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A Mixed-method Analysis of Community-Engaged Theatre Illuminates Black Women's Experiences of Racism and Addresses Healthcare Inequities by Targeting Provider Bias

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Abstract

Theatre has been a powerful means of eliciting social change. This paper describes methods and outcomes of a theatre project to reduce healthcare inequities experienced by Black women. We conducted narrative interviews with a convenience sample of Black women and conducted thematic analysis of interview transcripts to learn about their experiences of healthcare and to inform development of a professional theatrical production. To assess the impact of the performance on the audience, we used a single post-test concurrent mixed-methods design using a self-created Likert-type survey that included space for open-ended responses. Ten Black women completed narrative interviews. Thematic analysis revealed 5 main themes: being ignored, being accused, being talked-down to, fearing harm, and being hurt. Narratives were used to create a script that centered on these themes, and that was professionally produced and performed. Audience members ($n = 113$, 25% healthcare providers) produced a mean total post-test score of 19.28 (agree/strongly agree) on a 25-point survey with 2 items scoring in the 2 to 3 range (disagree/not sure). Thematic analysis data revealed the extent to which Black women experienced discrimination in multiple settings. Quantitative survey data suggested audience members conceptually understood and were aware of inequity, but open-ended responses revealed this information was new for some, and prior knowledge for others. The audience reported planning to change personal behaviors that may contribute to inequity. Participants were unsure if they had contributed to inequity in the past. The performance stimulated conversation about implicit bias and discrimination and encouraged audience members to examine their contributions to the problem. Future pre-post studies are needed to better assess the impact of the performance. Theatre has the potential to illuminate the extent and nature of discrimination in healthcare and society, and to foster conversations that allow audience members to consider their own potential contributions to discrimination.

Keywords

female, social change, surveys and questionnaires, health personnel, narration, healthcare disparities, mixed methods, thematic analysis, drama

What do we already know about this topic?

Implicit and explicit provider biases exist among healthcare professionals and impact consumer experiences and health outcomes. Current means of reducing bias in healthcare are inadequately addressing the problem of discrimination in healthcare.

How does this research contribute to the field?

Our findings indicate theatre may increase awareness of implicit bias and encourage change behaviors among healthcare professionals and community members, but that more is needed to help healthcare providers examine whether and how they have contributed to inequity in the past.

What are the implications of this research toward theory, practice, or policy?

Theatre may increase awareness and empathy surrounding Black women's experiences of discrimination in healthcare and may illuminate implicit provider biases. This use of theatre can provide a platform for having critical community conversations about how to address discrimination in healthcare.

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Introduction

An overwhelming body of literature has suggested that implicit provider bias impacts health outcomes for Black women in many areas, including but not limited to cardiac health, pre/post-natal, mental health, and pain outcomes.[1,2] This has been especially true for Black women with a history of substance misuse, particularly in the areas of pain management and prenatal care.[3,4] For instance, a recent study indicated peripartum cardiac mortality rates to be the highest for Black women,[5] and some have suggested this is the result of social structures/institutional racism. Healthcare professionals and consumers alike are situated within legal, political, and societal contexts that have a long-standing history of racial discrimination. As Krieger[1] points out:

> An important gap in current research. . .concerns the racialized health consequences of contemporary legal discrimination. . . [such as] the legally color-blind, albeit racially motivated, [1971] U.S. War on Drugs and its role in producing or exacerbating health-debilitating racial/ethnic inequalities.

The Joint Commission's[6] report on safety concerns related to implicit bias in healthcare suggests that perspective taking reduces bias and improve health outcomes.

One method for facilitating "perspective taking" is to illuminate others' stories through theatre. There is a long-standing tradition of using theatre to promote social change, generally referred to as applied theatre. Several types of applied theatre have been used to support marginalized populations and advocate for change—many of which involve audience participation and/or improvisation techniques. For example, Augusto Boal's use of 'Theatre of the Oppressed' asks the audience to actively participate in theatrical productions through interactions between the audience and performers, allowing the audience to analyze and affect how performances unfold, and providing a platform to discuss pertinent social justice issues.[7] Applied theatre approaches have been used to reduce stigma surrounding HIV,[8,9] youth depression and suicide,[10] autism,[11] and in health promotion for Indigenous communities.[12]

