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"IMPROVING MATERNAL HEALTH: LEGISLATION TO ADVANCE PREVENTION EFFORTS AND ACCESS TO CARE"

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Madam Chairman Eshoo, Ranking Member Burgess, Representative Engel of New York and Members of the Subcommittee on Health, thank you for inviting me to testify and discussing how we can improve maternal health.

My name is Elizabeth Howell. I am an obstetrician gynecologist and a health services researcher. I serve as Professor in the Departments of Population Health Science & Policy and Obstetrics, Gynecology, and Reproductive Science and direct the Blavatnik Family Women's Health Research Institute at the Icahn School of Medicine at Mount Sinai.

As I recently shared in my TEDMED talk, the first time I witnessed a maternal death was during my residency training and I will never forget it. I was coming back on duty to cover the labor and delivery unit and it was chaos when I got off the elevator. All I could see was a swarm of doctors and nurses hovering over a patient in the labor room. They were all desperately trying to save a woman's life.

The patient was in shock. She had delivered a healthy baby boy about an hour before I came to the hospital. Suddenly she collapsed, became unresponsive, and had profuse uterine bleeding. By the time I got to the room, multiple doctors and nurses were there and the mother was lifeless. The resuscitation team tried to bring her back, but despite everyone's best efforts she died. What I remember most about that day was the father's piercing cry. His cry went through my heart, and the heart of everyone on that floor. This was supposed to be one of the happiest days of his life. Instead it turned out to be the worst day.

This tragedy happens to hundreds of families every year in the United States. Approximately 700 women die from a pregnancy-related cause each year. Our maternal mortality rate is higher than other high-income countries, and the numbers are far worse for women of color. Our rate of

maternal deaths has increased over the last decade while other countries have reduced their rates. Yet we spend more on healthcare than any other country in the world.

The leading causes of maternal deaths in the United States include cardiovascular conditions such as cardiomyopathy and stroke, hypertension, hemorrhage, embolism and infection. In addition, data indicate that maternal deaths from substance use disorders and mental health are climbing. Maternal mortality involving opiates doubled over the last decade.

A maternal death is just the tip of the iceberg. For every death, over 100 women experience a severe complication related to pregnancy and childbirth resulting in thousands of women every year experiencing one of these events according to the CDC. These complications, called severe maternal morbidity, include life threatening events such as stroke, blood clots, end organ damage (e.g. kidney failure), receiving a blood transfusion, having a hysterectomy, or experiencing another tragic complication. The CDC reports that severe maternal morbidity is increasing and has doubled over the last two decades.

The uncomfortable part of this story is the fact that the majority of maternal deaths and a significant proportion of severe maternal morbidity are preventable. In fact, a recent CDC report that summarized findings from nine state maternal mortality review committees found that over 60% of the deaths were preventable making quality of care a critical lever to address the rising rates of maternal mortality. By quality of care I'm not just referring to the care provided by physicians, nurses, midwives, and other providers, but also the systems in place that make it possible – or more difficult – for women to receive evidence-based care. This holistic view also encompasses coverage, hospital system policies and practices, health care resources, and more. If we raised quality of care for pregnant women before, during, and after pregnancy, and implemented standardized care procedures across hospitals in the United States we could significantly lower rates of these tragic events.

The good news is that there are efforts at the national and state level to address quality of care, standardize care, and improve outcomes for pregnant women. At the state level perinatal quality collaboratives are working to improve quality of care for mothers and babies. Members identify health care processes that need to be improved and use the best available methods to make change. There are success stories in specific states but more resources are required to achieve better outcomes. At the national level the Alliance for Innovation on Maternal Health (AIM) is a national partnership that aims to reduce maternal deaths and severe maternal morbidity by engaging hospitals, health systems, state-based public health systems, consumer groups, community organizations, and others to implement evidence-based maternal safety bundles (standardized care practices). This data driven quality improvement initiative targets some of the most preventable causes of maternal death (high blood pressure, hemorrhage, and venous thrombotic disease). The AIM program is currently in 27 states and has the potential to reach the majority of US births. But the use of these bundles in many places around the country is missing or spotty and reflects the fact that quality of care differs across our nation.

Quality of care differs greatly for women of color. Black women are three to four times, and American Indian women are three times more likely to experience a pregnancy-related death than are white women. Although many want to think that income differences drive these disparities it goes beyond class. A black or African American woman with a college education is

nearly twice as likely to die as a white woman with less than a high school education and she is two to three times more likely to experience severe maternal morbidity.

