priately for different populations, settings, and domains. For instance, in health care settings, all three components of sexual orientation — attraction, behavior, and identity - may be important to measure, whereas sexual orientation identity alone (self-identification as heterosexual, gay or lesbian, or bisexual) might be appropriate in settings such as employment. Explicit federal guidance on gathering these data would also assist states and other entities seeking to expand their own data-collection efforts for purposes such as understanding and addressing the experiences of LGBTQI+ populations during the coronavirus pandemic.

Under the Obama administration, the Departments of Justice, Housing and Urban Development, and Health and Human Services, as well as the Environmental Protection Agency, requested that federal surveys such as the American Community Survey routinely ask questions about sexual orientation and gender identity to improve efforts to protect and serve LGBTQI+ populations.

The Trump administration, however, blocked advances in data collection at every turn.5 With a new presidential administration, as well as the Supreme Court's landmark decision in Bostock v. Clayton County clarifying that sex nondiscrimination laws cover sexual orientation and gender identity, the time has come to prioritize a government-wide effort to track and address systemic inequalities by implementing standards for the routine collection of data on sexual orientation, gender identity, and intersex status. Gathering these data throughout the health care and public health systems — as well as across domains such as employment, housing, education, and criminal justice — is essential to identifying the drivers of disparities and promoting the health and wellbeing of LGBTQI+ people in all areas of their lives.

Disclosure forms provided by the authors are available at NEJM.org.

From the Department of Health Policy and Management, Johns Hopkins School of Public Health, Baltimore (K.E.B.); the Section of General Internal Medicine, Boston University School of Medicine, and the Center for Transgender Medicine and Surgery, Boston Medical Center — both in Boston (C.G.S.); and the Whitman-Walker Institute, Washington, DC (L.E.D.).

This article was published on March 27, 2021, at NEJM.org.

- 1. National Academies of Sciences, Engineering, and Medicine. Understanding the status and well-being of sexual and gender diverse populations. Washington, DC: National Academies Press, 2020 (https://www.nationalacademies.org/our-work/
- understanding-the-status-and-well-being -of-sexual-and-gender-diverse-populations).
- 2. Haider AH, Schneider EB, Kodadek LM, et al. Emergency department query for patient-centered approaches to sexual orientation and gender identity: the EQUALITY Study. JAMA Intern Med 2017;177:819-28.
- **3.** Cahill S, Singal R, Grasso C, et al. Do ask, do tell: high levels of acceptability by patients of routine collection of sexual orientation and gender identity data in four diverse American community health centers. PLoS One 2014;9:e107104.
- 4. Mirza SA, Rooney C. Discrimination prevents LGBTQ people from accessing health care. Washington, DC: Center for American Progress, January 18, 2018 (https://www.americanprogress.org/issues/lgbtq-rights/news/2018/01/18/445130/discrimination-prevents-lgbtq-people-accessing-health-care/).
- Durso LE. Progress and challenges in sexual orientation and gender identity measurement in the first year of the Trump administration. Am J Public Health 2018;108: 894-5.

DOI: 10.1056/NEJMp2032447
Copyright © 2021 Massachusetts Medical Society.

HISTORY OF MEDICINE

"To Mitigate the Afflictions of the Human Race" — The Legacy of Dr. Rebecca Crumpler

Perri Klass, M.D.

Por physicians in the 19th century, caring for sick infants and children still meant presiding at inevitable death after inevitable death. The organized public health struggle against infant mortality had not yet taken shape in 1883, when Dr. Rebecca Crumpler published A Book of

Medical Discourses, yet she believed that many tragic outcomes were preventable. "People do not wish to feel that death ensues through neglect on their part," Crumpler writes, so they "speak of consumption, cholera infantum, and diphtheria, etc., as if sent by God to destroy our infants." But

in her view, "there is no doubt that thousands of little ones annually die at our very doors, from diseases which could have been prevented, or cut short by timely aid."¹

Ahead of her time in many ways, Rebecca Davis Lee Crumpler was the first Black woman to earn a medical degree in the United States, graduating from the New England Female Medical College in 1864, and was the first Black woman doctor to publish a book.² Unfortunately, you cannot find a photo that is verifiably her, and she left behind few personal papers or documents. But you can hear her voice clearly in the two-volume Book of Medical Discourses. You can also stand outside the house at 67 Joy Street where she lived and practiced as part of a thriving Black community in 19th-century Boston.