Solomon's[13] use of Ideologically Challenging Entertainment (ICE) is similar to Applied Theatre methods in that both embrace social justice-oriented goals. However, ICE is distinct in that it advocates for the use of mainstream entertainment approaches (which are arguably more able to capture the attention of the audience) whereas applied theatre approaches explicitly exclude mainstream entertainment. Solomon describes ICE as having the capacity to "inspire audiences to re-think their own prejudices, biases, and preconceived notions about groups they may consider 'other.'" In a study of the impact of ICE, 40 percent of those who saw the theatrical production were willing to reconsider their views. Of these audience members, 85% said their changed views pertained to discrimination and stereotypes (p. 179).[13] Similar to ICE, our use of theatre to illuminate Black women's experiences of discrimination embraces mainstream entertainment approaches, seeking to maximize engagement in the production. Likewise, our approach shares with applied theatre and ICE the goal of affecting social change. However, our approach differs from ICE with regard to its narrative-informed script-writing approach.

Literature[13] suggests that narrative theatre allows audience members to immerse themselves in the experience of being entertained by stories which can "aid the persuasive message by bypassing many of the triggers for cognitive resistance." As Solomon describes:

> Narrative persuasion is likely to be an exceptionally effective method of countering those attitudes that people are most unwilling to change (such as firmly held ideological or political beliefs).[13]

While our use of theatre is not specifically to persuade individuals toward a particular belief or set of beliefs, we do aim to engender attitude shifts that manifest as a reduction in stigma beliefs and a reduction in associated, harmful actions rooted in bias. Literature suggests that by illuminating instances of discrimination and evoking empathy toward characters, we may be able to initiate such changes in attitude.

Despite the potential for applied theatre approaches to facilitate new perspectives and shifts in attitudes/beliefs, several studies suggest that direct attempts at persuading a person to change their *behaviors* are typically met by cognitive resistance.[13] Costanza et al[14] remind us that persuasion for behavioral change is most often met with defensive denial. As an alternative to confrontational persuasive approaches, Costanza et al[14] advocate for increasing use of the successful aspects of motivational interviewing to facilitate behavior change, including strategies such as alliance-building, empathy, and reflective listening. Glasman and Albarracin[15] found, in their meta-analysis of the relationship between attitudes

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and behaviors, several factors that correlate with the degree to which attitudes guide future behavior. When attitudes were easy to recall, based on behavior-relevant information, continually reflected and reported on, and a person had direct experience with having the attitude, it was more likely to predict behavior.[15] Professional theatre, when done well, is easy to recall. It draws audience members in, immersing them in the life stories of characters, allowing them to experience strong emotions in a safe way, free from the risk of confrontation within their own, "real" personal lives. Green and Brock[16] refer to this immersion in performance media as "transportation." The transportation experience of watching a play gives audience members direct experiences of new attitudes. If these attitudes apply to behaviors in a person's everyday life, and if viewers are given the opportunity to continually reflect and report on their attitudes and behaviors in context, the likelihood of behavior changes increases.[13]

In this study we piloted a model of using narratives from Black women who had experienced discrimination to inform the development of a professional theatre production, performed for healthcare providers and the general community. The theatre production was designed to be an intervention for the audience, aimed at illuminating and reducing stigma beliefs and behaviors. Our rationale was that narrative-informed theatre could expose audience members to perspectives that may be absent from their daily discourses. Because these new perspectives are contextualized within personal, true stories, narrative theatre may also evoke empathy in the audience and have the potential to lead to changes in behavior. Performances were followed by a conversation between audience members, interviewees, theatre professionals involved in the production, and expert panelists. The primary goal of this project was to pilot the methodology of translating narrative interview transcripts into a professional theatre production, and to track outcomes on healthcare provider and community member responses to performances. We anticipated that this project would (1) engage healthcare professionals and the community at large, (2) provide a platform for critical post-show conversations about race and healthcare inequities, and (3) illuminate implicit provider biases/stigma with the goal of reducing instances of healthcare inequity through individual and systemic change.

Methods

This study used a post-test design to quantitively and qualitatively track community response to the production by measuring audience attendance (community members and percentage of healthcare professionals in audience) and post-show survey Likert scale and qualitative responses. In addition, we conducted thematic analysis[17] of narrative interviews to inform the development of the script and overall production. This study was approved by the Indiana University Institutional Review Board.