These disparities are even more pronounced in some cities. For example, in New York City black women are 8 to 12 times more likely to die from a pregnancy-related death than are white women. I am sure some of you have heard the heartbreaking story in ProPublica about the CDC epidemiologist, Dr. Shalon Irving, who died three weeks after giving birth to her first child. Dr. Irving was a brilliant epidemiologist who was committed to studying racial disparities in health. This was her first baby; she was 36; and she was African American. She had a complicated pregnancy but left the hospital with a healthy baby girl. Three weeks later she died from complications of hypertension. She was seen four or five times after her delivery by healthcare professionals. However, she was not listened to and the severity of her condition was not recognized.

Shalon's story is just one of many examples of racial and ethnic disparities in healthcare. There is growing recognition that social determinants of health – like racism, poverty, education, and segregated housing contribute to these disparities. But Shalon's story highlights an additional underlying cause – quality of care, lack of standards in postpartum care. She was seen multiple times by clinicians after the birth of her daughter and before her death but she still died. Quality of care in the setting of childbirth is an underlying cause of racial and ethnic disparities in maternal mortality and severe morbidity and something we can address now.

Research by our team and others has shown that for a variety of reasons, black women tend to deliver in a specific set of hospitals and those hospitals have worse outcomes for both black and white moms regardless of patient risk factors. This is true in the United States overall where three quarters of all black women deliver in a specific set of hospitals while less than one-fifth of white women deliver in those same hospitals. Both black and white women have worse outcomes in those hospitals. In New York City, a woman's risk of having a life-threatening complication in one hospital can be six or seven times higher than in another hospital. Black and Latina mothers are more likely to deliver in hospitals with worse outcomes. In fact, differences in delivery hospital explain nearly one half of the black-white disparity and one-third of the Latina-white disparity in severe maternal morbidity.

Our poor performance on maternal mortality and the glaring racial disparities that exist require immediate action. I am pleased today to provide testimony in strong support of legislation aimed at reducing maternal mortality and morbidity and that specifically addresses the longstanding racial and ethnic disparities in maternal mortality and morbidity in our country. There are a number of important elements discussed in these bills that are essential to achieving our goals: 1) development and testing of patient-centered maternal health quality measures that address health disparities before, during, and after pregnancy, 2) authorization of the AIM program to ensure best practices across hospitals and health systems for the care of pregnant women, 3) extension of Medicaid for 12 months postpartum to ensure access to needed care, 4) development and expansion of state and regional perinatal care quality collaboratives, 5) care management and coordination to address the social determinants that contribute to disparities, 6) infrastructure to support better data collection and measurement, and 7) support for implicit bias training for healthcare professionals. I suggest expanding the last element to include support for training

students, trainees, and healthcare professionals on patient-centered communication strategies, shared decision-making skills, and actions to address both implicit and explicit bias.

I would like to end my testimony today by emphasizing the fact that quality of care in the US health care system is an underlying driver of our high maternal mortality and morbidity rates and the racial and ethnic disparities that exist. If we raised the quality of care universally to what is supposed to be the standard, we could bring the rates of deaths and severe maternal morbidity down dramatically. The question is: are we as a society ready to value pregnant women from every community? We must do better.

I thank you for the opportunity to provide testimony. I look forward to your questions.

References

1. Howell EA, Egorova NN, Balbierz A, Zeitlin J, Hebert PL. Site of delivery contribution to black-white severe maternal morbidity disparity. Am J Obstet Gynecol. 2016 Aug;215(2):143-52.

2. Howell EA, Egorova N, Balbierz A, Zeitlin J, Hebert PL. Black-white differences in severe maternal morbidity and site of care. Am J Obstet Gynecol. 2016 Jan;214(1):122.e1-7.

3. Building U.S. Capacity to Review and Prevent Maternal Deaths. (2018). Report from nine maternal mortality review committees. Retrieved from http://reviewtoaction.org/Report_from_Nine_MMRCs

4. CDC Pregnancy Mortality Surveillance System. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-mortality-surveillance-system.htm

5. CDC Severe Maternal Morbidity in the United States https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html

6. Mangla K, Hoffman MC, Trumpff C, O;Grady S, Monk C. Maternal self-harm deaths: an unrecognized and preventable outcome. Am J Obstet Gynecol. 2019 Mar 5. [Epub ahead of print]

7. Howell EA. Reducing Disparities in Severe Maternal Morbidity and Mortality. Clin Obstet Gynecol. 2018 Jun;61(2):387-399.

8. AIM Program – Alliance for Innovation on Maternal Health https://safehealthcareforeverywoman.org/aim-program/