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COMMENTARY

Chronic Conditions and Women's Reproductive Health

Black maternal health scholars on fire: Building a network for collaboration and activism

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1 | INTRODUCTION

Black women are disproportionately impacted by chronic illness and are significantly more likely to experience severe morbidity and mortality as a consequence of pregnancy and childbirth.[1,2] As seen in a myriad of stories on maternal death and "near misses", Black women often experience maltreatment in clinical settings.[3–5] With rising national media and scientific attention to the depth of racial inequities, Black maternal health has emerged as a priority for government and private funders.[6–9] Providing financial support for maternal health research and programming is necessary, but insufficient, in eliminating disparate outcomes. There must be intentional, sustainable investments in the people best able to understand: Black women. Absent from the current landscape is a robust, well-supported cadre of Black maternal health scholar-activists who combine scientific and policy knowledge with the socio-cultural expertise that accompanies lived experience.

Federal research institutes and private sector funders in the United States have acknowledged preventable inequities and have dedicated resources to identify causes, mechanisms of influence, and solutions for reducing disparate outcomes.[7,8] However, the conceptualization, design, and conduct of these studies (as well as funding decisions to support them) occur primarily among White researchers, which plausibly limits reductions in inequities.[10] Specific investments in the educational trajectory of Black women are urgent and necessary to further enhance the quality, diversity, and impact of the maternal child health (MCH) field.

The Public Health and MCH workforce needs to be further diversified with Black women scholar-activists because they are also culturally representative of the very populations at the greatest risk to experience maternal and infant health disparities. For example, Black women are 3.2 times more likely to die from pregnancy-related deaths compared to their White counterparts, and these disparities increase with age to 4–5 times more likely.[11] Simultaneously, research demonstrates that when Black newborns are cared for by Black physicians, their mortality rate as compared to White infants is cut in half.[12] By increasing the MCH workforce to include Black women scholar-activists and health care providers, the likelihood for improvement in health inequities increases.

The goal of this commentary is to provide: (1) a brief overview of challenges Black women encounter on the path to and within science careers, (2) examples of successful approaches used to overcome these challenges, and (3) an urgent call to action for the field to commit to the

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training and development of Black women scholars in public and maternal health with the goal of eliminating maternal health inequities.

2 | EDUCATIONAL PATHWAYS AND OBSTACLES

In a similar manner to how structural racism and sexism produce adverse outcomes in labor and delivery,[13–15] these same mechanisms also produce unfavorable outcomes for Black women in academia. At every level of the professional path to a career in scientific research, Black women consistently face bias: unwarranted and seemingly unavoidable experiences that make it more challenging for them to enroll in and graduate from school. For example, Black women describe experiencing isolation, invisibility, exclusion, pressure to continuously prove themselves worthy, a lack of mentorship, and a lack of sponsorship throughout scholarship.[16] In addition, after graduation, they are often met with structural, interpersonal, and intrapersonal challenges in obtaining, managing, and remaining in research-focused academic and other scientific positions.[17] Obstacles include exclusion from collaborative opportunities, questioning of credentials and expertise by students and colleagues, criticism of their chosen outlets for publication, extra service requests and additional mentoring burden.[18] Hindering the progression of Black women into high level leadership positions also presents barriers to the mentorship of burgeoning Black female scholars, thus continuing this pernicious cycle.

Many training programs have been used to improve graduation and retention rates among Black students in higher education. These programs are of particular importance due to the evidence that Black students' experiences on college campuses have a significant impact on their academic longevity.[19] For Black college students, factors such as the level of faculty support, availability of research-based programming, and feelings of institutional connectedness and belonging have dramatic effects on their personal and academic development and matriculation.[19]

The Meyerhoff Scholars Program at the University of Maryland, Baltimore County is an example of a training program that has successfully increased the numbers of Black undergraduate college students who succeed in science, mathematics, and engineering.[20] Meyerhoff students were more than 10 times as likely than the historical African American sample to attend graduate school in science, technology, engineering and mathematics (STEM) fields, and almost two times as likely to attend medical school.[20]

Raising Achievement in Mathematics and Science scholar and similar programs at historically Black colleges and universities (HBCUs) are used to improve retention and graduation rates among minority students specifically in the STEM fields.[21] A study at Winston-Salem State University found that prior to the implementation of these training programs, graduation rates for full-time students were 17.8% in 2008 and for STEM majors it was 9.3%.[21] With the programs in place, graduation rates increased dramatically. The Raising Achievement in Mathematics and Science scholar program participants had a 98.8% graduation rate over 4 years and 100% of the 2009 scholar cohort graduated in STEM and were enrolled in either MS/PhD graduate programs or professional schools.[21]