Participants

Participant group 1 (PG1) consisted of ten Black or bi-racial (with Black being one of the races) women who had experienced healthcare inequities. Women were recruited using convenience and chain sampling and were compensated for completing a single narrative interview. Two participants identified as bi-racial (White and Black), and 8 identified as Black. Ages ranged from 30 to 60. Three participants were in substance use disorder recovery. 3 participants were, themselves, healthcare providers.

Participant group 2 (PG2) consisted of 113 community members and/or healthcare professionals who attended at least 1 of 4 theatrical productions performed as part of this project. They were recruited through advertising within local healthcare facilities, universities, cafes, and social media. Racial demographics were collected for PG1 as an inclusion criterion. They were not collected for PG2; however, some PG2 participants mentioned their race in qualitative responses, and this information is shared alongside results below.

Materials

The *Experiences of Discrimination*[18] (EOD)-report scale was used to set the tone and prompt content for the narrative interview. It was also used to confirm that the participant met the inclusion criterion listed above of having experienced a healthcare inequity. This questionnaire examines experiences of discrimination in various areas of life, and has high reliability, with Cronbach's alpha 0.74 or greater, and test-retest reliability coefficients (0.70). The measure also has high correlation (r .25 0:79) compared to other discrimination measures, and was significantly related to psychological distress. The EOD overlapped with or was immediately followed by an unstructured narrative interview that the researcher/first author used to obtain a deeper and/or more detailed understanding of participants' experiences of discrimination in healthcare and other settings.

At each performance, audience members were asked to complete a survey that included a yes/no informed consent statement, a yes/no item asking whether or not the participant was a healthcare provider, and 5 Likert-scale items created specifically for this study:

As a result of this performance:

1. I understand the concept of inequity.
2. I believe that healthcare inequity is a concern within our community.
3. I am newly aware of 1 or more biases I have toward a certain group of people.
4. I will make a change in the way I interact with others.
5. I can think of a time when I contributed to another's experience of inequity.

Items were given a response from 1 to 5 with numbers indicating (1) strongly disagree, (2) disagree, (3) not sure, (4) agree, and (5) strongly agree. Each item was followed by a space for qualitative comments.

Procedures

The first author posted flyers and contacted several organizations to circulate flyers electronically to obtain a convenience sample of Black women who had experienced discrimination in healthcare. Women who identified as Black or Black-biracial and reported experiencing discrimination in healthcare were included. Chain sampling contributed to recruitment for PG1 as information about the study was spread via word of mouth by those who had completed an interview. Participants were compensated for their time with a $100 gift card at the time of completing the interview. During interview sessions, the first author obtained informed consent and began the session by asking questions from the EOD. As participants answered questions about discrimination in healthcare and other areas of their lives, the first author asked participants to expand on their answers with detailed stories and specific examples. Interviews were audio-recorded, transcribed, and de-identified.

The first author partnered with a local, professional theatre company to complete this project. The theatre company employed a professional playwright to write a script using narratives from PG1. The theatre company worked with professional actors, a director, and a stage manager to produce a play, which was performed twice in a downtown theatre and twice at a public hospital, also located downtown. Plays were advertised as free and open to the public via social media, flyers in universities, hospitals, and cafes, and internally through an academic institution and hospital system chain. Each performance was followed by a "talk back" community conversation between audience members, project leads, actors, and experts on healthcare inequity and women's health. Members of PG1 were also invited to attend performances and participate in the talk-back. A self-created 1 to 5 Likert-type scale post-test survey was used to assess impact on audience members.

Descriptive statistics were conducted on performance attendance (healthcare provider and non-provider). Post-show survey scores are reported as an average for each individual question by summing attendees individual question scores (0-5) and dividing by the number of attendees. An average aggregate score (0-25) was calculated by summing all total scores and dividing by number of attendees. Healthcare provider attendance was calculated as a percentage by summing the number of surveys with the provider box checked and dividing by the total number of attendees. Prior to analyses, researchers performed case wise deletion for individual item scores and listwise deletion for total survey scores. Healthcare provider and non-healthcare provider survey responses were then calculated separately (individual question and total averages) and compared using a Wilcoxen Rank Sum test with effect sizes reported using Vargha and Delaney's *A*. Normality of data was determined using the Shapiro-Wilk test. Data were analyzed using The R Project for Statistical Computing for Windows, Version 3.5.3.[19] Content analysis of qualitative feedback on PG2 experiences are reported as they related to quantitative scores.

