</sup> The focus groups were conducted in summer 2020, beginning two months after the death of George Floyd. All focus groups were digitally recorded, and professionally transcribed. Both authors took field notes during data collection to document nonverbal expressions and interactions, which was used for writing memos in the data analysis process.<sup>23</sup> After the focus group, the following demographic data was collected from each participant.

Thematic analysis as proposed by Braun and Clarke was followed to analyze the data.<sup>24</sup> The research team read each transcript multiple times to familiarize themselves with the corpus of data. Both researchers coded all the data inductively and met multiple times to discuss codes and reach consensus. During the coding process, both researchers wrote memos commenting on emotions experienced during the interview as well as biases detected.<sup>23</sup> A third researcher met with the group and discussed patterns of convergence, divergence, and theme titles. Lincoln and Guba's framework were used to address and meet criteria for quality and rigor, such as credibility, dependability, confirmability, and transferability.<sup>25</sup> Data analysis was assisted with use of Dedoose (SocioCultural Research Consultants, LLC) qualitative analysis software. Furthermore, the consolidated criteria for reporting qualitative research (COREQ) was consulted throughout the data collection, analysis, and interpretation.<sup>26</sup>

## RESULTS

There were 24 participants in this study. The majority of the participants were second-year (P2) (n=14, 58%), or third-year (P3) students (n=8, 33%). There were also two (8%) fourth year (P4) student participants. All of the participants self-identified as Black or African American. For the purposes of this study, the term “Black” was used to encompass both.<sup>27</sup> Participants’ ages ranged from 22 to 29 years, with a mean age of 27 years (SD=1.93). The majority of the participants were female (n=20, 83%). Student backgrounds ranged from rural to small town to urban, and while the majority of students were from Tennessee (n=13, 54%), the cohort contained representation from 10 different states across the southern United States.

Five focus group sessions were held that included four to six students per group, and each group session lasted 94 minutes on average. Thematic analysis of data resulted in three distinct themes related to the study objectives:

### **Vicarious Trauma: Personalization of Racial Violence**

The participants described an intimate understanding that George Floyd’s murder was a reminder that this racialized violence could happen to a family member, a friend, or even themselves. One student said: “I didn’t feel like George Floyd was any stranger to me. I felt very personal about it because, you know, many of us, our dads are around [his] age, our cousin or our uncle or whoever, and I feel like he was really a representation of our own families, right? ... it could be our own front door the next time.” (S13, Male)

The participants expressed a sense of familiarity with this particular type of tragedy, and this haunting understanding was described as damaging to the students’ mental health. Several students described consciously refusing to watch the video of George Floyd’s murder in order to prevent mental anguish. “It just happens so often that we absolutely have every reason to just spiral into a never-ending pit of depression and anxiety and worry ... so I can’t watch stuff like that because I don’t want to think about my future husband or my future kids in that situation ... my dad, my brother ... I can’t do that.” (S3, Female)

The participants conveyed a deep empathy with George Floyd because he looked like them. Whether or not they bore witness to his death, they acknowledged that his suffering could have been or could one day be their own. Participants discussed feelings of sadness and hopelessness, and some reported trouble sleeping. One participant describes her vivid grief by stating: “I was literally getting ready for work, sitting on the bed, like crying. And

I’m like, I don’t even know this guy, why [can’t I] hold back tears?” (S5, Female).

### **Hypervigilance: Heightened Sense of Awareness, Fear, and Anxiety**

After the murder of George Floyd, the participants expressed feeling guarded, anxious, and reluctant in public. Students described feeling as though others were automatically treating them as suspects. One participant stated clearly: “... immediately after George Floyd happened ... I was looking over my shoulder all the time, everywhere I was, even at work. I felt ... charged.” (S13, Male) Another participant reinforced the constant awareness of racial identity, saying: “This whole thing has made me keep my guard up.” (S22, Female)

Participants described being overly cautious and taking steps to avoid being racially profiled, such as abstaining from running in predominately white neighbourhoods or parks. Students also discussed paying close attention to the words and actions of people of other races, resulting in questioning friendships and feeling distrust.