Spelman College also employs several programs to orient and support Black women students in STEM careers. Spelman has the Research Initiative for Scientific Enhancement training program, which supports the career pursuits of women and underrepresented minorities interested in biomedical research.[22] In addition, between 2015 and 2019, Spelman College was ranked by the National Science Foundation as the number 1 institution of origin for Black PhDs in STEM disciplines.[23] These types of programs and the contributions of Historically Black Colleges and Universities (HBCU's) to the Black female scientific workforce emphasizes their importance and necessity in contributing toward the development and advancement of Black women in research and advocacy.

The W. Montague Cobb/National Medical Association Health Institute (also known as The Cobb Institute) is an organization that focuses on improving health inequities and addressing structural racism through research, education, and mentorship.[24] The Cobb Scholars Program was launched in 2016 for senior residents, fellows, postdoctoral scientists, or early-stage investigators that come from underrepresented groups and are interested in biomedical and behavioral research.[24] The scholars receive mentorship in leadership and research from interdisciplinary senior fellows which provides for collaboration and coaching across sectors to enrich their experience.

Predominately White institutions can also help advance this goal. For example, the Pathways for Students into Health Professions program, housed within the University of California, Los Angeles campus, focuses on supporting underrepresented minority undergraduate students in MCH professions through the provisions of faculty mentorship, paid internships, and learning opportunities through various seminars.[25] Although the program is not specifically built for Black students, it does prioritize students coming from non-dominant racial and ethnic groups, and research has found that students who completed the program were significantly more likely to report an interest in MCH topics and careers when compared to pre-enrollment.[25]

3 | PRECEDENT AND NEW OPPORTUNITIES

Many mentorship and training programs are open to those coming from other non-dominant racial and ethnic groups, as well as multiple gender identities.[26] However, Black women often face different and distinct challenges as compared to their Black male counterparts or women of other racial backgrounds.[27] Thus, there is a critical need to focus on the unique training and mentorship needs of Black women in academia. To bolster impacts within the MCH field, it would be useful to develop and implement programs to support Black women in their matriculation in public health, social sciences, and health care graduate programs with a focus on MCH research.

There are a few graduate programs designed to support Black women in health care and health sciences that can be adapted for scholar-activists. For example, the Association of Black Women

Physicians offers the Sister-to-Sister Mentoring Program that provides mentorship to Black women physicians, residents, and medical students.[28] The program, Black Girl White Coat, is a social media mentorship initiative that hopes to provide further representation for groups that have been historically marginalized and oppressed.[29] In addition, the ADVANCE Institutional Transformation Project of Jackson State University is a STEM mentorship program designed to support and empower Black women scholar-activists as well as provide a mentorship pipeline for early career scientists.[30]

Each of these programs aim to cultivate community and camaraderie among women who frequently, by nature of their racial and gender identity, are isolated in academic and professional settings. By adapting these mentorship programs to accommodate the needs of aspiring Black maternal health scholars, we can expand the support of early career professionals beyond undergraduate trainings. The profound impact of intentional investment in the form of mentorship, academic skill building, and providing opportunities for advocacy in the next generation of leaders cannot be overstated. This common thread among the following programs remain at the crux of the case for increased financial and programming support dedicated to the academic and career development of Black maternal health scholars.

HBCU's must be central in the creation of a pipeline of leaders and scholars from historically underrepresented communities trained to work toward health equity in maternal health. For the past few years, Health Resources Services Administration through the Maternal and Child Health Bureau has formed an Alliance with 10 HBCU's to enhance the resources and expertise of faculty and students in HBCU's to address health inequities in MCH populations.[31] The Alliance meets monthly to discuss strategies to strengthen research, outreach, advocacy, and services and has recently presented recommendations to the Maternal and Child Health Bureau.

The Charles Drew University's Black Maternal Health Center of Excellence is one of the promising new programs underway that has been designed to address the persisting birthing disparities that disproportionately impact Black birthing people in Los Angeles County and the local Charles Drew community.[32] The initiative names racism as a root cause to the disproportionately higher rates of infant and maternal death for Black birthing people countywide.[33] In response to growing maternal morbidity and mortality rates in the state of Georgia, The Morehouse School of Medicine launched the Center for Maternal Health Equity in 2019.[34] Their approach to tackling maternal health inequities is multifaceted; the Center utilizes research, workforce training, community engagement, and policy advocacy to improve reproductive justice.[34] There is a paucity of evaluated programs tailored to meet the needs of Black women scholar-activists. However, many of the programs that currently exist offer foundations and frameworks that can be augmented to fit the needs of Black women and students within the MCH fields.