Results

Ten Black women participated in the EOD and narrative interview, and only 1 participant attended 1 performance. Thematic analysis of interview transcripts revealed 5 main themes that emerged from participant interviews: being ignored, being accused, being talked-down to, fearing harm, and being hurt. In-depth qualitative data are reported elsewhere. However, we have included the main themes with corresponding descriptions and exemplary quotes in Table 1.

Of 118 audience member participants, 113 provided informed consent and completed a post-show survey. Twenty-five percent, or 28 individuals, identified as healthcare providers. With reference to Figure 1, total scores for the survey were not normally distributed according to a Shapiro-Wilk normality test, $W = 0.95$, $P < .001$. Figure 2 demonstrates that a Wilcoxon rank sum test with continuity correction showed no significant difference in individual or total survey scores when health care providers were compared to non-health care providers, $W = 960.5$, $P = .302$. Tables 2 to 4 detail post-show survey data.

Discussion

Mean quantitative survey scores alone suggested that audience members "agreed" that the performance increased their conceptual understanding of inequity (Item 1), their awareness of the problem of inequity in their communities (Item 2), and the likelihood that they would implement change within their own lives related to behaviors that may contribute to inequity (Item 4). However, qualitative survey responses provided some context for quantitative scores, indicating that some of the audience members' understanding of inequity, awareness of it within their communities, and intentions to make changes in their own lives existed prior to the performance. This suggests the performance likely attracted some audience members who were already aware of and committed to addressing racial inequities. However, building on Glasman and Albarracin's meta-analysis findings,[15] the act of continually witnessing (through the performance) and reflecting/reporting on (through the survey and post-show conversation) attitudes, beliefs, and behaviors related to inequity facilitates ongoing change. Therefore, for those who brought prior awareness to the performance, their work in addressing inequity was potentially supported and facilitated by the event. Moreover, some qualitative comments *did* indicate that knowledge about inequities in their communities was new

Table 1. Qualitative Themes From Interviewees.

Theme	Description	Quote
Being ignored	Participants described being ignored at restaurants, stores, and in medical appointment waiting rooms (White people being given priority), and being excluded at school during group projects (no one would partner with the 2 Black students)	*"I am sitting there. Everybody that is coming in, they're showing them to their seat, and I'm like okay what's going on here because I've been sitting here for a while. . .But, I end up leaving. That happens a lot."* *"She helped everyone else in the waiting room, but when it came to us she was very nasty. There was a tone – a rudeness. . . you can feel it in your stomach. . .like a gut punch. It was very disgraceful."* *"I was in an engineering program. I was the only female and one of only two African Americans in our program. When the instructor would 'get in groups', nobody would get in a group with me and the other Black male. It was all White males except for us."*
Being accused	Participants were falsely accused of stealing when shopping, cheating at school, and of malingering or promiscuity	*"I went into store. . . I had somebody watching me, and when I got ready to go this person asked me was I going to put something back, and I said, "What do you mean? This is mine. . ." my scarf that I had around my neck. She never apologized or anything."* *"I said [to the nurse] 'Where did this condition come from? What happened?' She tried to 'um maybe you having sex at an early age or you having sex young.' I said, 'The man that I'm married to now is the man that I have been with. You can't tell me that I've been with a number of partners when I've only been with one.'"*
Being talked-down to/ unsupported	Healthcare professionals talked to participants as if they could not understand or participate in their own healthcare process; educators talked to Black students as if they were incapable of understanding the material; managers in healthcare settings did not support Black healthcare providers who were discriminated against by patients	*"A lot of times when African Americans go to see a doctor they feel like education is maybe less than theirs or less than someone else's or maybe they aren't intelligent enough to have a conversation with them on their level. They may speak to you different, treat you different, and act different with you."* *"Sometimes I have to tell people when I interact with them if you feel like you need to be technical, we can do that. I'll understand you."* *"When I was in high school, my counselor told me I probably wouldn't go to [university] and study engineering if I were you because you're probably not going to make it."* *"I was told flat out by management do not go take care of patient, she doesn't like Blacks. Flat out to my face. I just told her okay. . .but I was hurt. She should have talked with her and told her that – you know – we don't discriminate here. I mean from the paperwork that I saw it's no discriminating there."*
Fearing harm	Fear of being harmed or killed; fear of Black sons being harmed by police	*"I hate to say this, but I have a firearm. But, I used to leave it at home and I carry it with me all the time now, everywhere I go I carry it. I have to be prepared for what might happen because I'm not just going to let somebody kill me."*
Being hurt	Participants were distressed, saddened, and hurt that discrimination was still happening; they shared hurtful, racist remarks and actions	*"I hate the fight. I get tired of fighting. Most African American's get tired of fighting, its tiresome."* *"We are seeing that our country and the world, they are more racist than we even thought. That is extremely heartbreaking to see."* *"I've been cussed at, people tried to spit on me. I've been thrown stuff at, like, just from walking down the street, some people come pass in the car they'll holler racial slanders and throw stuff and tell me to go back to Africa. . .stuff like that."*