Several students noted wariness around white friends and colleagues. One student stated: “I distanced myself from my white friends ... because I just felt a level of distrust build up inside of me ... I think I just could not talk to them because I just felt too unsafe” (S4, Female)

Another student recalled attentiveness to the remarks of co-workers saying: “Okay, mental note ... I can still keep it professional, but I may keep my distance from this person because I know their standpoint and their lack of sensitivity.” (S9, Female)

Despite recognizing that not all white people shared conflicting opinions on the matter, students still expressed feelings of suspicion. Students remarked that many people were vocal on social media but questioned whether it was true allyship or just a trend. One student noted: “We’ve gotten to the point where we feel paranoid about people’s genuineness, right? We don’t know who to trust ... Who’s real and who’s not? Who’s for me and who’s not? Who’s really going to fight with me and who’s not?” (S8, Female). Another student commented: “They wouldn’t say it to your face. And I think that’s the worst ... the biggest concern now is ... who is showing you who they really are versus, you know, being ... an imposter?” (S14, Male)

Students expressed they not only paid attention to the remarks that were spoken or written, but also analyzed actions that were *not* taken. One participant remarked: “[I’ve]been paying attention to the ones who haven’t been saying anything. They love our music. They jam with us. They hang with us. Love to see you in class. But when

George Floyd happened, nothing. [I'm] paying attention.” (S13, Male)

The participants generally associated silence and inaction with complicity. Another student questioned: “So are you really my friend if you don't want to say anything about this?” (S20, Female)

The participants often extrapolated being vocal in this movement with potential engagement with other issues involving students of color. “I went to the White Coats for Black Lives protest... I know a lot of people that didn't go that were just like five minutes away and they could have easily driven down there and bent on one knee for nine minutes... that demonstration really showed me who is going to show up, whether it's for a protest [or] just for if a person of minority in our college voices a concern and an issue, are they just going to brush it off or are they going to take it as a real issue?” (S18, Female)

#### **Fight or Flight Responses: Internal vs External Manifestations of Racial Trauma**

Participants described channeling their feelings after George Floyd's death in distinct ways. Students described feeling overwhelmed by the situation and withdrawing into themselves and their communities (internal), as well as feeling empowered to advocate for change (external).

Many participants described handling their feelings of stress related to racial trauma through simply not coping with them at all (ie, internal manifestations). Per one student's account: “I'm just not dealing with it... it's exhausting to like even think about on top of COVID, on top of literally school being online, just everything in life.” (S5, Female) Another mentioned: “You only can feel two ways, either completely angry and furious and fuming and also sick to your stomach, or you can choose to feel numb” (S6, Female)

Several participants discussed accepting the struggle as a condition of their race. One participant noted: “As African Americans, we're kind of wired to just keep pushing through it. I mean, it's kinda sad... [but] it's just something that I guess we've learned to live with” (S4, Female) Another participant corroborated this sentiment stating: “The best way I can sum it up, is to live through trauma, because that is what we have to do. Because this happens, and we're still required to go to work, we're still required to go to school, we're still required to live” (S14, Male)

The participants also discussed the health implications of not dealing with this stress, citing the high prevalence of hypertension as well as detrimental forms of self-medication (such as drug and alcohol abuse) in Black communities. One student remarked: “... we might not

even talk to [anybody] about it, but [there] is a lot weighing on us.” (S13, Male)

Several participants described removing themselves from social interactions as a mechanism of self-preservation. Several participants described the social media atmosphere as “toxic” and described distancing themselves from online interaction. One participant noted this decision was not without consequence, stating: “I had to force myself to detach because I was entering a deep, dark hole... And I think, with COVID going on... that didn't help... because social media was the one place everybody was, you know, kinda using to stay connected.” (S15, Female)