The Diversity Scholars Leadership Program at the Boston University School of Public Health Center of Excellence in MCH is designed for students from underrepresented minority communities during their public health graduate studies in MCH.[35] The National Birth Equity Collaborative is a Black-led organization that serves as a hands-on training program for promising scholars in the field.[36] The Collaborative recruits interns from across multiple public health disciplines with experience in research, policy, training, advocacy, and community-centered work, with a commitment to reproductive justice and advancing birth equity.[37]

Founded in July 2020 during the dual pandemics of racism and COVID-19, The Maternal Outcomes for Translational Health Equity Research (MOTHER) Lab at Tufts University School of Medicine was created with two main goals: (1) to train, mentor, and engage bright scholars of color and White allies; and (2) to provide a research and training space to ensure scholars are supported as they prepare to go into their respective fields to dismantle systemic racism.[38] Through a keen focus on the development of research skills, advocacy, and leadership among its students, the MOTHER Lab provides a framework for the development of maternal health scholars that can serve as model for other research labs housed in schools of public health or medicine. The MOTHER Lab is a unit within the newly formed Center for Black Maternal Health and Reproductive Justice that houses faculty, staff, and students with a dedicated interest in addressing maternal health inequities. This center would contribute to immense progress in filling current gaps for mentorship, research, and sustainable change in this field.[39] Research has shown that mentorship for students of color in White spaces are especially beneficial and can become a positive predictor component to their academic and professional futures; this center would provide training, research, and mentorship opportunities for scholars and providers in the field of Black maternal health equity.[40,41] Additionally, the Center for Black Maternal Health and Reproductive Justice and the MOTHER Lab scholarly program for maternal health students are founded and run by Black female scholars with lived experience, thus representing a unique opportunity to engage and train the next generation of leaders.

Finally, policy agendas such as the Black Maternal Health Momnibus Act of 2021 (suite of 12 bills proposed in Congress), provide new and exciting ways to support the development of scholar-activists at the local, national, and state level that are dedicated to eliminating maternal mortality and morbidity in Black women.[42] These 12 bills address current Black maternal health disparities through numerous distinct methods, but prominently include expanded funding for research on the topic and diversifying the MCH workforce as important methods. One of these bills (Protecting Moms Who Served Act of 2021) has been signed into law, while parts of several others have been partially incorporated in the proposed Build Back Better Act (Data to Save Moms Act, Kira Johnson Act, Maternal Health Pandemic Response Act of 2020, Perinatal Workforce Act, Protecting Moms and Babies Against Climate Change Act, and the Tech to Save Moms Act).[43]

4 | A CALL TO ACTION

Calls to diversify the MCH workforce, assuring the recruitment and retention of Black women, fall short if they do not include tangible supports Black women need to flourish as they proceed from undergraduate and graduate education to the early years of their careers.

These include dedicated and well-matched mentors, enhanced skill building in scholarship, activism, and leadership, as well as resources to build community together. Federal policies and investments can make the difference:

1. *Advocacy for MCH Policy Change* — Advocating for the passage of bills that support diversification of the MCH workforce (as in the Momnibus Bill) will be an essential step in addressing Black maternal health disparities.
2. *Expanded national pipeline programs* — A next crucial step is to expand federally funded pipeline programs with strengthened investment in postdoctoral scholars and junior faculty. These programs should additionally have a particular focus on mentorship of Black female scholar-activists working in the field of maternal health inequities.
3. *Dedicated mentorship beyond training programs* — The structured mentorships between Black women both early in training and throughout career development will help to encourage and retain new scholars.

5 | CONCLUSION

Unique obstacles encountered from secondary school and throughout graduate education contribute to a lack of adequate representation of Black women in public health. This ultimately leads to a lack of lived experience and scholarship of scholars from communities most affected by the Black maternal health crisis. Modeling the success of other heavily invested pipeline mentorship and training programs, increased support of burgeoning Black maternal health scholar-activists may help mitigate this issue. Furthermore, existing policies and proposed legislation to diversify the public health workforce create the platform needed to build out the investment in Black women scholars who can lead the movement for maternal health equity.

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