and resulted from the performance. For example, the "post-performance discussion was enlightening" and "I definitely have a better understanding" illustrate this point.

Considering these findings together, with 25% percent of the audience being healthcare providers, these data were promising because they suggested that if the play produced

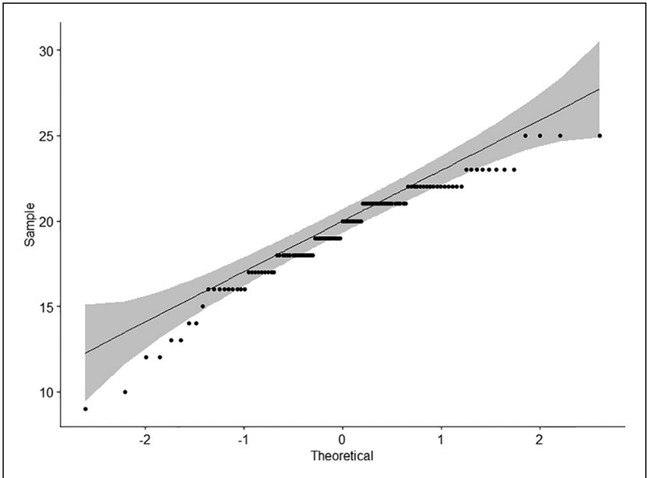

Figure 1. Shapiro-Wilk normality test distribution of total survey scores.

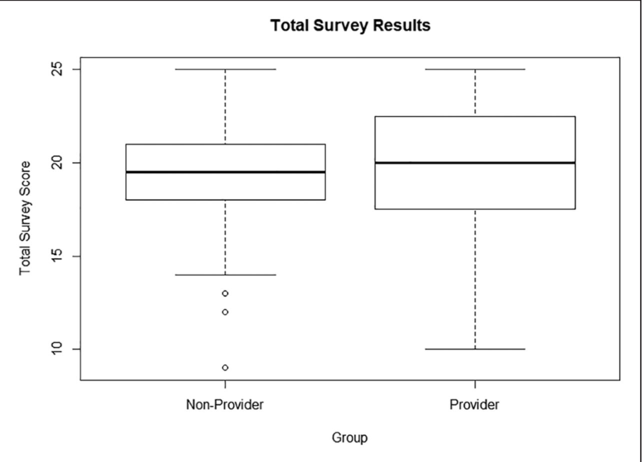

Figure 2. Wilcoxon rank sum test comparison of provider versus non-provider survey scores.

or supported changes in attitude, behavior, or both, these changes may impact healthcare systems. Changed attitudes and behaviors of healthcare providers have the potential to positively impact Black healthcare consumers, but may also positively influence the workplace culture and/or actions of peer healthcare providers. The need for change in these 2 areas was highlighted in qualitative data from interviews with Black women who participated in this study. Examples included stories of healthcare administrators treating aging Black patients "disgracefully" as well as multiple instances in which Black healthcare providers were discriminated against at work by co-workers and/or white patients. An important area of future research will be to follow healthcare provider audience members' experiences within their workplaces to track attitude and behavior changes, impacts on their workplace environments, and patient satisfaction scores and health outcomes. In addition, in future studies we will use a pre/post design to obtain baseline information about audience members' beliefs, knowledge, and behaviors to compare to post-test data.