The participants also described intentionally isolating themselves from other people. Students described requesting off from work, practicing meditation, spending more time exercising, and spending more time (often virtually) with family. One student describes the feelings causing her to retreat from co-workers saying: “I didn't really want to talk to anybody like at work, I just wanted to keep to myself.” (S18, Female)

One student remarked plainly: “Especially with COVID going on, it's a lot easier to spend that solidarity time by yourself... just finding comfort in our own people and also just staying away from the White population.” (S16, Male)

While some students describe detachment, disengagement, and numbing, others described empowerment and provided examples of various forms of activism (ie, external manifestations). Respondents noted participation in various forms of protest. In describing her experience attending a demonstration, one student said: “I've never been in a crowd so huge... And I felt like I was making a change when I was marching.” (S10, Female)

Students who did not attend protests found other ways to advocate in the virtual environment. One student describes a creative outlet, stating, “I wrote a poem, and I posted it on Facebook. It's called This is America.” (S9, Female) Another student noted, “I took the approach of posting information and just talking about being conscious about where we're putting our money, demanding that, if we're going to spend money with these companies, that they actually care whether I die or not.” (S3, Female)

Several students noted becoming emboldened in interactions on social media. One participant remarked, “Since the George Floyd event has happened, it's made me more vocal. [I] kept going back to the Facebook page, like should I say something? Should I say something? And I ended up saying something because I want people to change their hearts” (S22, Female)

Several students described this moment as a turning point and revealed that George Floyd's death allowed

them to speak their minds more freely. Students described feeling fearless, candid, and audacious. "I've come into being so unapologetic about my Blackness, my everything, at work, at school, like I just don't hold back. [When I first started], there were certain things I didn't want to say because I [didn't] want them to think I'm an angry Black girl or I [didn't] want them to think I'm too sensitive." (S19, Female) Other students echoed this stating: "We're tired. [We're] going to speak our mind at this point. The reaction that we get is the reaction that we get." (S3, Female) Another student remarked: "George Floyd has already afforded me the privilege to actually to be honest about what it's like to really be a Black woman in America." (S4, Female)

## DISCUSSION

Significant findings of this study include the deep racial empathy underpinning public events of racial violence, as well as hyperawareness of surroundings, relationships, and action/inaction of peers and institutions. Despite their varying backgrounds and experiences, the Black participants felt a personal connection to the tragedy simply because George Floyd was Black. Both in public and in private, these students described perceived (albeit uncertain) threats and deliberately erred on the side of caution. The students' sensitivity to their surroundings and peers resulted in additional psychological stress, the manifestations of which ranged from survival tactics to self-expression. The feelings many participants described, ie, anxiety, depressed mood, isolation, anger, fear, avoidance, are symptoms consistent with responses to race-based trauma.<sup>28,29</sup> Of note, this particular racial event and aftermath occurred when classes were not in session. The array of emotions described by participants in this study would not have been conducive to scholastic success during the academic year. While exploring a framework for the experiences of underrepresented minorities in pharmacy school, Bush cited the impact of sociopolitical events as an inhibitor of minority pharmacy student wellness.<sup>30</sup> According to Bor and colleagues, the largest effects on the mental health of Black people after police killings occur in the 1 to 2 months after exposure.<sup>11</sup> This study highlights the need for development and/or expansion of systems of support specifically to sustain the wellness and success of Black students.