Crumpler was born in Delaware in 1831. She explains that "having been reared by a kind aunt in Pennsylvania, whose usefulness with the sick was continually sought, I early conceived a liking for, and sought every opportunity to be in a position to relieve the sufferings of others." From 1852 to 1860, she worked as a nurse, mostly with doctors in Charlestown, Massachusetts, who recommended her to the medical college, and though some faculty "hesitated very seriously in recommending her," she graduated in 4 years with the degree of "Doctress of Medicine," identified as "Mrs. Rebecca Lee, negress."3 Hearing her voice in Medical Discourses makes you wish her "long-kept journal" had been preserved, but her published text provides some clues about her life. She tells us, for example, that she's a teetotaler, and she seems to suffer in Boston's climate, which she describes as "bleak and changeable." She traveled in British Canada in 1865 and comments on what she observed caring for children there.

After the Civil War, she went

to Richmond, Virginia, to practice among those who had until recently been enslaved, "the proper field for real missionary work," where she was able "through the agency of the Bureau under Gen. Brown, to have access each day to a very large number of the indigent, and others of different classes, in a population of over 30,000 colored." Brevet Brigadier General Orlando Brown was the assistant commissioner for the Virginia Bureau of Refugees, Freedmen, and Abandoned Lands, known as the Freedmen's Bureau. Whereas some Bureau employees blamed smallpox outbreaks on either the "dirty and unhealthy habits of former slaves" or some innate physiological (i.e., racial) vulnerability, Crumpler "recognized that the most fatal threat to freedpeople's health was the lack of shelter, clothing, and nutrition"4 — what we now call social determinants of health.

Thanks to one of her Black female physician successors, Dr. Melody T. McCloud, an obstetrician-gynecologist in Atlanta, Crumpler was honored in 2019 for her service in a proclamation by the Commonwealth of Virginia. McCloud cites "her courage, her dedication to her calling to be a physician, to serve those most in need of care," lauding her for serving "even though she experienced a lot of discrimination down there, some hospitals denied her admitting privileges, pharmacists refused to honor her prescriptions — she said that many people wisecracked that the M.D. behind her name stood for mule driver." And thanks to the advocacy of Victoria Gall and the Friends of the Hyde Park Library, a monument was set up at her grave in the Fairview Cemetery in the Hyde Park section of Boston in July 2020, and Dr. Joan Reede, the first Black female dean at Harvard Medical School, spoke at the ceremony.

When Crumpler returned to Boston from Virginia, she "entered into the work with renewed vigor," which included "receiving children in the house for treatment; regardless, in a measure, of remuneration." And she wrote her book, passing along her medical wisdom.

Believing in the health benefits of breast-feeding, she encourages mothers and cheers them on over the rough spots; given her practice experience, she also worries that if a wet nurse is hired, that that woman's own baby may suffer. Discussing breastfeeding difficulties, she observes that "A lady of wealth may get discouraged and give her babe to the care of another, whose babe may in consequence have to be put in some charity house or otherwise to board. Her babe may thrive and live; while that of her wet-nurse may soon pine away and die. No one can avoid distressing others unless he strives, to the best of his ability, to bear his own burdens."

A topic that interested Crumpler greatly was the cause of cholera infantum, the "summer diarrhea" that killed so many babies every year. This term referred not to cholera - which caused terrible, but identifiable, epidemics in many U.S. cities but to infantile diarrhea, a devastating disease that we would now understand to have varied causes, viral and bacterial, and to frequently arise from fecal-oral transmission and contaminated milk and water. It worsened in the summer, presumably because

milk tended to spoil and babies to dehydrate.5

Devoting several chapters to this disease, Crumpler provides a sad description: "A child may be nursing at the breast or feeding from a bottle when all of a sudden it leaves off, and looks languidly about in a comparatively stupid and pitiful manner; the eyes lose their lustre, are rolled about as if not noticing any particular object. Fluids are thrown up as soon as swallowed; passages from the bowels are frequent, though many times but a speck in the centre of a wet napkin, most of the report being wind." As the disease progressed, the tongue would become dry and stiff, the features sunken signs we would now recognize as progressing dehydration.