Some audience members were unsure as to whether they had contributed to another person's experience of inequity in the past (Item 5). More than 1 commented "I hope not!" but could not say for sure. This reflects Rita Charon's claim about narrative medicine that it appears to be more difficult for clinicians to examine their own biases than those of the "other."[20]

While the majority of audience members were not healthcare providers, numerous studies have shown that health disparities cannot be separated from a large social system and history of racial discrimination in several contexts.[21-23] Illustrating this point, the American Heart Association reported a link between poor cardiovascular health and self-reported experiences of racism.[24] Compared to White people, prevalence and health outcomes of severe hypertension and cardiovascular disease among Black Americans is significantly higher.[22,25] For instance, within 5 years of myocardial infarction, 28% of Black women died compared to 17% of White women.[26] Health outcomes for Black Americans have been linked to quality of care and the treatment options offered to them.[22] Considering the health impacts of widespread discrimination, changed attitudes and behaviors among non-provider community members can likely also contribute to systemic changes that may reduce health disparities. As healthcare providers are situated within larger sociocultural contexts, changed perspectives and behaviors within communities have the potential to impact the views and practices of healthcare providers and impact healthcare inequity.

Literature suggests that implicit racial discrimination continues to harm Black people in several ways, including producing health disparities as described above. For example, Ferdinand and Nasser[22] reported that "overt or explicit racism has declined in the US since the 1960s [but that] some minority persons, particularly Black Americans, may still endure social slights and offenses that undermine health." This was reflected by the reports of this study's participants who, although were recruited specifically to describe discrimination in healthcare, had numerous examples of the many ways they were negatively impacted by racism that extended to all facets of everyday life. Nine of the women told stories of overt unfair treatment in several contexts including in higher education, at work, while shopping, traveling, and in looking for housing or employment. The women also reported grappling with how to respond to more implicit offenses, noting the constant struggle of trying to determine whether they were seeing "what they think they were seeing." Qualitative data indicated that White audience members were struck by "the constant decision about whether to push back and say something when faced with discrimination" that Black women faced (White provider). The notion of being "tired of fighting" was expressed repeatedly by Black interviewees and audience members alike. According to Gee et al,[27] these ongoing, persistent experiences of discrimination contribute to "weathering" which:

Table 2. Descriptive PG2 Survey Responses.

	Provider	Non-provider	Combined	
Measure	M (SD)	M (SD)	M (SD)	Key
Total	19.59 (3.50)	19.17 (2.93)	19.28 (3.09)	Agree
Item 1-conceptual understanding	4.57 (0.82)	4.56 (0.82)	4.55 (0.81)	Agree
Item 2-awareness of problem	4.54 (0.94)	4.68 (0.64)	4.60 (0.80)	Agree
Item 3-awareness of own bias	2.89 (1.14)	2.75 (1.25)	2.78 (1.21)	Disagree
Item 4-change behavior	4.19 (0.94)	4.01 (0.93)	4.02 (0.95)	Agree
Item 5-contributions to inequity	3.46 (1.18)	3.13 (1.33)	3.20 (1.29)	Not sure

Note. Casewise deletion used for individual item score and listwise deletion used for total score.

Table 3. Wilcoxon Rank Sum PG2 Survey Responses.

	Provider	Non-provider	Sum of ranks	Significance	Effect size
Measure	N	N	W	*P*	*A*
Total	27	82	960.5	.302	0.44
Item 1-conceptual understanding	28	84	1182.5	.960	0.51
Item 2-awareness of problem	28	84	1215.5	.734	0.52
Item 3-awareness of own bias	28	84	1097.0	.588	0.47
Item 4-change behavior	27	84	994.0	.302	0.43
Item 5-awareness of own bias	28	84	1019.0	.280	0.44

Note. Casewise deletion used for individual item score and listwise deletion used for total score. Effect size reported using Vargha and Delaney's *A*.

> [R]efers to the idea that minority populations become older faster through the 'wear and tear' on their bodies that result from chronic exposure to social adversity. Consistent with this idea, research shows that African Americans have earlier onset of disease, greater morbidity at younger ages, shorter telomere lengths (an indicator of more rapid cellular aging), and a shorter life expectancy compared with Whites (p. S44).[27]

Our study suggests that Black women's health outcomes and experiences within healthcare systems and the larger society continue to be negatively impacted by racial discrimination.