An important takeaway from this study is that in the wake of incidents of racial trauma, the participants describe an instinct to avoid interacting with people of other races, particularly White people. Largely the students in this study described concealing the weight of their pain from non-Black peers, coworkers, and friends. Surprisingly, the students did not describe this stress as

causing significant limitations to their daily activities. However, studies have shown that, over time, chronic stress related to racial discrimination may be associated with poor health outcomes.<sup>25,31,32</sup> This sentiment is echoed by LaShyra Nolen, a Black Harvard medical student who noted, "My entire experience in higher education has involved around centering my professors' and colleagues' white comfort, often at the expense of my own mental wellness."<sup>33</sup> This illustrates that non-Black faculty, students, and staff may have no idea of the extent of the racial trauma their peers may be experiencing. Once enlightened to the intensity of this distress, an instinct may be to reach out to connect with Black colleagues; however, this study revealed that Black individuals may have no interest in sharing their true feelings with non-Black persons. In fact, pleasantries from White colleagues during periods of racial unrest may be met with a variety of emotions, from appreciation to suspicion, to annoyance or aggravation.<sup>33-35</sup>

The experiences of the Black students captured here are diverse and wide-ranging. This underscores that there is no "one size fits all" response to racial tragedy. Although individual student expectations and needs may vary, our study revealed that during times of racial unrest, despite how they may appear on the outside, Black students may not be "okay." Those looking to provide support may take heed from Nolen who wants her White professors to know that asking "How are you doing?" isn't enough. "You should know I'm not ok, and you should do the work to make sure you aren't contributing to the reason I'm not."<sup>33</sup>

As Black individuals may not feel comfortable fraternizing with members of other races after these racially traumatic incidents, extension of compassion, radical empathy, and trauma-informed care may benefit transracial interpersonal relationships.<sup>36,37</sup> Additionally, despite experiencing significant distress, Black students may be unlikely to seek out mental health practitioners who are White because of sensitivity or suspicion.<sup>38,39</sup> Institutions seeking to support Black students during times of sociopolitical unrest would be wise to employ or refer students to mental health providers of their race. Other structures of encouragement for minority students during these times may include the social support of Black family, friends, and faculty/staff.<sup>30,39,40</sup> Therefore, strategies to increase diversity and inclusion may also help to mitigate the effects of racial trauma on Black students. This study showcases the role of social media in influencing student well-being, and institutions may find proactive discussions on professionalism and freedom of speech limitations crucial to Black student perceptions of their classmates and environment. Additionally, training in microaggressions, implicit bias, and cultural humility may

also prove helpful in maintaining a positive social and diversity climate.<sup>40-42</sup> Organizations and institutions should be cognizant that Black students are paying attention to what they do and say in response to sociopolitical unrest and are making judgements accordingly. Acknowledging that Black lives matter and devising intentional strategies to support Black students may prove beneficial in maintaining engagement.

The participants described their experience after the murder of George Floyd as a moment that was heartbreakingly familiar yet somehow distinctly pivotal. George Floyd's death may have unleashed a new generation of activists, unafraid to confront racism and injustice.<sup>43</sup> It is important that academic institutions provide a safe space for these voices. More than ever before, students of all races may be willing to participate in the uncomfortable conversations surrounding systemic racism, and educators should prepare themselves to facilitate these discussions.<sup>6</sup> For example, in response to the social unrest, the UTHSC College of Pharmacy created an Equity, Inclusivity and Diversity Advisory Board, conducted multiple college-wide listening sessions, and hired a Director of Diversity, Equity and Inclusion. Future research should investigate Black student perceptions of equity, diversity, and inclusion initiatives and incorporation of their feedback and recommendations.

Findings from the convenience sample of PharmD students from one institution cannot be generalized to the full spectrum of Black students in the United States. However, this sample was diverse in age and background, with 46% of participants being from out of state. Future studies may include larger nationwide samples.

George Floyd's death and subsequent protests sparked a national conversation regarding systemic racism and injustice. Unfortunately, incidents of racialized violence are far too common and seemingly unceasing. For example, at the time of this manuscript preparation, police had killed 164 Black people in 2020 alone.<sup>44</sup> This study has shown that racial trauma occurs as a result of police violence, but these feelings may be reignited by microaggressions, discrimination, or recurrence of other types of racialized events.<sup>32</sup> As the country continues to experience growing pains, there is an opportunity to capitalize on the momentum from George Floyd's death by developing primary prevention strategies from a public health frame. These upstream approaches remain crucial to challenging and dismantling systemic racism and the trauma it leaves behind.<sup>32,45,46</sup>

