

Maternal Mortality

Despite Outcry over Pregnancy-Related Deaths, Doctors are Limited in How Much They Can Control the Trend

By Barrett Baker

There is a disturbing trend happening in the United States that is going in the wrong direction from most of the civilized world. According to the Center for Disease Control and Prevention (CDC), maternal mortality rates in the United States have risen from seven or eight cases per 100,000 live births 30 years ago to an average of 18 per 100,000 today. Considering there are approximately 4 million live births in the U.S. annually, that equates to approximately 700 unexpected maternal deaths each year. In some cases, the babies don't make it either.

With those kinds of numbers in mind, you would expect that there would be a national outcry in the healthcare community to reverse the trend. There is. And many steps have been taken to help push those numbers downward again. But according to local doctors who are close to the problem, there are several factors contributing to the totals that they can only do so much to control.

Dr. Jeffrey Henke, an obstetrician and gynecologist with Riverside Regional Medical Center in Newport News, believes part of the problem is in the data collection itself. "Previously in the United States, most death certificates did not have a check box or something to signify whether a death was considered a maternal death or not," he explains. "That changed about eight to 10 years ago, and it is now required." According to Henke, another potential problem is the way that maternal deaths are being defined. "Maternal death is now anything related to pregnancy, is exacerbated by pregnancy, or a chain of events started by pregnancy that caused a death within one year of birth," he says. "So, it's not always stuff that you would think of. Somebody could have an aortic aneurism that you wouldn't think of as a pregnancy issue that they die of nine months after the delivery, but that would get counted as a maternal death."

However, Henke also believes there is a major social issue at fault for the rise in recorded maternal deaths. "There is a huge disparity in the numbers when it comes to ethnicity," he says. "Looking at numbers roughly from 2013, the death rate for Caucasian women was around 13 per 100,000, while the rate for African-Americans was closer to 44. The amount of prenatal care you get doesn't matter whether you've had three visits or 12, but if you don't have access to healthcare and never have any prenatal care, you have a five-fold increase in the death rate."

Dr. Camille Kanaan, who specializes in maternal and fetal medicine at Eastern Virginia Medical School, agrees. Reading from a report issued by The American College of Obstetricians and Gynecologists published last September, he states, *We note that although Washington, D.C. has the highest maternal mortality ratio in the nation [38.8 percent], non-Hispanic, white patients in the district have the lowest mortality ratio in the United States.*

"Excellent care is apparently available, but it is not reaching all the people," Kanaan says. "So, there are definitely issues with access to care that are affecting maternal mortality. It's a very complicated issue that needs to be looked at, not only from a medical aspect, but also from a social aspect."

The Centers for Disease Control and Prevention (CDC) reports that the top causes for pregnancy-related deaths in the United States between 2011 and 2013 were cardiovascular diseases, non-cardiovascular diseases, infection or sepsis, hemorrhage, cardiomyopathy (a

hereditary disease of the heart muscle), thrombotic pulmonary embolism, hypertensive disorders, cerebrovascular accidents, and amniotic fluid embolism.

"Part of why people think the current trend has gone up is that obesity has gone up dramatically in the last 30 years," says Henke. "Diabetes, high blood pressure, cardiovascular disease are all related to obesity, so that may be a big part of it, too. The other is age. If you're over 40, your risk goes up seven-fold. But having children later in life has been another growing trend in this country."

"Pregnancies do carry risks of complications," says Kanaan. "Many of those things we can improve medically, and things have improved. But maternal mortality has changed over the years, so it's not always the same things that are causing mothers to die. Infection and hemorrhage responses have improved. We manage them better. But other complications related to obesity, diabetes, embolisms and even age-related factors have all increased. With that, we continue to face different causes for maternal mortality. So as time changes, we have to address the issues a little bit differently."

Amniotic Fluid Embolism

Miranda Klassen, founder and executive director of the Amniotic Fluid Embolism (AFE) Foundation almost died giving birth to her son nine years ago. The culprit was an unexpected birth complication that is not widely known or understood, though it has been around for probably as long as women have been giving birth—amniotic fluid embolism (AFE).

"It happens very commonly in women that give birth where the amniotic fluid that surrounds the baby goes into any of the uterine veins," she explains. "For many women it doesn't cause any problems, but for some it can create an allergic-like reaction, much like how a bee sting could harm one person and not another. But it knows no bias in terms of ethnicity. It can happen during cesarean section or during vaginal delivery. And it can happen while delivering your first baby or your fifth."

Being one of the rare survivors of this complicated issue, Klassen started the AFE Foundation to help raise awareness of it.

"When someone dies unexpectedly while going through what is supposed to be one of the most joyous times of their lives, the survivors go through grief; there's that period of denial and that phase of anger," she says. "So, our mission is to help families better understand what happened to their loved ones. The support really comes in connecting them with other families that understand because it is so rare, it is so devastating, and the circumstances are so unique."

Klassen understands that AFE deaths represent a very small portion of maternal deaths but wants people to be more aware of the potential problem. "Postpartum hemorrhage and high BMIs (body mass index), which leads to gestational diabetes, are all things that are preventable. We have answers for that," she says. "But we don't have answers to AFE. We don't know why AFE happens. So yes, the other factors are contributing to the rise in maternal deaths, but we still need answers."

One of her goals is to provide support to the passage of the Preventing Maternal Deaths Act of 2017. "We can't make it mandatory for states to uniformly report maternal deaths," she says. "As a nation we don't really have a handle on this, but we want to give the states all the tools they can possibly use to review these deaths, to see what the problems are and to make positive changes. We need states to better understand why women are dying."