Limitations

Survey items for this study were intentionally written in an effort to determine whether understandings, beliefs, awareness, knowledge, and/or intention to change behavior resulted specifically from the performance, as opposed to from other life experiences. However, qualitative comments indicated that some audience members marked "agree" to questions such as "As a result of this performance, I understand the concept of inequity" but noted things like "I have always understood." This example illustrates how, despite our intentions to examine impressions resulting specifically from the play, audience members sometimes marked "agree" when the answer perhaps should have been "disagree." For instance, in the above example, if a person felt they had understood inequity prior to the play, a better answer may have been "disagree," because their understanding was not a *result* of watching the performance. Thus, a limitation of this study was that our results may over-estimate the degree to which the performance produced new knowledge. Nonetheless, it was clear from audience comments that the play provided a catalyst for meaningful conversations, and, as intended, brought the concepts of inequity and implicit bias to the forefront of viewers' minds, thereby serving as a promising means of illuminating the problem of discrimination in healthcare and serving as a facilitator of change.

Based on the "disagree" response to survey Item 3—"As a result of this performance I am newly aware of 1 or more biases I have toward a certain group of people"—and the qualitative feedback (eg, "Not *newly* aware," and "I experience this on a daily basis"), it is possible that an existing awareness of inequity and personal bias brought participants to the performance. This may be a limitation in that audience members attracted to this type of performance are likely already examining bias and working toward positive change, whereas a larger impact may be made on society and healthcare if audience members were those who had not considered concepts such as implicit personal biases and institutional racism. Offering this performance in healthcare provider in-services, and efforts at targeted marketing in future studies may help to deliver the performance to more people who are not already aware of and dedicated to addressing problems of racial inequity.

Compensation was only offered for participating in the EOD and narrative interview. This appeared to negatively

Table 4. Qualitative PG2 Survey Responses.

Survey questions	Quotations
Item 1: As a result of this performance I understand the concept of inequity. (Conceptual Understanding)	'disagree' • *I knew about inequity before seeing the performance (n = 3; non-provider)* 'strongly agree' or 'agree' • *I am a White mom of four adopted Black children. All are adults now but I wish I had this information, presented so powerfully, years ago. I could have prepared them much better. Thank you! I have the info now (non-provider)* • *I have always understood (non-provider)* • *Post-performance discussion was enlightening (non-provider)* • *Equity is not the same as equal, it's giving and making sure all communities have what they need to thrive (non-provider)* • *I definitely have a better understanding (non-provider)* • *Absolutely. I've seen and felt it firsthand as a woman of color. (non-provider)* • *It makes me mad (provider)* • *In many ways; pay inequity, patient satisfaction scores (provider)*
Item 2: As a result of this performance I believe that healthcare inequity is a concern within our community. (Awareness of problem)	'strongly agree' or 'agree' • *While it's a concern to me and probably within the AA community, not sure concern is shared outside of that community. (non-provider)* • *Knew it before (non-provider)* • *Every community! (non-provider)* • *We are the only nation that health bills are listed on almost all bankruptcy; poorer healthcare or none to some people. (non-provider)* • *I resonated with the community about being 'tired of fighting' (provider)* • *Under represented physician and occupational therapy care; [minorities] score lower on patient satisfaction scores (provider)*
Item 3: As a result of this performance I am newly aware of 1 or more biases I have toward a certain group of people. (Awareness of own bias)	'strongly disagree' or 'disagree' • *I experience this on a daily basis (provider)* • *Not newly aware (n = 7, 6 non-providers, 1 provider)* ○ *As a woman of color, I am very aware of being treated differently so I try not to treat others differently (n = 2, non-provider)* 'not sure' • *Learned about the 'mulatto' issue from a new angle (provider)* • *Recently went through undoing racism workshop by people's institute (provider)* • *Not sure about myself, but opened my eyes to many different situations in which others experience racism (non-provider)* • *I do have stereotypes that I attribute to other races (provider)* • *When people seem to not care about themselves (provider)* • *I was struck by the constant decision about whether to push back and say something when faced with discrimination (provider)* 'agree' • *I know I have biases; I work to change them (non-provider)* • *I want to think I am not but I know it is in me more than I would want to recognize (provider)*
Item 4: As a result of this performance I will make a change in the way I interact with others. (Change behavior)	'disagree' • *I believe I try to practice treating people with dignity and respect; as an African American woman I am familiar with discrimination and sexism and even still I have to at times catch myself when I make assumptions or give into stereotypes (non-provider)* 'agree' • *Thank you for the reminder* • *I can always do better. I'm going to remember the value of listening and validation (provider)* • *I wish I knew how to be less biased. I am kind, I believe in equity, but the bias is built in psychosocially (non-provider)* • *I will be more direct in dealing with inequities (non-provider, identified as Black woman)* • *I'll be more assertive with White people on these issues (non-provider; identified as White person)* • *In so far as continuing to create/expand my awareness in all personal communications (non-provider)* • *I already treat everyone with respect and love, I will continue to interact with everyone in that way (non-provider)* • *I already make a concerted effort to be sensitive to interactions with others (non-provider, identified as woman of color)* • *I learned that a more proactive, inclusionary approach is needed in many circumstances (provider)*