## CONCLUSION

This study, which involved focus groups with Black pharmacy students at one college of pharmacy, found that

Black students experience significant stress as a result of prominent racially traumatic events. Black students may withdraw from non-Black persons because of their hypersensitivity and anxiety or they may be willing to engage in candid conversations. Racial trauma has implications for student wellness and academic success. As racism and police brutality have proven to be an ever-present problem, this study offers key information for institutions seeking to recruit, support, and retain diverse learners. The data portrays the inner turmoil that Black pharmacy students face, and may also inform interactions with Black patients, coworkers, and health professionals during times of sociopolitical unrest.

## ACKNOWLEDGMENTS

The authors thank Kenneth Hohmeier, PharmD, for his review of this manuscript.

## REFERENCES

1. Bowen Matthew D, Rodrigue E, Reeves RV. Report: time for justice: tackling race inequalities in health and housing. Brookings website. October 19, 2016. Accessed October 1, 2021. <https://www.brookings.edu/research/time-for-justice-tackling-race-inequalities-in-health-and-housing/>
2. Sablich L. 7 findings that illustrate racial disparities in education. Brookings website. June 6, 2016. Accessed October 1, 2021. <https://www.brookings.edu/blog/brown-center-chalkboard/2016/06/06/7-findings-that-illustrate-racial-disparities-in-education/>
3. Mapping Police Violence. Updated December 31, 2020. Accessed October 1, 2021. <https://mappingpoliceviolence.org/>
4. A look at high-profile police shootings in the United States. Missoulian website. September 15, 2017. Updated August 19, 2019. Accessed October 1, 2021. [https://missoulian.com/news/national/a-look-at-high-profile-police-shootings-in-the-united-states/collection\\_2b947b85-b922-5ebe-94dc-eb64f555c09.html](https://missoulian.com/news/national/a-look-at-high-profile-police-shootings-in-the-united-states/collection_2b947b85-b922-5ebe-94dc-eb64f555c09.html)
5. Burch A, Cai W, Gianordoli G, McCarthy M, Patel JK. How Black lives matter reached every corner of America. The New York Times. June 13, 2020. Accessed January 18, 2021. <https://www.nytimes.com/interactive/2020/06/13/us/george-floyd-protests-cities-photos.html>
6. Weine S, Kohrt BA, Collins PY, et al. Justice for George Floyd and a reckoning for global mental health [published correction appears in *Glob Ment Health (Camb)*. 2020 Sep 28;7:e25]. *Glob Ment Health (Camb)*. 2020;7:e22. Published August 26, 2020. doi: 10.1017/gmh.2020.17
7. Declarations of Racism as a Public Health Issue. American Public Health Association website. Accessed October 1, 2021. <https://www.apha.org/topics-and-issues/health-equity/racism-and-health/racism-declarations>
8. Pruitt SM, Hoyert D, Anderson KN, et al. Racial and Ethnic Disparities in Fetal Deaths—United States, 2015–2017. Center for Disease Control and Prevention website. September 18, 2020. Accessed October 1, 2021. <https://www.cdc.gov/mmwr/volumes/69/wr/mm6937a1.htm>
9. Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths. Centers for Disease Control and Prevention website.

September 5, 2019. Accessed October 1, 2021. <https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html>

10. Quiñones AR BA, Markwardt S, et al. Racial/ethnic differences in multimorbidity development and chronic disease accumulation for middle-aged adults. *PLoS One*. 2019;14(6):e0218462. doi:10.1371/journal.pone.0218462.