But Crumpler emphasizes that diseases have causes and can therefore be prevented. What she'd seen in Canada (in St. John, New Brunswick) persuaded her that cholera infantum was not all about bad air, because the houses there were near the sea and well ventilated. But many families were poor, and she is concerned that parents not be blamed for their poverty. "It has been argued, authoritatively, no doubt, that the causes of cholera infantum are, poor milk, bad air arising from old water-soaked cellars, of tenement houses," she remarks, adding with irony that, "when it affects those of all conditions in life, the rich, the poor, the black and the white - its cause is said to be in some atmospherical phenomena." Clearly, although she didn't yet know about the invisible microbes that were killing infants, she saw other invisible presences hovering over the heads of young patients

who were poor or Black. She admonishes physicians that "It is just as important that a doctor should be in attendance before the birth of a poor woman's child as that he should be present before the birth of the child of wealth. And it should be considered inhuman in any physician to purposely absent him or herself."

Recognizing the extraordinary burdens borne by Black parents, Crumpler worries that they don't take sufficient care of themselves and are particularly vulnerable to the harsh Boston climate. She urges baths, clothing appropriate to the season, taking less medicine, "desisting" from alcohol and tobacco, and guarding against changes in the weather: "By seeking to get in possession of the comforts of life, and buying a little home, our men can yet be enabled to live, and raise up children who shall be an honor to that noble race with which we are identified, in point of strength and longevity."

Though Crumpler doesn't discuss her own encounters with racial prejudice, she notes that "Women doctors, or, more properly speaking, doctresses of medicine, although usually treated with less courtesy by doctors, are, nevertheless, by them considered to be in their proper sphere in the confinement-room and nursery." Anyone concerned with the health care of women and children will be moved by what she says next: clearly unintimidated by colleagues who have treated her discourteously ("I feel under no obligations to them for their charity"), she emphasizes the tremendous value of "caring for the helpless babe" the most important of all jobs,

"out of which the moral and physical condition of humanity can be affected either for good or evil."

Crumpler lived at a formative time for pediatrics: she was born a vear after Abraham Jacobi, often considered the founder of American pediatrics, who established the first American clinic for diseases of children in 1860. By the end of Crumpler's life, in 1895, milk-purification movements were under way in many cities, aiming to reduce infant deaths from summer diarrhea, and a more general movement targeting infant mortality was beginning to take shape, drawing on the hygiene and disease-prevention principles emphasized in her Medical Discourses.

Crumpler's fondness for children, and especially babies, comes through so clearly that you cannot help thinking about all the infants she must have seen perish, not only from diarrhea but also from whooping cough, pneumonia, and diphtheria — all diseases that are now preventable and treatable. She advises parents about how to tend their children carefully from birth, how to wash and dress them, nurse and wean them, but the circumstances of her time require her to begin her chapter on "General Treatment of Infants" with the words, "Children are given to parents only for a lifetime; it may be long, or it may be very short." In her writing, we hear the authentic voice of a heroic physician, with remarkable experience and prescience, pointing the way for Black Americans, women, and everyone working to reduce mortality among infants - Black and White, rich and poor - at a time before that was an articulated public goal. Her book is dedicated "To mothers, nurses, and all who may desire to mitigate the afflictions of the human race."

Disclosure forms provided by the author are available at NEJM.org.

From New York University, New York.

This article was published on March 27, 2021, at NEJM.org.

- 1. Crumpler R. A book of medical discourses in two parts. Boston: Cashman, Keating, 1883.
- **2.** Wells S. Out of the dead house: nineteenth-century women physicians and the writing of medicine. Madison: University of Wisconsin Press, 2001.
- 3. Gates HL, Higginbotham EB. African

American lives. New York: Oxford University Press, 2004:199-200.

- **4.** Downs J. Sick from freedom: African-American illness and suffering during the Civil War and Reconstruction. New York: Oxford University Press, 2012:118-9.
- **5.** Klass P. A good time to be born: how science and public health gave children a future. New York: Norton, 2020.

DOI: 10.1056/NEJMp2032451

Copyright © 2021 Massachusetts Medical Society.