(continued)

Table 4. (continued)

Survey questions	Quotations
As a result of this performance I can think of a time when I contributed to another's experience of inequity. (Awareness of own bias)	'strongly disagree' or 'disagree' • *I try and advocate for my patients, especially those that I feel are being ignored or discriminated against. Unfortunately, this may be individuals that speak different languages, older geriatric patients, minority populations, and those with different socioeconomic backgrounds. (provider)* • *I hope not (provider)* 'not sure' • *I hope not (provider)* • *Not on purpose (non-provider)* • *I am sure this is true, but if I were aware I would change it (non-provider)* 'agree' or 'strongly agree' • *I can remember growing up with biracial friends and often only attending to their experience as a person of color and not as someone who is biracial and straddles many lines/groups.* • *By staying silent (non-provider)* • *Ouch! But I'm working on it (non-provider)* • *I'm sad to know and recall times that I either may not have recognized inequality or not spoken up (provider)* • *Absolutely, sadly. (non-provider)*

impact PG1 retention as only 1 participant joined a performance and post-show conversation. Offering compensation for attending performances and participating in post-show conversations may positively influence PG1 retention. It would likely also change the impact of the project on both participant groups—performances may be enrichened by hearing from the women whose stories contributed to the play, and watching the play and hearing the audience members' reactions would likely impact PG1 experiences of the project, although more research is needed to assess the nature of this potential impact.

The small sample size of interviewed participants limits the generalizability of our findings. While generalizability is not typically a goal of qualitative research, a larger sample from a wider geographic location would have likely produced a wider range of data that could inform a play with greater representation of the diversity of experiences. Moreover, the audience survey data reported in this paper is not generalizable to a larger demographic but is rather limited to a single Midwest geographic location. In future studies we intend to broadcast "live" play readings via Zoom to obtain larger audience samples from a larger geographic range. In addition, considering our goal of illuminating implicit provider biases/stigma to eventually reduce instances of healthcare inequity, this model of using professionally produced, narrative-informed theatre may benefit other stigmatized/marginalized groups. Future studies will examine the impact of narrative-informed theatre on stigma beliefs within a national audience pertaining to transgender and gender-nonconforming identities, and women recovering from substance misuse. We will also explore using this model with other marginalized populations and/or intersections of marginalized identities with the ultimate goal of illuminating bias, increasing empathy, and reducing stigma.

Conclusion

Racial discrimination continues to harm Black women in several areas of their everyday lives. They experience discrimination in healthcare, but also in activities such as going to school, shopping, and engaging in social activities. Theatre has the potential to illuminate the extent and nature of discrimination in healthcare and society, and to foster conversations that allow audience members to consider their own potential contributions to discrimination. While our theatre performance may have attracted people already aware of and committed to addressing racial inequity, widespread, targeted marketing of such events may bring content to audiences lacking this prior awareness. More research using a pre/post design is needed to evaluate baseline knowledge of audiences and to better evaluate the impact of the performance. Our preliminary data suggested that some gained new insight, awareness, and commitment to make changes in their own lives, whereas for some, the play reinforced information they were already aware of. According to prior literature, engaging the audience in reflective post-show conversations and in reporting on their stigma beliefs in a post-show survey and future follow-up surveys may facilitate the development of new attitudes that lead to future behavior change whether people had prior awareness of inequity or not. Future research is needed to follow healthcare providers who have participated in the theatre intervention in order to track whether the intervention results in new behaviors, patient/provider trust and communication, and patient health outcomes.

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