11. Bor J, Venkataramani AS, Williams DR, Tsai AC. Police killings and their spillover effects on the mental health of Black Americans: a population-based, quasi-experimental study. *Lancet*. 2018; 392(10144):302–310. doi:10.1016/S0140-6736(18)31130-9

12. Fowers A, Wan W. Depression and anxiety spiked among Black Americans after George Floyd's death. *The Washington Post*. June 12, 2020. Accessed October 1, 2021. <https://www.washingtonpost.com/health/2020/06/12/mental-health-george-floyd-census/>

13. Racism as a Public Health Crisis. Cornell University Cornell Health website. Accessed October 1, 2021. <https://health.cornell.edu/initiatives/skorton-center/racism-public-health-crisis>

14. Carter RT. Racism and psychological and emotional injury: recognizing and assessing race-based traumatic stress. *Counseling Psychol*. 2007;35(1):13–105. doi:10.1177/0011000006292033.

15. Utsey SO, Giesbrecht N, Hook J, Stanard PM. Cultural, sociofamilial, and psychological resources that inhibit psychological distress in African Americans exposed to stressful life events and race-related stress. *Couns Psychol*. 2008;55(1):49–62. Doi: 10.1037/0022-0167.55.1.49

16. Van Manen M. *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy*. Routledge; 2016.

17. Parker MN, Jones RT. Minority status stress: effect on the psychological and academic functioning of African-American students. *J Genid Cult Health*. 1999;4(1):61–82. doi: <https://doi.org/10.1023/A:1023230210132>

18. Easterwood A. *Racial Stressors and the Black College Experience at Predominately White Institutions*. [PhD thesis]. Lawrence, KS: University of Kansas; 2016. [https://kuscholarworks.ku.edu/bitstream/handle/1808/22359/Easterwood\\_ku\\_0099M\\_14812\\_DATA\\_1.pdf?sequence=1](https://kuscholarworks.ku.edu/bitstream/handle/1808/22359/Easterwood_ku_0099M_14812_DATA_1.pdf?sequence=1). Accessed October 1, 2021.

19. Frechette J, Bitzas V, Kilpatrick K, Lavoie-Tremblay M, Aubry M. Capturing lived experience: methodological considerations for interpretive phenomenological inquiry. *Int J Qual Methods*. 2020;19(1):1–12. Doi: <https://doi.org/10.1177/1609406920907254>

20. Lobe B, Morgan D, Hoffman KA. Qualitative data collection in an era of social distancing. *Int J Qual Methods*. 2020;19(2):1–8 doi: 10.1177/1609406920937875

21. Krueger RA, Casey MA. Designing and conducting focus group interviews. social analysis, selected tools and techniques. 2002:4–23. Accessed October 1, 2021.

22. Levitt HM, Motulsky SL, Wertz FJ, Morrow SL, Ponterotto JG. Recommendations for designing and reviewing qualitative research in psychology: promoting methodological integrity. *Qual Res Psych*. 2017;4(1):2–22. doi:10.1037/qup0000082

23. Birks M, Chapman Y, Francis K. Memoing in qualitative research: probing data and processes. *J Res Nurs*. 2008;13(1):68–75. doi:10.1177/1744987107081254

24. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77–101. doi:10.1191/1478088706qp063oa.

25. Lincoln YS, Guba EG. *Naturalistic Inquiry*. vol 75. Sage; Beverly Hills, 1985.

26. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and

focus groups. *Int J Qual Health C*. 2007;19(6):349–357. doi:intqhc/mzm042.

27. Definition of black. Merriam-Webster Dictionary website. Accessed October 1, 2020. <https://www.merriam-webster.com/dictionary/black>.

28. Racial Trauma. Mental Health America website. Accessed October 1, 2020. <https://www.mhanational.org/racial-trauma>.

29. Racism and Mental Health. Mental Health America. Accessed October 1, 2020. <https://www.mhanational.org/racism-and-mental-health>.

30. Bush AA. A conceptual framework for exploring the experiences of underrepresented racial minorities in pharmacy school. *Am J Pharm Educ*. 2020;84(1):7544. doi:10.5688/ajpe7544

31. Berger M, Sarnyai Z. "More than skin deep": stress neurobiology and mental health consequences of racial discrimination. *Stress*. 2015;18(1):1–10. doi:10.3109/10253890.2014.989204.

32. Alang S, McAlpine D, McCreedy E, Hardeman R. Police brutality and black health: setting the agenda for public health scholars. *Am J Public Health*. 2017;107(5):662–665. doi:10.2105/ajph.2017.303691

33. Nolen L. This is what I want to tell my White professors when they ask, 'How are you today?'. *HuffPost Personal*. June 8, 2020. Accessed October 1, 2021. [https://www.huffpost.com/entry/black-medical-student-wants-white-professors-to-know\\_n\\_5ed91238c5b6e0feefc26315](https://www.huffpost.com/entry/black-medical-student-wants-white-professors-to-know_n_5ed91238c5b6e0feefc26315).

34. Smith E. No, White people, you can't ease your guilt over racism by paying Black people via Cash App. *Los Angeles Times*. June 3, 2020. Accessed October 1, 2021. <https://www.latimes.com/california/story/2020-06-03/how-white-people-can-be-allies-george-floyd-protests>

35. Braithwaite P. Your Black coworkers are still not okay – here's how to support them. October 1, 2020. Accessed January 18, 2020. <https://www.self.com/story/black-coworkers-how-to-support>

36. What is Radical Empathy? *Camp Stomping Ground.org* website. February 16, 2017. Accessed October 1, 2020. <https://campstompingground.org/blog/2017/2/16/what-is-radical-empathy>

37. What is Trauma-Informed Care? *Buffalo University Center for Social Research* website. Accessed October 1, 2021. <http://socialwork.buffalo.edu/social-research/institutes-centers/institute-on-trauma-and-trauma-informed-care/what-is-trauma-informed-care.html>

38. Mandani D. America's racial reckoning is putting a spotlight on Black mental health. *NBC News Online*. September 22, 2020. Accessed October 1, 2021. <https://www.nbcnews.com/news/nbcblk/america-s-racial-reckoning-putting-spotlight-black-mental-health-n1241127>

39. Anderson G. The emotional toll of racism. *Inside Higher Ed*. October, 23, 2020. Accessed October 1, 2021. <https://www.insidehighered.com/news/2020/10/23/racism-fuels-poor-mental-health-outcomes-black-students>

40. Kiles TM, Garey KW, Wanat MA, Pitman P. A survey to assess experiences and social support of underrepresented minority doctor of pharmacy students. *Curr Pharm Teach Learn*. 2021;13(3):245–254. doi: <https://doi.org/10.1016/j.cptl.2020.10.015>

41. Avant ND, Weed E, Connelly C, Hincapie AL, Penm J. Qualitative analysis of student pharmacists' reflections of harvard's race implicit association test. *Curr Pharm Teach Learn*. 2018;10(5): 611–617. doi:10.1016/j.cptl.2018.02.002

42. Rockich-Winston N, Wyatt TR. The case for culturally responsive teaching in pharmacy curricula. *Am J Pharm Educ.* 2019;83(8):7425. doi:10.5688/ajpe7425
43. Charles D, Himmelstein K, Keenan W, Barcelo N. White coats for Black lives: medical students responding to racism and police brutality. *J Urban Health.* 2015;92(6):1007-doi:10.1007/s11524-015-9993-9
44. Cohen L. It's been over 3 months since George Floyd was killed by police. Police are still killing Black people at disproportionate rates. CBS Newscom. September 10, 2020. Accessed October 1, 2021. <https://www.cbsnews.com/pictures/black-people-killed-by-police-in-the-u-s-in-2020/>
45. Addressing Law Enforcement Violence as a Public Health Issue. American Public Health Association website. November 13, 2018. Accessed October 1, 2021. <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2019/01/29/law-enforcement-violence>
46. Arya V, Butler L, Leal S, et al. Systemic racism: pharmacists' role and responsibility. *Am J Pharm Educ.* 2020;84(11):8418. doi:10.5688/ajpe8418